



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS



VISHAY DALE FILM RESISTORS

B / H

SAP Part Number

BBF20M5LF08
BBMW210MLE08

SAP Description

BBF 20.5M 15% F08
BBMW 210M 15% E08 e3

NOTE: H SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 3 or 4 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
BAEW BAKW BBF BBFW BBM BBMW BBR BBRW BBV BFQ BFT BFW HAEW HAKW HBF HBFW HBM HBMW HBR HBRW HBV HFQ HFT HFW	K = kilohms M = Megohms G = Gigohms Check data sheet for available value range	J = $\pm 5\%$ K = $\pm 10\%$ L = $\pm 15\%$ M = $\pm 20\%$	STANDARD LEADFREE CODES E08 = Foam pack, 5/ea rolled in Microfoam STANDARD TIN/LEAD CODES F08 = Foam pack, 5/ea rolled in Microfoam NON-STANDARD TIN/LEAD CODES F03 = Foam pack, 10/ea rolled in Microfoam F06 = Foam pack, 1/ea rolled in Microfoam J03 = Skin pack, 5 to 10 pcs on cardboard (vary with size) M27 = Heat Seal pack, components wrapped in pink foam, sealed in a level "C" – water-vapor proof bag in a supplemental container, marking per MIL-STD-129. S51 = Custom pack, per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

C6

SAP Part Number
 C00006221KF6301CJ
 C0000612R0J6302EA

SAP Description
 C6 :6301 221K 1% CJ
 C6 :6302 12 5% EA e3

MODEL 1 digit	SIZE 5 digits	VALUE 4 digits	TOLERANCE 1 digit	SPEC 4 digits	PACKAGING 2 digits
C	00006 = 6	R = ohms K = kilohm M = Megohm	F = ±1% G = ±2% J = ±5% K = ±10%	See FP/C6 Spec Codes	<p>STANDARD LEAD FREE CODES EA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim EK = Bulk pack</p> <p>STANDARD TIN/LEAD CODES CJ = Reel pack, 0.200" pitch, 2-7/8" tape spacing, 2-7/8" tape spacing, with leadtrim (RH3, 1,000pcs/reel) B8 = Bulk pack</p> <p>NON-STANDARD LEAD FREE CODES EF = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>NON-STANDARD TIN/LEAD CODES A5 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim CH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (RH2, 750pcs/reel) CF = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (RH1, 500pcs/reel) LB = Lacer pack (L05) KR (K22) ammo pack available BF (B14) bulk pack available F5 (F05) foam pack available CK (R19), RG (R20), RE (R36), RH (R64), R9 (R68), WG (RE4), WF (RE5), R6 (RE6), R7 (RE7), R8 (RE8), C2, C3, CB, M6, R4 reel pack available</p> <p>Click to go to Packaging Code definition page</p>

Note: C6 is an FP1 or FP32 with an Epoxy coating rather than the FP products normal Silicone coating.



VISHAY DALE FILM RESISTORS

CCF

SAP Part Number
CCF5015R0FKR36
CCF6010K0FKE36
CCF02221RFKE36

SAP Description
CCF-50 15 1% T-1 R36
CCF-60 10K 1% T-1 E36 e3
CCF-2 221 1% T-1 E36 e3

MODEL 3 digits	SIZE 2 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CCF	50 60 02 = 2	R = ohms K = kilohms M = Megohms Check data sheet for available value range Note: 1% parts only available in E96 decade values and 5% parts only available in E24 decade values	F = ±1% J = ±5% (not for 60-size)	K = ±100ppm/°C (T-1) H = ±50ppm/°C (T-2, 50-size only)	STANDARD LEADFREE CODES E36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard



VISHAY DALE FILM RESISTORS

CMF (Industrial)

SAP Part Number

CMF50487K00BERE
 CMF0739R000JLEA
 CMF5549R900FKRE116
 CMF60332K00FKEA70

SAP Description

CMF-50 487K .1% T-9 R36
 CMF-07 39 5% T-0 EA e3
 CMF-55-116 49.9 1% T-1 R36
 CMF-60-70 332K 1% T-1 EA e3

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
CMF	50 55 60 65 70 07 20	R = ohms K = kilohms M = Megohms Note: E24 decade values only for CMF07 and CMF20 Check data sheet for available value range	A = ±0.05% B = ±0.1% C = ±0.25% D = ±0.5% F = ±1% G = ±2% J = ±5% K = ±10% S = Special Note: 2% and 5% tolerances only for CMF07 and CMF20	E = ±25ppm/°C (T-9) H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1) L = ±150ppm/°C (T-0) N = ±200ppm/°C (T-00) S = Special	STANDARD LEAD FREE CODES EA = Reel pack (std taping, Full reel quantity) EB = Reel pack (std taping except 1,000pcs/reel) EK = Bulk pack STANDARD TIN/LEAD CODES RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) BF = Bulk pack (B14) CP = Reel pack, 0.400" pitch, 2-7/8" tape spacing, with leadtrim (R55, std for -146 & -147) NON-STANDARD TIN/LEAD CODES KA = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (K36) RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) WF = Reel pack (RE5, std taping except 500pcs/reel) R7 = Reel pack (RE7, std taping except 1,500pcs/reel) R8 = Reel pack (RE8, std taping except 2,000pcs/reel) KB (K55), KE (K81), KJ (K82) ammo pack available BL (B24), B1 (B25), B7 (B45), B9 (B70), MD (M22), MH (M74), MP (M75) bulk pack available LA (L03) lacer pack available M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), CL (RH5), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available SP (RK1) SM (S50), SL (S51) special pack available NON-STANDARD LEAD FREE CODES ER (EK1), EU (E74) reel pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 11 = 0.032" leadwire (65-size) 39 = Fusible (55-size) 64 = Fusible (60-size) 70 = Color banded, 5 bands (for ≤ 1 %) 80 = Color banded, 4 bands (for ≥ 2 %) 88 = HSD (for all sizes) 95 = 0.032" leadwire (60-size) 143 = Non-magnetic; (for all sizes) 146 = Flame retardant (65 & 70 sizes) 147 = Pulse withstanding (65 & 70 sizes) 170 = HSD and Color banded, 5 bands (for ≤ 1 %) Click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

CMF (Military - RL)

SAP Part Number
RL20S301JR36

SAP Description
CMF-20 300 5% T-00 RL20S301J R36

MODEL 2 digits	SIZE 3 digits	VALUE 3 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RL	07S 20S	3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier. For values below 10 ohms, an "R" is used as a decimal placeholder. (NOTE: P/N FORMAT PER MIL-PRF-22684) Check data sheet for available value range	G = $\pm 2\%$ J = $\pm 5\%$	<p>STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim RE6 = Reel pack (std taping except 1,000pcs/reel) B14 = Bulk pack</p> <p>STANDARD TIN/LEAD SLDC CODES RSL = Reel pack, std taping, SLDC BSL = Bulk pack, SLDC</p> <p>NON-STANDARD TIN/LEAD CODES K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim RE5 = Reel pack (std taping except 500pcs/reel) K55, K81, K82 ammo pack available B24, B25, B45, B70, M22, M74, M75 bulk pack available L03 lacer pack available M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available S50, S51 special pack available</p> <p>Click to go to Packaging Code definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Blank = Standard</p> <p>GENERAL USAGE DASH NUMBERS 88 = Hot Solder Dipped 143 = Non-magnetic</p>



VISHAY DALE FILM RESISTORS

CMF (Military - RN)

SAP Part Number
 RN55D3013FB14
 RN65E1002BR36143

SAP Description
 CMF-55 301K 1% T-1 RN55D3013F B14
 CMF-65-143 10K .1% T-9 RN65E1002B R36

MODEL 2 digits	SIZE 2 digits	T.C. 1 digit	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RN	50 55 60 65 70	E = ±25ppm/°C (T-9) C = ±50ppm/°C (T-2) D = ±100ppm/°C (T-1)	4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. (NOTE: P/N FORMAT PER MIL-R-10509) Check data sheet for available value range	B = ±0.1% C = ±0.25% D = ±0.5% F = ±1%	STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim RE6 = Reel pack (std taping except 1,000pcs/reel) B14 = Bulk pack STANDARD TIN/LEAD SLDC CODES RSL = Reel pack, std taping, SLDC BSL = Bulk pack, SLDC NON-STANDARD TIN/LEAD CODES K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim RE5 = Reel pack (std taping except 500pcs/reel) K55, K81, K82 ammo pack available B24, B25, B45, B70, M22, M74, M75 bulk pack available L03 lacer pack available M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available S50, S51 special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 88 = Hot Solder Dipped 143 = Non-magnetic



VISHAY DALE FILM RESISTORS

CPF

SAP Part Number

CPF1145R00DHR36
 CPF360K400FKE36
 CPF211R500FKEE66

SAP Description

CPF-1 145 .5% T-2 R36
 CPF-3 60.4K 1% T-1 E36 e3
 CPF-2-6 11.5 1% T-1 EE6 e3

MODEL 3 digits	SIZE 1 digit	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CPF	1 2 3	R = ohms K = kilohms M = Megohms Check data sheet for available value range	B = ±0.1% C = ±0.25% D = ±0.5% F = ±1% G = ±2% J = ±5%	E = ±25ppm/°C (T-9) H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1) L = ±150ppm/°C (T-0) N = ±200ppm/°C (T-00)	STANDARD LEAD FREE CODES E36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim EE6 = Reel pack (std taping except 1,000pcs/reel) E14 = Bulk pack STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim RE6 = Reel pack (std taping except 1,000pcs/reel) B14 = Bulk pack NON-STANDARD TIN/LEAD CODES K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim RE5 = Reel pack (std taping except 500pcs/reel) K55, K81, K82 ammo pack available B24, B25, B45, B70, M22, M74, M75 bulk pack available L03 lacer pack available M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available S50, S51 special pack available NON-STANDARD LEAD-FREE CODES E74 = Reel pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

CRCC

SAP Part Number

CRCC1206123F560KTF
CRCC1206472J220MEA

SAP Description

CRCC1206123F560K R02
CRCC1206472J220M EA e3

MODEL	SIZE	RESISTANCE VALUE	RESISTOR TOLERANCE	CAPACITANCE VALUE	CAPACITOR TOLERANCE	PACKAGING
4 digits CRCC	4 digits 1206	3 digits 3-digit numeric code (in ohms) where the first two digits are the significant figures and the last digit is the multiplier. Check data sheet for available value range	1 digit F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$	3 digits 3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier. Check data sheet for available value range	1 digit K = $\pm 10\%$ M = $\pm 20\%$	2 digit STANDARD LEAD FREE CODES EA = Reel pack, embossed carrier tape, 7" reel STANDARD TIN/LEAD CODES TF = Reel pack, embossed carrier tape, 7" reel (R02) Click to go to Packaging Code definition page



VISHAY DALE FILM RESISTORS

D / G

SAP Part Number

DPX40M2JB191
 GPW250KLE19
 DVY500MJB19V1

SAP Description

DPX-1 40.2M 5% B19
 GPW 250K 15% E19 e3
 DVY-V1 500M 5% B19

NOTE: SP07 will convert Vinyl and Mylar sleeve options as "Specials". For example: DVYV will show as DVY-V.

MODEL	VALUE	TOLERANCE	PACKAGING	OPTIONAL CONSTRUCTION	SPECIAL
3 digits	4 digits	1 digit	3 digits	Up to 1 digit	Up to 3 digits
DJU DPW DPX DVY DZW DZZ GJU GPW GPX GVY GZW GZZ	K = kilohms M = Megohms G = Gigohms Check data sheet for available value range	J = ±5% K = ±10% L = ±15% M = ±20%	STANDARD LEAD FREE CODES E19* = Bulk pack E03* = Skin pack STANDARD TIN/LEAD CODES B19 = Bulk pack J03 = Skin pack, 5 to 10 pcs on cardboard (vary with size) F06 = Foam pack, 1/ea rolled in Microfoam M27 = Heat Seal pack, components wrapped in pink foam, sealed in a level "C" – water-vapor proof bag in a supplemental container, marking per MIL-STD-129. S51 = Custom pack, per TPI * Leadfree version not currently released Click to go to Packaging Code definition page	V = Vinyl sleeve M = Mylar sleeve	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

DC

SAP Part Number
 DC1/4436R2DR3618
 DC1/8500K0FR3610

SAP Description
 DC-1/4-18 436.2 .5% R36
 DC-1/8-10 500K 1% R36

NOTE: DC SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 2 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
DC	1/4 1/8	R = ohms K = kilohms M = Megohms Check data sheet for available value range	D = $\pm 0.5\%$ F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$	TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim RE4 = Reel pack (std taping except min of 300pcs/reel, multiple of 100pcs) RE5 = Reel pack (std taping except 500pcs/reel) RE6 = Reel pack (std taping except 1,000pcs/reel) RE7 = Reel pack (std taping except 1,500pcs/reel) RE8 = Reel pack (std taping except 2,000pcs/reel) K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

DCS

SAP Part Number
DCS1/2135R0FR3615

SAP Description
DCS-1/2-15 135 1% R36

NOTE: DCS SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
DCS	1/2	R = ohms K = kilohms M = Megohms 135R0 = 135 ohm	D = ±0.5% F = ±1% G = ±2% J = ±5%	TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim RE4 = Reel pack (std taping except min of 300pcs/reel, multiple of 100pcs) RE5 = Reel pack (std taping except 500pcs/reel) RE6 = Reel pack (std taping except 1,000pcs/reel) RE7 = Reel pack (std taping except 1,500pcs/reel) RE8 = Reel pack (std taping except 2,000pcs/reel) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

ERC (Military - RNC / RNR)

SAP Part Number
RNC55H1002FSR36
RNC60J10R0FSRE6201

SAP Description
ERC-55 10K 1% T-2 RNC55H1002FS R36
ERC-55-201 10 1% T-9 RNC60J10R0FSR RE6

MODEL 3 digits	SIZE 2 digits	T.C. 1 digit	VALUE 4 digits	TOLERANCE 1 digit	FAILURE RATE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RNC RNR	50 55 60 65 70	J = ± 25 ppm/ $^{\circ}$ C (T-9) H = ± 50 ppm/ $^{\circ}$ C (T-2) K = ± 100 ppm/ $^{\circ}$ C (T-1)	4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. (NOTE: P/N FORMAT PER MIL-PRF-55182) Check data sheet for available value range	B = $\pm 0.1\%$ D = $\pm 0.5\%$ F = $\pm 1\%$	M = 1% P = 0.1% R = 0.01% S = 0.001%	STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (std for 50, 55 & 60 sizes) R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (std for 65 & 70 sizes) RE6 = Reel pack (std taping except 1,000pcs/reel) B14 = Bulk pack STANDARD TIN/LEAD SLDC CODES RSL = Reel pack, std taping, SLDC BSL = Bulk pack, SLDC NON-STANDARD TIN/LEAD CODES R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim RE5 = Reel pack (std taping except 500pcs/reel) K36, K55, K81, K82, K83 ammo pack available B24, B25, B45, B70, M22, M74, M75 bulk pack available L03 lacer pack available M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available M23, M24, R16, R18, R33, R38, R48, R50, R55, R62, R68, R74, R93, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available S50, S51 special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 4 = HSD (70-size) 31 = HSD (50-size) 65 = HSD (55 or 65-size) 201 = HSD (60-size) Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

ERC (Specials)

SAP Part Number
 ERC50536R00FHR697
 ERC5510K000BER6122

SAP Description
 ERC-50-97 536 1% T-2 RE6
 ERC-55-122 10K .1% T-9 RE6

(Typically to Customer Source Control Drawings)

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
ERC	50 55 60 65 70	R = ohms K = kilohms M = Megohms Check data sheet for available value range	A = ±0.05% B = ±0.1% C = ±0.25% D = ±0.5% F = ±1% G = ±2% J = ±5%	Z = ±5ppm/°C (T-16) Y = ±10ppm/°C (T-13) X = ±15ppm/°C (T-10) E = ±25ppm/°C (T-9) H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1)	STANDARD LEAD FREE CODES EA = Reel pack, 0.200" pitch, 2-1/16" (for 50, 55 & 60-sizes) or 2-7/8" (for 65 & 70-sizes) tape spacing, with leadtrim EB = Reel pack (std taping except 1,000pcs/reel) EK = Bulk pack STANDARD TIN/LEAD CODES RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36, std for 50, 55 & 60-sizes) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64, std for 65 & 70-sizes) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) BF = Bulk pack (B14) NON-STANDARD TIN/LEAD CODES RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) WF = Reel pack (RE5, std taping except 500pcs/reel) KA (K36), KB (K55), KE (K81), KJ (K82) ammo pack available BL (B24), B1 (B25), B7 (B45), B9 (B70), BS (BSL), MD (M22), MH (M74), MP (M75) bulk pack available LA (L03) lacer pack available M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CP (R55), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), R7 (RE7), R8 (RE8), CL (RH5), UL (RSL), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available SM (S50), SL (S51) special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

ERL (Military RLR)

SAP Part Number

RLR07C1002FSB14
RLR20C2152GRR3611

SAP Description

ERL-07 10K 1% T-1 RLR07C1002FS B14
ERL-20-11 21.5K 2% T-1 RLR20C2152GR R36

MODEL	SIZE	LEAD MATERIAL	VALUE	TOLERANCE	FAILURE RATE	PACKAGING	SPECIAL
3 digits	2 digits	1 digit	4 digits	1 digit	1 digit	3 digits	Up to 3 digits
RLR	05 07 20 32	C	4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. (NOTE: P/N FORMAT PER MIL-PRF-39017) Check data sheet for Available value range	F = ±1% G = ±2%	M = 1% P = 0.1% R = 0.01% S = 0.001%	STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (std for 05, 07 & 20 sizes) R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (std for 32 size) RE6 = Reel pack (std taping except 1,000pcs/reel) B14 = Bulk pack STANDARD TIN/LEAD SLDC CODES RSL = Reel pack, std taping, SLDC BSL = Bulk pack, SLDC NON-STANDARD TIN/LEAD CODES R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim RE5 = Reel pack (std taping except 500pcs/reel) K36, K55, K81, K82, K83 ammo pack available B24, B25, B45, B70, M22, M74, M75 bulk pack available L03 lacer pack available M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available M23, M24, R16, R18, R33, R38, R48, R50, R55, R62, R68, R74, R93, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available S50, S51 special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 1 = HSD (32-size) 11 = HSD (20-size) 19 = HSD (05-size) 23 = HSD (07-size) Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

ERL (Specials)

SAP Part Number

ERL057R5000GKRE29

ERL071M6000GKRE32

SAP Description

ERL-05-29 .5 2% T-1 R36

ERL-07-32 1.6M 2% T-1 R36

(Typically to Customer Source Control Drawings)

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
ERL	05 07 20 32 62	R = ohms K = kilohms M = Megohms Check data sheet for available value range	F = ±1% G = ±2% J = ±5%	H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1) L = ±150ppm/°C (T-0) N = ±200ppm/°C (T-00)	STANDARD LEAD FREE CODES EA = Reel pack, pitch and tape spacing vary based on size, with leadtrim EB = Reel pack (std taping except 1,000pcs/reel) EK = Bulk pack STANDARD TIN/LEAD CODES RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36, std for 05, 07 & 20-sizes) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64, std for 32-size) CP = Reel pack, 0.400" pitch, 2-7/8" tape spacing, with leadtrim, (R55, std for 62-size) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) BF = Bulk pack (B14) NON-STANDARD TIN/LEAD CODES RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) WF = Reel pack (RE5, std taping except 500pcs/reel) KA (K36), KB (K55), KE (K81), KJ (K82) ammo pack available BL (B24), B1 (B25), B7 (B45), B9 (B70), BS (BSL), MD (M22), MH (M74), MP (M75) bulk pack available LA (L03) lacer pack available M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), R7 (RE7), R8 (RE8), CL (RH5), UL (RSL), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available SM (S50), SL (S51) special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

FP

SAP Part Number

FP01/224R9F5605B8
 FP0001374KF6201EK
 FP003P300RG9303CH
 FP1/2P32K7G5555EA

SAP Description

FP1/2 :5605 24.9 1% B8
 FP1 :6201 374K 1% EK e3
 FP3P :9303 300 2% RH2
 FP1/2P :5555 32.7K 2% EA e3

MODEL 2 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	SPEC 4 digits	PACKAGING 2 digits
FP	01/2 = 1/2 0001 = 1 0002 = 2 0003 = 3 0004 = 4 0005 = 5 0007 = 7 0010 = 10 0032 = 32 0042 = 42 0067 = 67 0069 = 69 1/2P = 1/2P 001P = 1P 002P = 2P 003P = 3P 069P = 69P 001D = 1D 42TX	R = ohms K = kilohms M = Megohms Check data sheet for available value range	F = ±1% G = ±2% J = ±5% K = ±10%	See FP/C6 Spec Code	STANDARD LEAD FREE CODES EA = Reel pack, pitch and tape spacing vary based on size, with leadtrim EK = Bulk pack EL = Lacer pack STANDARD TIN/LEAD CODES CJ = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH3, 1,000pcs/reel, for 1/2, 1, 32 & 69-sizes) CH = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH2, 750pcs/reel, for 1/2, 1, 2, 3, 32, 42, 67 & 69-sizes) G1 = Reel pack, 0.400" pitch, 4" tape spacing, with leadtrim, with leadtrim (600 pcs/reel, for 4-size only) B8 = Bulk pack LB = Lacer pack (L05) NON-STANDARD LEAD FREE CODES EF = Reel pack, pitch varies based on size, 2-1/16" tape spacing, with leadtrim NON-STANDARD TIN/LEAD CODES A5 = Reel pack, pitch varies based on size, 2-1/16" tape spacing, with leadtrim CF = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH1, 500 pcs/reel) K4 (K04), KR (K22), KB (K55) ammo pack available BF (B14) bulk pack available F5 (F05) foam pack available MK (M8), CM (R16), CK (R19 or RH4), RG (R20), RE (R36), RK (R50), RH (R64), CR (R66), R9 (R68), WG (RE4), WF (RE5), R6 (RE6), R7 (RE7), R8 (RE8), C2 , C3 , CB , M6 , N2 , N3 , NB , NC , R4 (27) reel pack available Click to go to Packaging Code definition page



VISHAY DALE FILM RESISTORS

FRJ

SAP Part Number
FRJ55R36
FRJ50E36

SAP Description
FRJ-55 R36
FRJ-50 E36 e3

NOTE: FRJ55 SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 3 digits	SIZE 2 digits	VALUE 0 digits	PACKAGING 3 digits	SPECIAL Up to 3 digits
FRJ	50 55	This is a jumper, No value is needed	STANDARD LEADFREE CODES E36 = Reel pack,0.200" pitch, 2-1/16" tape spacing, with lead trim STANDARD TIN/LEAD CODES R36 = Reel pack,0.200" pitch, 2-1/16" tape spacing, with lead trim Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

MVW / HVW / HVX

SAP Part Number
 MVW3/4150K0KLB
 HVW002150K0KLB
 HVX00126K40MEL

SAP Description
 MVW-3/4 150K 10% L05
 HVW-2 150K 10% L05
 HVX-1 26.4K 20% EL e3

MODEL 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
MVW HVW HVX	1/2 3/4 001 (HVW & HVX only) 002 (HVW & HVX only)	K = kilohms M = Megohms Check data sheet for available value range	J = ±5% K = ±10% M = ±20%	STANDARD LEAD FREE CODES (HVW & HVX only) EK = Bulk pack, big box (1/2 & 3/4 sizes only) EL = Lacer pack EE = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (1/2 & 3/4 sizes only) STANDARD CODES * BJ = Bulk pack, big box (B21, 1/2 & 3/4 sizes only) LB = Lacer pack (L05) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19, 1/2 & 3/4 sizes only) NON-STANDARD CODES * BK = Bulk pack, small box (B22) RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) SL = Custom pack, per TPI (S51) B8, BF (B14) bulk pack available RD (R35), RF (R48), CR (R66), RR (RD5), WF (RE5) reel pack available * MVW product is Pb-free, HVW & HVX product is Pb-bearing Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

PES

SAP Part Number
PES1/41K00FKBF

SAP Description
PES-1/4 1K 1% T-1 B14

MODEL 3 digits	SIZE 3 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits
PES	1/4	R = ohms K = kilohms M = Megohms Check data sheet for available value range	F = ±1% G = ±2% J = ±5%	H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1)	STANDARD LEAD FREE CODES EK = Bulk pack STANDARD TIN/LEAD CODES BF = Bulk pack (B14) Click to go to Packaging Code definition page



VISHAY DALE FILM RESISTORS

PMCI

SAP Part Number
PMCI0580G0GS51
PMCI0220G0KE02

SAP Description
PMCI-5 80G 2% S51
PMCI-2 20G 10% E02 e3

MODEL 4 digits	TYPE 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits
PMCI	01 = 1 02 = 2 etc...	R = ohms K = kilohms M = MILLION G = Gigohms Check data sheet for available value range	F = ±1% G = ±2% J = ±5% K = ±10% L = ±15% M = ±20%	STANDARD LEADFREE CODES* E02 = Foam pack STANDARD TIN/LEAD CODES F02 = Foam pack NON-STANDARD TIN/LEAD CODES B23 = Bulk pack F05 = Foam pack, 5/ea rolled diagonally in Microfoam F06 = Foam pack, 1/ea rolled in Microfoam F08 = Foam pack, 5/ea rolled in Microfoam S51 = Custom pack, per TPI * Lead free version currently not released Click to go to Packaging Code definition page



VISHAY DALE FILM RESISTORS

PMMO

SAP Part Number
PMMO10500KFBC
PMMO381G32FBB

SAP Description
PMMO-10 500K 1% F05
PMMO-38 1.32G 1% B23

MODEL 4 digits	TYPE 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits
PMMO	10 18 19 20 38	R = ohms K = kilohms M = Megohms G = Gigohms Check data sheet for available value range	F = ±1% G = ±2% J = ±5% K = ±10% L = ±15% M = ±20%	STANDARD LEADFREE CODES* EM = Foam pack, 5/ea rolled diagonally in Microfoam STANDARD TIN/LEAD CODES BC = Foam pack, 5/ea rolled diagonally in Microfoam (F05) NON-STANDARD TIN/LEAD CODES BB = Bulk pack (B23) ML = Heat Seal pack (M10) * Leadfree version not currently released Click to go to Packaging Code definition page



VISHAY DALE FILM RESISTORS

PSF

SAP Part Number

PSF201238R30QXTA
 PSF452720K00FZEA
 PSF20121K000AYBA1

SAP Description

PSF2012 38.3 .02% T-10 R86
 PSF4527 20K 1% T-16 EA e3
 PSF2012-1 1K .05% T-13 B43

MODEL 3 digits	SIZE 4 digits	VALUE 5 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
PSF	2012 4527	R = ohms K = kilohms Check data sheet for Available value range	T = ±0.01% Q = ±0.02% P = ±0.025% A = ±0.05% B = ±0.1% C = ±0.25% D = ±0.5% F = ±1%	Z = ±5ppm/°C (T-16) Y = ±10ppm/°C (T-13) X = ±15ppm/°C (T10) E = ±25ppm/°C (T-9) 0 = Special, per TPI	STANDARD LEADFREE CODES EA = Reel pack, Embossed carrier tape, 13" reel EB = Reel pack, Embossed carrier tape, 13" reel (std taping except 1,000pcs/reel) EK = Bulk pack, plastic bag STANDARD TIN/LEAD CODES TA = Reel pack, Embossed carrier tape, 13" reel (R86) TB = Reel pack, Embossed carrier tape, 13" reel (R79, std taping except 1,000pcs/reel) BA = Bulk pack, plastic bag (B43) NON-STANDARD TIN/LEAD CODES SB = Custom pack, per TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Blank = Standard Click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

PTF

SAP Part Number
PTF5624K060QZBF
PTF65698K00AYEA

SAP Description
PTF-56 24.06K .02% T-16 B14
PTF-65 698K .05% T-13 EA e3

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
PTF	51 56 65	R = ohms K = kilohms M = Megohms Check data sheet for available value range	T = ±0.01 Q = ±0.02 P = ±0.025 A = ±0.05 B = ±0.1% C = ±0.25% D = ±0.5% F = ±1%	Z = ±5ppm/°C (T-16) Y = ±10ppm/°C (T-13) X = ±15ppm/°C (T-10) 0 = Special, see TPI	STANDARD LEAD FREE CODES EA = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim EB = Reel pack (std taping except 1,000pcs/reel) EK = Bulk pack STANDARD TIN/LEAD CODES RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) BF = Bulk pack (B14) NON-STANDARD TIN/LEAD CODES KA = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (K36) RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) WF = Reel pack (RE5, std taping except 500pcs/reel) KB (K55), KE (K81), KJ (K82) ammo pack available BL (B24), B1 (B25), B7 (B45), B9 (B70), BS (BSL), MD (M22), MH (M74), MP (M75) bulk pack available LA (L03) lacer pack available M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CP (R55), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), R7 (RE7), R8 (RE8), CL (RH5), UL (RSL), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available SM (S50), SL (S51) special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

RC

SAP Part Number
 RC057510R0JMWB
 RC11001K32FKTP20

SAP Description
 RC-575 10 5% M T03
 RC-1100-20 1.32K 1% K R01

NOTE: RC SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 2 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
RC	0540 0550 0575 1100 1206 2010 2512 5100 5150 7225	R = ohms K = kilohms M = Megohms	C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	E = $\pm 25\text{ppm}/^\circ\text{C}$ H = $\pm 50\text{ppm}/^\circ\text{C}$ K = $\pm 100\text{ppm}/^\circ\text{C}$ L = $\pm 150\text{ppm}/^\circ\text{C}$ N = $\pm 200\text{ppm}/^\circ\text{C}$ M = $\pm 300\text{ppm}/^\circ\text{C}$ P = $\pm 500\text{ppm}/^\circ\text{C}$ S = Special	STANDARD TIN/LEAD CODES TP = Reel pack, Embossed carrier tape, 7" reel (R01) S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) WB = Tray pack (T03) NON-STANDARD TIN/LEAD CODES TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87) reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available SL (S51) special pack available Click to go to Packaging Code definition page	Dash #'s 01 thru 99 as applicable Blank = Solder pre-tinned (standard) GENERAL USAGE DASH NUMBERS 20 = Gold termination 40 = Platinum Gold termination 42 = Palladium Silver termination Click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

RCWPM (Military M/D55342 Thick Film)

SAP Part Number

M55342K09B10D0RTP
M55342K06B10E0RWB2
M55342M10B33H0PS3
D55342K07B2P70TWBT

SAP Description

RCWPM-2512 10 1% K M55342K09B10D0R R01
RCWPM-575-20 10K 1% K M55342K06B10E0R T03
RCWPM-1100 33K 2% M M55342M10B33H0P S83
RCWPM-1206-98 2.7M 10% M D55342K07B2P70T T03

MILITARY STYLE 6 digits	CHAR. 1 digit	MIL. SPEC. SHEET 2 digits	TERMINATION 1 digit	VALUE & TOL. 4 digits	FAILURE RATE 1 digit	PACKAGING 2 digits	SUFFIX 1 digit
M55342 D55342	K = ±100ppm/°C L = ±200ppm/°C M = ±300ppm/°C	01 = 0502 02 = 0550 03 = 5100 04 = 5150 05 = 7225 06 = 0575 07 = 1206 08 = 2010 09 = 2512 10 = 1100 11 = 0402 12 = 0603 13 = 0302	B = Pre-tinned Nickel Barrier, wraparound	Per std. Mil. Spec. Check data sheet for available value range	C = Non-ER M = 1% P = 0.1% R = 0.01% S = 0.001% T = Space level U = 0.01% w/ Group A & B testing/Lot V = 0.001% w/ Group A & B testing/Lot	STANDARD TIN/LEAD CODES TP = Reel pack, Embossed carrier tape, 7" reel (R01) S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WB = Tray pack (T03) WA = Tray pack, w/ESD (M18) STANDARD TIN/LEAD SLDC CODES UL = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC U5 = Reel pack, Embossed carrier Tape, 7" reel, SLDC (std taping except 500 pcs/reel). WL = Tray pack, SLDC NON-STANDARD TIN/LEAD CODES BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA , UB , UC , UD , UE reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) pack available	0 thru 9 or A thru Z as applicable Blank = Standard GENERAL USAGE DASH NUMBERS T = "T" space level (-98) S = "T" space level, Part marking to MIL spec Option 1 (-97) 2 = Part marking to MIL spec Option 1 (-20) 3 = Part marking to MIL spec Options 2 and 3 (-30)



VISHAY DRALORIC FILM RESISTORS

RCA

SAP Part Number

SAP Description

RCA080510K0FKTA (Part number for RCA0805 10K Ohm, 1%, 100PPM, RT1 Package)

MODEL	SIZE	VALUE	TOLERANCE	T.C	PACKAGING	SPECIAL
3 digits	4 digits	4 digits	1 digit	1 digit	2 digits	Up to 2 digits
RCA	0201 0402 0603 0805 1206 1210 1218 2010 2512	R = decimal K = thousand M = million 1K32 = 1,320 ohm 10R0 = 10 ohm 0000 = Jumper Check datasheet for available value range	C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$ L = $\pm 15.0\%$ W = +0%, -30% Z = Zero Ohm Jump	E = 25 PPM H = 50PPM K = 100PPM L = 150 PPM N = 200 PPM M = 300 PPM P = 500 PPM Q = 400 PPM T = 600 PPM V = 2000 PPM W = 4000 PPM S = SPECIAL	TA = RT1 (reel) TB = RT5 (reel) TC = RT6 (reel) TD = RT7 (reel) TE = RF4 (reel) TF = R02 (reel) TG = R67 (reel) TH = R82 (reel) TJ = RT8 (reel) TK = RT9 (reel) BA = B27 (cassette) TX = R56 (reel) Click to go to Packaging Code definition page	NA = UNTRIMMED P = PRECISION TR = CUSTOMER TRIMMABLE IF = PULSE NUMERIC 01 THRU 99 TBD Click to go to Permark codes section

VISHAY DALE FILM RESISTORS

RCP

SAP Part Number

RCP1206B10R0GS6

RCP1206B3K30GTP

RCP1206W1K00JEA

SAP Description

RCP1206B 10 2% S82

RCP1206B 3.3K G% R01

RCP1206W 1K 5% EA e3

MODEL	SIZE	BOTTOM TERM.	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	1 digit	4 digits	1 digit	2 digits	Up to 3 digits
RCP	1206	W = Wide B = Traditional	R = ohms K = kilohms Check data sheet for available value range	F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	STANDARD LEADFREE CODES EA = Reel pack, Embossed carrier tape, 7" reel EB = Reel pack, Embossed carrier tape, 7" reel (std taping except 1,000pcs/reel) EC = Reel pack, Embossed carrier tape, 7" reel (std taping except 500pcs/reel) ED = Reel pack, Embossed carrier tape, 7" reel (std taping except 300 pcs/reel) ET = Tray pack ES = Tape Reel (E51) Package per TPI STANDARD TIN/LEAD CODES TP = Reel pack, Embossed carrier tape, 7" reel (R01) S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) WB = Tray pack (T03) NON-STANDARD TIN/LEAD CODES TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA , UB , UC , UD , UE reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available	Dash #'s 1 thru 999 as applicable Blank = standard Click to go to Permark codes section

SL (S51) special pack available

[Click to go to Packaging Code definition page](#)



VISHAY DALE FILM RESISTORS

RCW

SAP Part Number
RCW057510R0JMWB42
RCW11001K32FKTP40

SAP Description
RCW-575-42 10 5% M T03
RCW-1100-40 1.32K 1% K R01

NOTE: RCW SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 3 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL 2 digits
RCW	0540 0550 0575 1100 1206 2010 2512 5100 5150 7225	R = ohms K = kilohms M = Megohms	C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	E = $\pm 25\text{ppm}/^\circ\text{C}$ H = $\pm 50\text{ppm}/^\circ\text{C}$ K = $\pm 100\text{ppm}/^\circ\text{C}$ L = $\pm 150\text{ppm}/^\circ\text{C}$ N = $\pm 200\text{ppm}/^\circ\text{C}$ M = $\pm 300\text{ppm}/^\circ\text{C}$ P = $\pm 500\text{ppm}/^\circ\text{C}$ S = Special	STANDARD TIN/LEAD CODES TP = Reel pack, Embossed carrier tape, 7" reel (R01) S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) WB = Tray pack (T03) NON-STANDARD TIN/LEAD CODES TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87) reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available SL (S51) special pack available Click to go to Packaging Code definition page	Dash #'s 01 thru 99 as applicable GENERAL USAGE DASH NUMBERS 40 = Platinum Gold termination 42 = Palladium Silver termination Click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

RCWE

SAP Part Number

RCWE080530L1FKEA

RCWE2512R470JKTA

SAP Description

RCWE-0805 .0301 1% 100PPM EA e3

RCWE-2512 .47 5% 100PPM TA

MODEL 4 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL 2 digits
RCWE	0402 0603 0612 0805 1020 1206 1210 1218 2010 2512	R = decimal L = milliohm (use L below 0.1 ohm) Examples: R180 = .18 ohm R301 = .301 ohm 20L0 = .020 ohm Check data sheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$	K = 100 PPM N = 200 PPM M = 300 PPM Q = 400 PPM T = 600 PPM G = 700 PPM R = 250 PPM	STD LEADFREE CODES EA = 7" Reel (0402 thru 2512) STD TIN / LEAD CODES TA = 7" Reel (0402 thru 2512) NON-STD LEADFREE CODES EB = 11.25" Reel (0402 thru 1206) EC = 13" Reel (0402 thru 1206) ED = 7" Reel, 4mm pitch (2512 only) EI = Plastic tape (1206 only) NON-STD TIN / LEAD CODES TB = 11.25" Reel (0402 thru 1206) TC = 13" Reel (0402 thru 1206) TD = 7" Reel, 4mm pitch (2512 only) Click to go to Packaging Code definition page	Dash #'s 01 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

RCWL

SAP Part Number

RCWL1206R180JMEA
 RCWL0805R499FMEC
 RCWL2512R270JNTA

SAP Description

RCWL-1206 .18 5% 300PPM EA e3
 RCWL-0805 .499 1% 300PPM EC e3
 RCWL-2512 .27 5% 200PPM TA

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	SPECIAL
4 digits	4 digits	4 digits	1 digit	1 digit	2 digits	2 digits
RCWL	0402 0603 0805 1206 1210 1218 2010 2512	R = decimal L = milliohm (use L below 0.1 ohm) Examples: R180 = .18 ohm R301 = .301 ohm 20L0 = .020 ohm Check data sheet for available value range Reference Data = Standard Electronic Decade Value Tables	F = $\pm 1.0\%$ J = $\pm 5.0\%$	N = 200 PPM R = 250 PPM M = 300 PPM Q = 400 PPM T = 600 PPM U = 1000 PPM	STD LEADFREE CODES EA = 7" Reel (0402 thru 2512) STD TIN / LEAD CODES TA = 7" Reel (0402 thru 2512) NON-STD LEADFREE CODES EB = 11.25" Reel (0402 thru 1206) EC = 13" Reel (0402 thru 1206) ED = 7" Reel, 4mm pitch (2512 only) EI = Plastic tape (1206 only) NON-STD TIN / LEAD CODES TB = 11.25" Reel (0402 thru 1206) TC = 13" Reel (0402 thru 1206) TD = 7" Reel, 4mm pitch (2512 only) Click to go to Packaging Code definition page	Dash #'s 01 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

RCWK

SAP Part Number

RCWK060630L1FHEA

RCWK060647L0DHTA

SAP Description

RCWK-0606 .0301 1% 50PPM EA e3

RCWK-0606 .047 0.5% 50PPM TA

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	SPECIAL
4 digits	4 digits	4 digits	1 digit	1 digit	2 digits	2 digits
RCWK	0606	L = milliohm (use L below 0.1 ohm) Examples: 30L1 = .0301 ohm 20L0 = .020 ohm Check data sheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$	H = 50 PPM	STD LEADFREE CODES EA = 7" Reel STD TIN / LEAD CODES TA = 7" Reel Click to go to Packaging Code definition page	Dash #'s 01 thru 99 as applicable



VISHAY DALE FILM RESISTORS

RCWP

SAP Part Number

RCWP510010K0FKS6
RCWP05751M00FKEA
RCWP12060000ZSTP99

SAP Description

RCWP-5100 10K 1% K S82
RCWP-0575 1M 1% K EA e3
RCWP-1206-99 R01

MODEL 4 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
RCWP	0201 0302 0402 0502 0540 0550 0575 0603 1100 1206 2010 2512 5100 5150 7225	R = ohms K = kilohms M = Megohms Check data sheet for available value range	C = ±0.25% D = ±0.5% F = ±1% G = ±2% J = ±5% K = ±10% M = ±20% Z = 0 ohm jumper	E = ±25ppm/°C H = ±50ppm/°C K = ±100ppm/°C L = ±150ppm/°C N = ±200ppm/°C M = ±300ppm/°C P = ±500ppm/°C S = Special, 0 ohm jumper	STANDARD LEADFREE CODES EA = Reel pack, 7" reel (std taping, 4,000 pcs/reel except 2512 = 2,000 pcs/reel) EB = Reel pack, 7" reel (std taping except 1,000pcs/reel) EC = Reel pack, 7" reel (std taping except 500pcs/reel) ED = Reel pack, 7" reel (std taping except 300 pcs/reel) ET = Tray pack (all sizes except 0201) STANDARD TIN/LEAD CODES TP = Reel pack, Embossed carrier tape, 7" reel (R01, 4,000 pcs/reel except 2512 = 2,000 pcs/reel, std taping for all sizes except 0201) S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel, all sizes except 0201) S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel, all sizes except 0201) S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel, all sizes except 0201) WB = Tray pack (T03, all sizes except 0201) UA = Reel pack, Punched paper tape, 7" reel (4,000 pcs/reel except 2512 = 2,000 pcs/reel, std for 0201 size only) UB = Reel pack, Punched paper tape, 7" reel (std taping except 300 pcs/reel, std for 0201 size only) UC = Reel pack, Punched paper tape, 7" reel (std taping except 500 pcs/reel, std for 0201 size only) UD = Reel pack, Punched paper tape, 7" reel (std taping except 1,000 pcs/reel, std for 0201 size only) U5 = Reel pack, Embossed carrier Tape, 7" reel, SLDC (std taping except 500 pcs/reel). NON-STANDARD TIN/LEAD CODES TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TN (R78), TU (R87), TT (RT4), UL (RSL), ST (S76), SU (S77), SV (S78), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UE reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17), UL (TSL) tray pack available SL (S51) special pack available	Dash #'s 01 thru 99 as applicable Blank = Solder pre-tinned (standard) GENERAL USAGE DASH NUMBERS 30 = Part marking (0603 and larger case sizes; 4 digits for ≤ 1 %, 3 digits for ≥ 2 %) 69 = Moisture resistant 99 = 0 ohm jumper Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

RCWPM-99 (DSCC Drawing Military Jumper)

SAP Part Number
 RCWPM1100TP99
 RCWPM0402TN99

SAP Description
 RCWPM-1100-99 87011-B R01
 RCWPM-0402-99 03014-B R78

MODEL 5 digits	SIZE 4 digits	PACKAGING 2 digits	SPECIAL 2 digits
RCWPM	0201 (DSCC P/N 03011-B) 0302 (DSCC P/N 03012-B) 0402 (DSCC P/N 03014-B) 0502 (DSCC P/N 88032-B) 0550 (DSCC P/N 03002-B) 0575 (DSCC P/N 90048-B) 0603 (DSCC P/N 03013-B) 1100 (DSCC P/N 87011-B) 1206 (DSCC P/N 94011-B) 2010 (DSCC P/N 03015-B) 2512 (DSCC P/N 03016-B) 5100 (DSCC P/N 90049-B) 5150 (DSCC P/N 90092-B) 7225 (DSCC P/N 90047-B)	STANDARD TIN/LEAD CODES TP = Reel pack, Embossed carrier tape, 7" reel (R01) S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) WB = Tray pack (T03) STANDARD TIN/LEAD SLDC CODES UL = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC WL = Tray pack, SLDC NON-STANDARD TIN/LEAD CODES TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA, UB, UC, UD, UE reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available SL (S51) special pack available Click to go to Packaging Code definition page	99 = 0 ohm jumper



VISHAY DALE FILM RESISTORS

RCWPM-99 (Military M32159 Jumper Thick Film)

SAP Part Number

M32159B05MTP
 M32159B07MWL
 M32159B09CWB
 M32159B12MS696
 M32159B08CS396

SAP Description

RCWPM-7225-99 M32159B05M R01
 RCWPM-1206-99 M32159B07M TSL
 RCWP-2512-99 M32159B09C T03
 RCWPM-0603-96 M32159B12M S82
 RCWP-2010-96 M32159B08C S84

MILITARY STYLE 6 digits	TERMINATIO N 1 digit	MIL. SPEC. SHEET 2 digits	FAILURE RATE 1 digit	PACKAGING 2 digits	SUFFIX Up to 3 digits
M32159	B = Pre-tinned Nickel Barrier, wraparound	01 = 0502 02 = 0550 03 = 5100 04 = 5150 05 = 7225 06 = 0575 07 = 1206 08 = 2010 09 = 2512 10 = 1100 11 = 0402 12 = 0603 13 = 0302	C = Non-ER M = Military Grade, High Reliability	STANDARD TIN/LEAD CODES TP = Reel pack, Embossed carrier tape, 7" reel (R01) S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) WB = Tray pack (T03) STANDARD TIN/LEAD SLDC CODES UL = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC WL = Tray pack, SLDC NON-STANDARD TIN/LEAD CODES TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA , UB , UC , UD , UE reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available SL (S51) special pack available Click to go to Packaging Code definition page	Blank = Standard (-99) 96 = Part Marked (-96)



VISHAY DALE FILM RESISTORS

RDX

SAP Part Number

RDX4B199MGNJ03AA
 RDX3A2M50GNE03AD
 RDX5Z1M50FKJ03ZZ2

SAP Description

RDX-4B 199M 2% T-00 J03 10,000:1
 RDX-3A 2.5M 2% T-00 E03 2,000:1 e3
 RDX-5-2 1.5M 1% T-1 J03

MODEL 3 digits	SIZE 1 digit	CONFIGURATION 1 digit	VALUE (R ₁) 4 digits	TOL. 1 digit	T.C. 1 digit	PACKAGING 3 digits	RATIO 2 digits	SPECIAL Up to 2 digits
RDX	2 3 4 5 6 7	A = Axial leads B = Radial tabs C = Radial ends, axial tap Z = None	K = kilohms M = Megohms G = Gigohms Check data sheet for available value range	F = ±1% G = ±2% J = ±5% K = ±10%	K = ±100ppm/°C (T-1) N = ±200ppm/°C (T-00) "old" M = 200ppm = N in SAP	STANDARD LEAD FREE CODES* E03 = Skin pack STANDARD TIN/LEAD CODES J03 = Skin pack NON-STANDARD TIN/LEAD CODES S51 = Custom pack, per TPI * Leadfree version not currently released Click to go to Packaging Code definition page	AA to ZZ as needed AA = 10,000:1 AB = 5,000:1 AC = 1,000:1 AD = 2,000:1 ZZ = null, see TPI	Dash #'s 1 thru 99 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

RJU

SAP Part Number

RJU2753M02GKF07

RJU0402M50KNE07

RJU0953M02GKF071

SAP Description

RJU-275 3.02M 2% T-1 F07

RJU-40 2.5M 10% T-00 E07 e3

RJU-95-1 3.02M 2% T-1 F07

MODEL 3 digits	SIZE 3 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RJU	040 = 40 050 = 50 070 = 70 095 = 95 140 150 275 400	K = kilohms M = Megohms G = Gigohms Check data sheet for available value range	F = ±1% G = ±2% J = ±5% K = ±10%	K = ±100ppm/°C (T-1) N = ±200ppm/°C (T-00)	STANDARD LEAD FREE CODES E07 = Foam pack STANDARD TIN/LEAD CODES F07 = Foam pack NON-STANDARD TIN/LEAD CODES J03 = Skin pack L05 = Lacer pack S51 = Custom pack, per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Double-click below to go to Permark codes section



VISHAY DALE FILM RESISTORS

RNX

SAP Part Number

RNX05010M0FHLB
RNX2001G00KNEL
RNX12561M3FKLBP

SAP Description

RNX-1/2 10M 1% T-2 L05
RNX-2 1G 10% T-00 EL e3
RNX-1-1/4P 61.3M 1% T-1 L05

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	OPTIONAL CONSTRUCTION	SPECIAL
3 digits	3 digits	4 digits	1 digit	1 digit	2 digits	0 or 1 digit	Up to 3 digits
RNX	025 = 1/4 038 = 3/8 050 = 1/2 075 = 3/4 100 = 1 125 = 1-1/4 150 = 1-1/2 200 = 2	R = ohms K = kilohms M = Megohms G = Gigohms Check data sheet for available value range	D = ±0.5% F = ±1% G = ±2% J = ±5% K = ±10%	H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1) N = ±200ppm/°C (T-00) “old” M = 200ppm = N in SAP	STANDARD LEAD FREE CODES EL = Lacer pack EE = Reel pack, 0.200” or 0.400” pitch, 2-1/2” tape spacing, no leadtrim EB = Reel pack (std taping except 1,000pcs/reel) STANDARD TIN/LEAD CODES LB = Lacer pack (L05) RC = Reel pack, 0.200” pitch, 2-1/2” tape spacing, no leadtrim (R19) RF = Reel pack, 0.400” pitch, 2-1/2” tape spacing, no leadtrim (R48) R6 = Reel pack (std taping except 1,000pcs/reel) NON-STANDARD TIN/LEAD CODES BF = Bulk pack (B14) SL = Custom pack, per TPI (S51) A5, RA (R05), RB (R08), RG (R20), RE (R36), WG (RE4), WF (RE5), R7 (RE7), R8 (RE8) CK (RH4) reel pack available Click to go to Packaging Code definition page	Blank = Standard N = Non-inductive (200ppm TC only) P = 0.032” DIA leads	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

ROX

SAP Part Number

ROX300100MGNF5
 ROX15033M0FHFL
 ROX0753M70JNLBP12
 ROX200200KJNF5NT99

SAP Description

ROX-3 100M 2% T-00 F05
 ROX-1-1/2 33M 1% T-2 EL e3
 ROX-3/4P-12 3.7M 5% T-00 L05
 ROX-2NT-99 200K 5% T-00 F05

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	OPTIONAL CONSTRUCTION	SPECIAL
3 digits	3 digits	4 digits	1 digit	1 digit	2 digits	Up to 2 digits	Up to 3 digits
ROX	050 = 1/2 075 = 3/4 100 = 1 150 = 1-1/2 200 = 2 300 = 3 400 = 4 500 = 5 600 = 6	R = ohms K = kilohms M = Megohms G = Gigohms Check data sheet for available value range	D = ±0.5% F = ±1% G = ±2% J = ±5% K = ±10%	H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1) N = ±200ppm/°C (T-00) "old" M = 200ppm = N in SAP	STANDARD LEAD FREE CODES EL = Lacer pack EE = Reel pack, 0.400" pitch, 2-1/2" tape spacing, no leadtrim EM = Foam pack, 5/ea rolled diagonally in Microfoam STANDARD TIN/LEAD CODES LB = Lacer pack (L05) RF = Reel pack, 0.400" pitch, 2-1/2" tape spacing, no leadtrim (R48) F5 = Foam pack, 5/ea rolled diagonally in Microfoam (F05) NON-STANDARD TIN/LEAD CODES SL = Custom pack, per TPI (S51) RD (R35), WF (RE5), R6 (RE6) reel pack available Click to go to Packaging Code definition page	Blank = Standard N = Non-inductive (200ppm TC only) P = 0.040" DIA leads S = Solid body, axial T = Threaded terminals Y = One end axial, one end threaded terminal NOTE: Maximum of 4 digits between Optional Construction and Special columns combined	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

RZY

SAP Part Number

RZY1F02

RZY2S511

SAP Description

RZY-1 F02

RZY-2-1 S51

MODEL 3 digits	TYPE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RZY	1 2	STANDARD TIN/LEAD CODES S51 = Custom pack, per TPI NON-STANDARD TIN/LEAD CODES F02 = Foam pack F05 = Foam pack, 5/ea rolled diagonally in Microfoam Click to go to Packaging Code definition page	1 thru 999 as applicable Blank = Standard



VISHAY DALE FILM RESISTORS SPF

SAP Part Number

SPF-13
SPF-172-2

SAP Description

SPF-13 S51
SPF-175-2 S51

Standard packaging code S51 for all part numbers

MODEL 3 digits	TYPE 2 to 4 digits	SPECIAL Up to 4 digits
SPF	-1 thru -999 -2 -5 -34 -76 -101 -186	-xxx (only if needed, where xxx = 1 thru 999)



VISHAY DALE FILM RESISTORS

SPTF

SAP Part Number

SPTF110
SPTF090S2

SAP Description

SPTF-110 S51
SPTF-90-2 S51

Standard packaging code S51 for all part numbers

MODEL 4 digits	TYPE 3 digits	SPECIAL Up to 4 digits
SPTF	001 thru 999 074 = 74 090 = 90 110 116 121	Sxxx (only if needed, where xxx = 1 thru 999)



VISHAY DALE FILM RESISTORS SPW

SAP Part Number
SPW22750R00JSL

SAP Description
SPW-227 50 5% S51

MODEL 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
SPW	001 thru 999 (Standard Catalog sizes) 236 227 210 214 212	R = ohms Check data sheet for available value range	G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$	STANDARD CODES SL = Custom pack, per TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS

SPWC

SAP Part Number
SPWC010450R1JSL

SAP Description
SPWC-104 50.1 5% S51

MODEL 4 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
SPWC	0104 0105 0204 0205	R = ohms Check data sheet for available value range	J = ±5%	STANDARD CODES SL = Custom pack, per TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS T-SERIES

SAP Part Number

TAOW43M0LB21
TAKW2M00ME21
TAFW30M0KB217

SAP Description

TAOW 43M 15% B21
TAKW 2M 20% E21 e3
TAFW-7 30M 10% B21

MODEL 4 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
TAEW TAFW TAKW TAOW TAQW TARW	M = Megohms G = Gigohms Check data sheet for available value range	J = $\pm 5\%$ K = $\pm 10\%$ L = $\pm 15\%$ M = $\pm 20\%$	STANDARD LEAD FREE CODES E21 = Bulk pack, big box STANDARD TIN/LEAD CODES B21 = Bulk pack, big box NON-STANDARD LEAD FREE CODES E22 = Bulk pack, small box NON-STANDARD TIN/LEAD CODES B14 = Bulk pack B22 = Bulk pack, small box S51 = Custom pack, per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE FILM RESISTORS MISCELLANEOUS (cont 1 of 3)

SAP Part Number
81018706B29

SAP Description
810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)

PART NUMBER 6 digits	DASH TYPE 2 digits	PACKAGING 3 digits
2xxxxx 8xxxxx	00 thru 99 as applicable	B29, P03, S27, S31, T03, etc. Click to go to Packaging Code definition page



VISHAY DALE FILM RESISTORS

LOT CHARGES (cont 2 of 3)

SAP Part Number
LOTCHG-R-CHIPMIL
LOTCHG-DALEFILMMIL

SAP Description
LOTCHG-R-CHIPMIL S31
LOTCHG-DALEFILMMIL S31

Standard packaging code S31 for all part numbers

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	DALEFILMMIL = Dale Leaded-Film Military (Material Group FF1) DALEFILMCOM = Dale Leaded Film Commercial (Material Group FF2) R-CHIPMIL = Dale R-Chips (SMD) Military (Material Group FF3)



VISHAY DALE FILM RESISTORS FAST TRACK PROGRAM (cont 3 of 3)

SAP Part Number
FSTTRK10DALEFFCOM
FSTTRK20R-CHIPMIL

SAP Description
FSTTRK10DALEFFCOM S31
FSTTRK20R-CHIPMIL S31

Standard packaging code S31 for all part numbers

CHARGE 6 digits	LEAD TIME 2 digits	RESISTOR STYLE 9 digits
FSTTRK	05 = 5 working days 10 = 10 working days 15 = 15 working days 20 = 20 working days	DALEFFMIL = Dale Leaded-Film Military (Material Group FF1) DALEFFCOM = Dale Film Leaded Commercial (Material Group FF2) R-CHIPMIL = Dale R-Chips (SMD) Military (Material Group FF3)



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS

VISHAY HUNTINGTON RESISTORS

ACCESSORIES



SAP Part Number

HEI75007505E29

HEI21045707E66

SAP Description

HEI 75007505 E29

HEI 21045707 E66

BRAND 3 digits	MODEL 8 digits	PACKAGING 3 digits	SPECIAL Up to 3 digits
HEI	75006902 = centering washer 75007401 = centering washer 75007505 = screw 75007510 = screw 75008101 = centering washer 21045703 = insulating washer 21045707 = mica washer	STANDARD LEAD FREE PACKAGING CODES E29 = RoHS Compliant E66 = Lead free bulk pack	Dash Numbers A – ZZZ or 0 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

ALSR / ALVR



SAP Part Number

ALSR012R000FE08

ALSR1045R00JE29

SAP Description

ALSR01 2 1% E08 e3

ALSR10 45 5% E29 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
ALSR ALVR	01 02 03 5A 05 07 10 11 12 13 15 20 30 B1=10B	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	P = ± 0.025% A = ± 0.05% B = ± 0.1% C = ± 0.25% D = ± 0.5% F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E07= Tape/reel, 0.4 in. pitch, 2-7/8 in. tape spacing (ALxR5A, ALxR05) E08 = Tape/reel, 0.2 in. pitch, 2-1/16 in. tape spacing (ALxR01) E29 = Tape/reel, 0.4 in. pitch, 3-3/8 in. tape spacing (ALxR07, ALxR10, ALxR11, ALxR12, ALxR13, ALxR15) E48 = Tape/reel, 0.4 in. pitch, 2-1/2 in. tape spacing (ALxR02, ALxR03) E12 = Bulk pack up to 100 pcs E51 = Custom pack, per TPI	NI = NON INDUCTIVE W03 = printed as 3.25 W W07 = printed as 6.5 W

VISHAY HUNTINGTON RESISTORS

ASE / AVE



SAP Part Number

ASE024020ER150JE

AVE030015E8R00KE

SAP Description

ASE0240-20E 0.15 5% E01 e3

AVE0300-15E 8 10% E01

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	2 digits	1 digit	4 digits	1 digit	1 digit	Up to 2 digits
ASE AVE	0050 0100 0110 0120 0155 0220 0240 0300 0350 0375 0400 0420 0425 0450 0500 0750* 1000* 1500* 2000* 5000*	02* 03 04 06 15 =QC 20 21 22 FC = Ferrule Cap	E = Lead Free	R = decimal K = thousand R150 = 0.15 ohm 54R1 = 54.1 ohm 1K30 = 1,300 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E= Lead (Pb)-Free cell and bulk pack	Dash Numbers 0A – ZZ or 01 - 99 As Applicable 91 = 100 Style Horizontal Thru-Bolt Bracket 92 = 200 Style Push-In Bracket 93 = 300 Style Vertical Thru-Bolt Bracket

*ASE Model only

VISHAY HUNTINGTON RESISTORS

AST / AVT



SAP Part Number

AST07506E1K500KE

AVT16020E3K800ME

SAP Description

AST075-06E 1.5K 10% E01 e3

AVT160-20E 3.8K 20% E01 e3

MODEL 3 digits	SIZE 3 digits	TERMINAL 2 digits	TERMINAL FINISH 1 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 1 digits	SPECIAL Up to 2 digits
AST AVT	005 070 010 075 020 75A 025 100 25A 110 25B 120 030 130 050 160 50A 175 50B 190 060 200 065 225 012 080	04 05 06 07 14 = QC 15 = QC 20 FC = Ferrule Cap	E = Lead Free	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E = Lead (Pb)-Free cell and bulk pack	Dash Type 0A – ZZ or 01 - 99 As Applicable 91 = 100 Style Horizontal Thru-Bolt Bracket 92 = 200 Style Push-In Bracket 93 = 300 Style Vertical Thru-Bolt Bracket

VISHAY HUNTINGTON RESISTORS

BRACKETS



SAP Part Number

HEIKIT206100E29

HEIKIT1030420E29

SAP Description

HEI 206 FOR TUBULAR 100 E29

HEI 103 FOR EDGEWOUND 0420 E29

BRAND 3 digits	TYPE 3 digits	BRACKET TYPE 3 digits	RESISTOR SIZE 3-4 digits	PACKAGING 3 digits	SPECIAL Up to 3 digits
HEI	KIT	101 102 103 104 110 111 201 203 204 205 206 207 301 302 303 500	AST, AVT, FST, FVT Type (3 digits) 005, 008, 010, 020, 025, 25A, 25B, 026, 030, 040, 40B, 050, 50A, 50B, 50C, 060, 065, 070, 075, 75A, 080, 100, 110, 120, 130, 150, 155, 160, 175, 190, 200, 225, 240, 300, 375, 400, 500, 600 ASE, AVE, FSE, FVE Type (4 digits) 0040, 0050, 0060, 0075, 0090, 0100, 0110, 0120, 0140, 0150, 0155, 0160, 0180, 0185, 0220, 0225, 0240, 0270, 0300, 0350, 0375, 0400, 0420, 0425, 0450, 0500, 0750, 1000, 1500, 2000	STANDARD LEAD FREE PACKAGING CODES E29 = RoHS Compliant E66 = Lead free bulk pack	Dash Numbers A – ZZZ or 0 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

CF



SAP Part Number

CF01/427K00JE66

CF000156R00JE66

SAP Description

CF01/4 27K 5% E66 e3

CF0001 56 5% E66 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	5 digits	1 digit	3 digits	Up to 2 digits
CF	01/4 0001	R = decimal K = thousand 56R00 = 56 ohm 27K00 = 27,000 ohm	J = $\pm 5\%$	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free ammo pack	Dash Numbers 1 - 99 As Applicable

VISHAY HUNTINGTON RESISTORS

CMS / CMV



SAP Part Number

CMS16CME16K00KE

CMV22CME1R500JE

SAP Description

CMS16-CME 16K 10% E01 e3

CMV22-CME 1.5 5% E01 e3

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	2 digits	1 digits	5 digits	1 digit	1 digits	Up to 2 digits
CMS CMV	16 20 22	CM = 0.197" Diameter terminal hole CA = 0.265" Diameter terminal hole	E = Lead Free	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E= Lead (Pb)-Free cell and bulk pack	NI = NON INDUCTIVE Dash Numbers 0A – ZZ or 01 - 99 As Applicable

VISHAY HUNTINGTON - CENTRAL RESISTORS

FA



SAP Part Number

FA3/41K500FE08

FA00542K00BE07

SAP Description

FA3/4 1.5K 1% E08 e3

FA005 42K 0.1% E07 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
FA	3/4 001 01A 002 003 03A 004 04B 005 05A 007 07A 010 10A	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	T = ± 0.01% A = ± 0.05% B = ± 0.1% C = ± 0.25% D = ± 0.5% F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E07= Tape/reel, 0.4 in. pitch, 2-7/8 in. tape spacing (FA004, FA005, FA05A, FA07A) E08 = Tape/reel, 0.2 in. pitch, 2-1/16 in. tape spacing (FA3/4, FA001, FA01A) E29 = Tape/reel, 0.4 in. pitch, 3-3/8 in. tape spacing (FA007, FA010, FA10A) E48 = Tape/reel, 0.4 in. pitch, 2-1/2 in. tape spacing (FA002, FA003, FA03A, FA04B) E12 = Bulk pack up to 100 pcs	NI = NON INDUCTIVE

VISHAY HUNTINGTON RESISTORS

FS



SAP Part Number

FS-020CBE10R00JE

FS-010CBE30R00FE

SAP Description

FS-020-CBE 10 5% E01 e3

FS-010-CBE 30 1% E01 e3

MODEL 2 digits	SIZE 4 digits	TERMINAL 2 digits	TERMINAL FINISH 1 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 1 digits	SPECIAL Up to 2 digits
FS	-003 -05A -005 -05B -05S -006 -010 -10S -020 -20S	CB = PCB Mount	E = Lead Free	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Cui feestom pack, per TPI E= Lead (Pb)-Free cell and bulk pack	NI = NON INDUCTIVE Dash Numbers 0A – ZZ or 01 - 99 As Applicable

VISHAY HUNTINGTON RESISTORS

FSE / FVE



SAP Part Number

FSE024020ER150JE

FVE030015E8R00KE

SAP Description

FSE0240-20E 0.15 5% E01 e3

FVE0300-15E 8 10% E01

MODEL 3 digits	SIZE 4 digits	TERMINAL 2 digits	TERMINAL FINISH 1 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 1 digits	SPECIAL Up to 2 digits
FSE FVE	0040 0240 0050 0270 0060 0300 0075 0375 0090 0400 0100 0420 0110 0500 0120 0550 0140 0600 0150 0700 0155 0750 0160 0800 0180 1000 0185 1500 0220 2000 0225 3000	02* 03 04 06 15 = QC 20 22 FC = Ferrule Cap	E = Lead Free	R = decimal K = thousand R150 = 0.15 ohm 54R1 = 54.1 ohm 1K30 = 1,300 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E = Lead (Pb)-Free cell and bulk pack	Dash Numbers 0A – ZZ or 01 - 99 As Applicable 91 = 100 Style Horizontal Thru-Bolt Bracket 92 = 200 Style Push-In Bracket 93 = 300 Style Vertical Thru-Bolt Bracket CT = Center Tap

VISHAY HUNTINGTON RESISTORS

FSOT / FVOT MINIATURE OVAL



SAP Part Number

FSOT1011E1R000JENI

FVOT2011E2K000KE

SAP Description

FSOT10-11E-NI 1 5% E01 e3

FVOT20-11E 2K 10% E01 e3

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	2 digits	1 digits	5 digits	1 digit	1 digits	Up to 2 digits
FSOT FVOT	10 15 20 070 095	11	E = Lead Free	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = $\pm 1\%$ G = $\pm 2\%$ H = $\pm 3\%$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E= Lead (Pb)-Free cell and bulk pack	NI = NON INDUCTIVE Dash Numbers 0A – ZZ or 01 - 99 As Applicable CT = Center Tap

VISHAY HUNTINGTON RESISTORS

FSOT STANDARD OVAL



SAP Part Number

FSOT4009E1R000JENI

FSOT7516E200R0ME

SAP Description

FSOT40-09E-NI 1 5% E01 e3

FSOT75-16E 200 20% E01

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	2 digits	1 digits	5 digits	1 digit	1 digits	Up to 2 digits
FSOT	30 40 55 65 75	09 16 = QC	E = Lead Free	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E= Lead (Pb)-Free cell and bulk pack	NI = NON INDUCTIVE Dash Numbers 0A – ZZ or 01 - 99 As Applicable

VISHAY HUNTINGTON RESISTORS

FST / FVT



SAP Part Number

FST02506E10R00KE

FVT50B15E25R00JE

SAP Description

FST025-06E 10 10% E01 e3

FVT50B-15E 25 5% E01

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	3 digits	2 digits	digits	5 digits	1 digit	1 digits	Up to 2 digits
FST FVT	005 080 008 100 010 110 020 120 025 130 25A 150 25B 155 026 160 030 175 040 200 40B 225 050 240 50A 300 50B 350 50C 375 065 400 075 500 75A 600 750 1K0 20A	02 04 05 06 07 14= QC 15 = QC 20 21 22 FC = Ferrule Cap	E = Lead Free	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E= Lead (Pb)-Free cell and bulk pack	NI = NON INDUCTIVE Dash Type 0A – ZZ or 01 - 99 As Applicable 91 = 100 Style Horizontal Thru-Bolt Bracket 92 = 200 Style Push-In Bracket 93 = 300 Style Vertical Thru-Bolt Bracket NP = Non-inductive + 200 Style Push-in bracket NH = Non-inductive +100 style Horizontal bracket NV = Non-inductive + 300 style vertical bracket CT= Center Tap

VISHAY HUNTINGTON RESISTORS

FSTL / FVTL / FSTS / FVTS / FSWL/ FVWL



SAP Part Number

FSTS05R2E250R0JE

FVWL20A1E350R0HE

SAP Description

FSTS05-R2E 250 5% E01 e3

FVWL20-A1E 350 3% E01 e3

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	2 digits	1 digit	5 digits	1 digit	1 digits	Up to 2 digits
FSTL	05	A1(sizes 10 & 20)	E = Lead Free	R = decimal	F = ± 1%	STANDARD LEAD FREE PACKAGING CODES E = E01 = Skin pack K = E51 = Custom pack, per TPI E= Lead (Pb)-Free cell and bulk pack	NI = NON INDUCTIVE Dash Numbers 0A – ZZ or 01 - 99 As Applicable CT = Center Tap
FVTL	10	A2 (sizes 05)		K = thousand	G = ± 2%		
FSTS	20	R1(sizes 10 & 20)		R1500 = 0.15 ohm	H = ± 3%		
FVTS	5A	R2(sizes 05)		54R15 = 54.15 ohm	J = ± 5%		
FSWL	08			1K325 = 1,325 ohm	K = ± 10%		
FVWL	1A				M = ± 20%		
	12						
	15						
	2A						

VISHAY HUNTINGTON RESISTORS

FVR



SAP Part Number

FVR0504R000KE66

FVR025350R0KE66

SAP Description

FVR050 4 10% E66 e3

FVR025 350 10% E66 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
FVR	025 050 100 150 300	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	K = ± 10%	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

MF



SAP Part Number

MF1/210K00FE66

MF1/4499R0JE66

SAP Description

MF1/2 10K 1% E66 e3

MF1/4 499 5% E66 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
MF	1/4 1/2 002	R = decimal K = thousand 54R15 = 54.15 ohm 1K325 = 1,325 ohm	B = $\pm 0.1\%$ F = $\pm 1\%$ J = $\pm 5\%$	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free ammo pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON - MILLS RESISTORS MRA



SAP Part Number
MRA-05R5000FE48
MRA-126R000FE07

SAP Description
MRA-05 0.5 1% E48 e3
MRA-12 6 1% E07 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
MRA	-05 -10 -12 -2B	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	T = ± 0.01% A = ± 0.05% B = ± 0.1% C = ± 0.25% D = ± 0.5% F = ± 1.0% J = ± 5.0%	STANDARD LEAD FREE PACKAGING CODES E07= Tape/reel, 0.4 in. pitch, 2-7/8 in. tape spacing (MRA-10, MRA-12) E48 = Tape/reel, 0.4 in. pitch, 2-1/2 in. tape spacing (MRA-05, MRA-2B) E12 = Bulk pack up to 100 pcs	

VISHAY HUNTINGTON - MILLS

RESISTORS

MRB



SAP Part Number
 MRB016R000FE08
 MRB054R990FE48

SAP Description
 MRB01 6 1% E08 e3
 MRB05 4.99 1% E48 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
MRB	01 02 03 05 06 10 12 15	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	T = ± 0.01% A = ± 0.05% B = ± 0.1% C = ± 0.25% D = ± 0.5% F = ± 1.0% J = ± 5.0%	STANDARD LEAD FREE PACKAGING CODES E07= Tape/reel, 0.4 in. pitch, 2-7/8 in. tape spacing (MRB10, MRB12) E08 = Tape/reel, 0.2 in. pitch, 2-1/16 in. tape spacing (MRB01, MRB02, MRB03) E29 = Tape/reel, 0.4 in. pitch, 3-3/8 in. tape spacing (MRB15) E48 = Tape/reel, 0.4 in. pitch, 2-1/2 in. tape spacing (MRB05, MRB06) E12 = Bulk pack up to 100 pcs	NI = NON INDUCTIVE

VISHAY MILLS RESISTORS

MRC



SAP Part Number

MRC05750R0FE02

MRC50R5000JE02NI

SAP Description

MRC05 750 1% E02 e4

MRC50-NI 0.5 5% E02 e4

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	
MRC	05 10 25 50	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	D = ± 0.5% F = ± 1% H = ± 3% J = ± 5% K = ± 10%	STANDARD LEAD FREE PACKAGING CODES E02 = Card Pack E51 = Custom pack, per TPI	Dash Numbers 1-999 as applicable NI = NON INDUCTIVE



VISHAY HUNTINGTON MILLS RESISTORS MRP

SAP Part Number

MRP001R0500JE08

MRP010120K0KE29

SAP Description

MRP001 0.05 5% E08 e3

MRP010 120K 10% E29 e3

MODEL 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
MRP	1/4 1/A = 1/2A 1/2 001 01A 01B 002 02A 02B 02C 003 03B 004 04B 005 006 007 010 10B 015	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	T = ± 0.01% P = ± 0.025% A = ± 0.05% B = ± 0.1% C = ± 0.25% D = ± 0.5% F = ± 1.0% G = ± 2.0% H = ± 3.0% J = ± 5.0% K = ± 10.0%	STANDARD LEAD FREE PACKAGING CODES E07= Tape/reel, 0.4 in. pitch, 2-7/8 in. tape spacing (MRP03B, MRP004, MRP04B, MRP005, MRP006, MRP007) E08 = Tape/reel, 0.2 in. pitch, 2-1/16 in. tape spacing (MRP1/4, MRP1/A, MRP1/2, MRP001) E29 = Tape/reel, 0.4 in. pitch, 3-3/8 in. tape spacing (MRP010, MRP10B) E48 = Tape/reel, 0.4 in. pitch, 2-1/2 in. tape spacing (MRP01A, MRP01B, MRP002, MRP02A, MRP02B, MRP02C, MRP003) E12 = Bulk pack up to 100 pcs	NI = NON INDUCTIVE

VISHAY HUNTINGTON - MILLS RESISTORS MRS



SAP Part Number

MRS-12985L00HE1402

MRS-13752L00FE1405

SAP Description

MRS-1298-02 0.005 3% E14 e3

MRS-1375-05 0.002 1% E14 e3

MODEL 8 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL 2 digits
MRS-1253	L = milliohm (below 0.01 ohm)	T = $\pm 0.01\%$	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack	00 to ZZ
MRS-1287	R = decimal	A = $\pm 0.05\%$		
MRS-1288	5L00 = .005 ohm	B = $\pm 0.1\%$		
MRS-1298	R050 = 0.05 ohm	C = $\pm 0.25\%$		
MRS-1367		D = $\pm 0.5\%$		
MRS-1368		F = $\pm 1\%$		
MRS-1375		G = $\pm 2\%$		
MRS-1429		H = $\pm 3\%$		
MRS-1430		J = $\pm 5\%$		
MRS-1510		K = $\pm 10\%$		
MRS-1512				
MRS-1513				

VISHAY MILLS RESISTORS

MRW



SAP Part Number

MRW05R1000KE14

MRW0712R50JE14

SAP Description

MRW05 0.1 10% E14 e3

MRW07 12.5 5% E14 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	
MRW	02 03 05 07 10 15 22	L = milliohm (below 0.01 ohm) R = decimal K = thousand 6L700 = 0.0067 ohm R1500 = 0.15 ohm 1K325 = 1,325 ohm	P = $\pm 0.025\%$ F = $\pm 1\%$ H = $\pm 3\%$ J = $\pm 5\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack E31 = Four layer bulk pack E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1-999 as applicable NI = NON INDUCTIVE S = Standoff, historically "S" used after wattage

VISHAY MILLS RESISTORS

MRWL



SAP Part Number

MRWL05R0100HE14

MRWL10R0250FE14

SAP Description

MRWL05 0.01 3% E14 e3

MRWL10 0.025 1% E14 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	
MRWL	02 03 05 07 10 15 22	R = decimal R0150 = 0.015 ohm	F = $\pm 1\%$ H = $\pm 3\%$ J = $\pm 5\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack E31 = Four layer bulk pack E51 = Custom pack, per TPI E66 = Special bulk pack	NI = NON INDUCTIVE Dash Numbers 1-999 as applicable

VISHAY MILLS RESISTORS

MRWxR



SAP Part Number

MRW3R1R000KE32

MRW5RR1000JE32NI

SAP Description

MRW3R 1 10% E32 e3

MRW5R-NI 0.1 5% E32 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	
MRW	2R 3R 5R 7R 1R = 10R	R = decimal K = thousand R1500 = 0.15 ohm 1K325 = 1,325 ohm	P = $\pm 0.025\%$ F = $\pm 1\%$ H = $\pm 3\%$ J = $\pm 5\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E01 = Skin pack E31 = Four layer bulk pack E32 = Two layer bulk pack E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1-999 as applicable NI = NON INDUCTIVE

VISHAY MILLS RESISTORS

MR93 SERIES



SAP Part Number

MR93531K5000FAE66

MR9356380K00JCE66

SAP Description

MR9353 1.5K 1% 10 E66 e3

MR9356 380K 5% 4500 E66 e3

MODEL	VALUE	TOLERANCE	TC	PACKAGING	SPECIAL
6 digits	6 digits	1 digit	1 digits	3 digits	1 digit
MR9352	R = decimal	S = $\pm 0.005\%$	A = Standard, 10 (W)	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1-9 as applicable
MR9353	K = thousand	T = $\pm 0.01\%$	B = 3900 (Q)		
MR9354	M = million	Q = $\pm 0.02\%$	C = 4500 (M)		
MR9355	R15000 = 0.15 ohm	P = $\pm 0.025\%$	D = 6000 (N)		
MR9356	54R150 = 54.15 ohm	A = $\pm 0.05\%$	G = 5		
MR9357	1K3250 = 1,325 ohm	B = $\pm 0.1\%$	J = 2		
MR9358	1M0000 = 1 M ohm	C = $\pm 0.25\%$			
MR9359		D = $\pm 0.5\%$			
		F = $\pm 1.0\%$			

VISHAY MILLS RESISTORS

MR100 SERIES



SAP Part Number

MR10186K660BAE66

MR106250R00BGE66

SAP Description

MR101 86.66K .1% 10 E66 e3

MR106 250 .1% 5 E66 e3

MODEL 5 digits	VALUE 6 digits	TOLERANCE 1 digit	TC 1 digits	PACKAGING 3 digits	SPECIAL Up to 2 digits
MR101	R = decimal	S = ± 0.005%	A = Standard, 10 (W)	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1-99 as applicable
MR102	K = thousand	T = ± 0.01%	B = 3900 (Q)		
MR103	M = million	Q = ± 0.02%	C = 4500 (M)		
MR104	R15000 = 0.15 ohm	P = ± 0.025%	D = 6000 (N)		
MR105	54R150 = 54.15 ohm	A = ± 0.05%	G = 5		
MR106	1K3250 = 1,325 ohm	B = ± 0.1%	J = 2		
MR107	1M0000 = 1 M ohm	C = ± 0.25%			
MR108		D = ± 0.5%			
MR109		F = ± 1 %			
MR110		G = ± 2 %			
MR111		J = ± 5 %			
MR112		K = ± 10 %			
MR113					
MR114					
MR115					
MR116					

VISHAY MILLS RESISTORS

MR300 SERIES



SAP Part Number

MR3031M0000TAE66

MR307250R00JDE66

SAP Description

MR303 1M .01% 10 E66 e3

MR307 250 5% 6000 E66 e3

MODEL	VALUE	TOLERANCE	TC	PACKAGING	SPECIAL
5 digits	6 digits	1 digit	1 digit	3 digits	Up to 2 digits
MR301	R = decimal	S = $\pm 0.005\%$	A = Standard, 10 (W)	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1-99 as applicable
MR302	K = thousand	T = $\pm 0.01\%$	B = 3900 (Q)		
MR303	M = million	Q = $\pm 0.02\%$	C = 4500 (M)		
MR304	R15000 = 0.15 ohm	P = $\pm 0.025\%$	D = 6000 (N)		
MR305	54R150 = 54.15 ohm	A = $\pm 0.05\%$	G = 5		
MR306	1K3250 = 1,325 ohm	B = $\pm 0.1\%$	J = 2		
MR307	1M0000 = 1 M ohm	C = $\pm 0.25\%$			
MR308		D = $\pm 0.5\%$			
MR309		F = $\pm 1.0\%$			
MR310		J = $\pm 5.0\%$			
MR311					
MR312					
MR313					
MR314					
MR315					
MR316					

VISHAY MILLS RESISTORS

MR500 SERIES



SAP Part Number

MR50314R000FDE66

MR5103K0000FCE66

SAP Description

MR503 14 1% 6000 E66 e3

MR510 3K 1% 4500 E66 e3

MODEL 5 digits	VALUE 6 digits	TOLERANCE 1 digit	TC 1 digit	PACKAGING 3 digits	SPECIAL Up to 2 digits
MR501	R = decimal	S = $\pm 0.005\%$	A = Standard, 10 (W)	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1-99 as applicable
MR502	K = thousand	T = $\pm 0.01\%$	B = 3900 (Q)		
MR503	M = million	Q = $\pm 0.02\%$	C = 4500 (M)		
MR504	R15000 = 0.15 ohm	P = $\pm 0.025\%$	D = 6000 (N)		
MR505	54R150 = 54.15 ohm	A = $\pm 0.05\%$	G = 5		
MR506	1K3250 = 1,325 ohm	B = $\pm 0.1\%$	J = 2		
MR507	1M0000 = 1 M ohm	C = $\pm 0.25\%$			
MR508		D = $\pm 0.5\%$			
MR509		F = $\pm 1.0\%$			
MR510		H = $\pm 3.0\%$			
MR511		J = $\pm 5.0\%$			
MR512					

VISHAY MILLS RESISTORS

MR530 SERIES



SAP Part Number

MR53033K0000JCE66

MR530811R000JAE66

SAP Description

MR5303 3K 5% 4500 E66 e3

MR5308 11 5% 10 E66 e3

MODEL	VALUE	TOLERANCE	TC	PACKAGING	SPECIAL
6 digits	6 digits	1 digit	1 digit	3 digits	1 digit
MR5301	R = decimal	S = $\pm 0.005\%$	A = Standard, 10 (W)	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1-9 as applicable
MR5302	K = thousand	T = $\pm 0.01\%$	B = 3900 (Q)		
MR5303	M = million	Q = $\pm 0.02\%$	C = 4500 (M)		
MR5304	R15000 = 0.15 ohm	P = $\pm 0.025\%$	D = 6000 (N)		
MR5305	54R150 = 54.15 ohm	A = $\pm 0.05\%$	G = 5		
MR5306	1K3250 = 1,325 ohm	B = $\pm 0.1\%$	J = 2		
MR5307	1M0000 = 1 M ohm	C = $\pm 0.25\%$			
MR5308		D = $\pm 0.5\%$			
MR5309		F = $\pm 1.0\%$			
MR5310		G = $\pm 2.0\%$			
MR5311		J = $\pm 5.0\%$			
MR5312					
MR5313					
MR5314					

VISHAY MILLS RESISTORS

MR600 SERIES



SAP Part Number

MR6014K2890CAE66

MR6122K0000TGE66

SAP Description

MR601 4.289K .25% 10 E66 e3

MR612 2K .01% 5 E66 e3

MODEL 5 digits	VALUE 6 digits	TOLERANCE 1 digit	TC 1 digit	PACKAGING 3 digits	SPECIAL Up to 2 digits
MR601	R = decimal	S = ± 0.005%	A = Standard, 10 (W)	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1-99 as applicable
MR602	K = thousand	T = ± 0.01%	B = 3900 (Q)		
MR603	M = million	Q = ± 0.02%	C = 4500 (M)		
MR604	R15000 = 0.15 ohm	P = ± 0.025%	D = 6000 (N)		
MR605	54R150 = 54.15 ohm	A = ± 0.05%	G = 5		
MR606	1K3250 = 1,325 ohm	B = ± 0.1%	J = 2		
MR607	1M0000 = 1 M ohm	C = ± 0.25%			
MR608		D = ± 0.5%			
MR609		F = ± 1.0%			
MR610		J = ± 5.0%			
MR611					
MR612					
MR613					
MR614					
MR615					
MR616					
MR617					

VISHAY MILLS RESISTORS

MR700 SERIES



SAP Part Number

MR70225K000BAE66

MR70643K200TAE66

SAP Description

MR702 25K .1% 10 E66 e3

MR706 43.2K .01% 10 E66 e3

MODEL 5 digits	VALUE 6 digits	TOLERANCE 1 digit	TC 1 digit	PACKAGING 3 digits	SPECIAL Up to 2 digits
MR701	R = decimal	S = $\pm 0.005\%$	A = Standard, 10 (W)	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1-99 as applicable
MR702	K = thousand	T = $\pm 0.01\%$	B = 3900 (Q)		
MR703	M = million	Q = $\pm 0.02\%$	C = 4500 (M)		
MR704	R15000 = 0.15 ohm	P = $\pm 0.025\%$	D = 6000 (N)		
MR705	54R150 = 54.15 ohm	A = $\pm 0.05\%$	G = 5		
MR706	1K3250 = 1,325 ohm	B = $\pm 0.1\%$	J = 2		
MR707	1M0000 = 1 M ohm	C = $\pm 0.25\%$			
		D = $\pm 0.5\%$			
		F = $\pm 1.0\%$			

VISHAY HUNTINGTON RESISTORS

MTL



SAP Part Number

MTL03R0100FE66

MTL055L000JE66

SAP Description

MTL03 .01 1% E66 e3

MTL05 .005 5% E66 e3

MODEL 3 digits	SIZE 2 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
MTL	1A 2B 2C 03 04 05 06 10	L = milliohm (below 0.01 ohm) R = decimal 5L000 = 0.005 ohm R1500 = 0.15 ohm	F = $\pm 1\%$ G = $\pm 2\%$ H = $\pm 3\%$ J = $\pm 5\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free bulk pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

PC, PCA



SAP Part Number

PCA-151K200KE14

PC-252K400JE31

SAP Description

PCA-15 1.2K 10% E14 e3

PC-25 2.4K 5% E31 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 or 3 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
PC PCA	-03 -05 -07 -10 -15 -18 -20 -22 -25	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack E31 = Four layer bulk pack E51 = Custom pack, per TPI E66 = Bulk pack, Metal Oxide only	Dash Numbers 1 - 999 As Applicable NI = NON INDUCTIVE

VISHAY HUNTINGTON RESISTORS

PC QUICK CONNECT



SAP Part Number
 PC-503R000KE66
 PC-3015R00JE66

SAP Description
 PC-50 3 10% E66
 PC-30 15 5% E66

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
PC	-30 -40 -50	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E51 = Custom pack, per TPI E66 = Bulk pack	Dash Numbers 1 - 999 As Applicable BKT = Bracket

VISHAY HUNTINGTON RESISTORS

PCL



SAP Part Number

PCL-05R0150JE14

PCL-10R1000JE31

SAP Description

PCL-05 0.015 5% E14 e3

PCL-10 0.10 5% E31 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
PCL	-03 -05 -07 -10 -15	R = decimal R0150 = 0.015 ohm	B = ± 0.1% F = ± 1% G = ± 2% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack E31 = Four layer bulk pack E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1 - 999 As Applicable NI = NON INDUCTIVE

VISHAY HUNTINGTON RESISTORS

PCR



SAP Part Number

PCR-101K200KE10

PCR-07270R0JE10

SAP Description

PCR-10 1.2K 10% E10 e3

PCR-07 270 5% E10 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
PCR	-05 -07 -10 -15	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% J = ± 5% K = ± 10% M = ± 20%	STANDARD LEAD FREE PACKAGING CODES E10 = Foam pack (7W and larger) E14 = Bulk pack (5W only) E31 = Four layer bulk pack (5W only) E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

PCRC



SAP Part Number

PCRC02100R0JE32

PCRC1030R00KE32

SAP Description

PCRC02 100 5% E32 e3

PCRC10 30 10% E32 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
PCRC	02 03 05 07 10	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	STANDARD LEAD FREE PACKAGING CODES E01 = Skin pack E31 = Four layer bulk pack E32 = Two layer bulk pack E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

PCRL



SAP Part Number

PCRL05R0100JE32

PCRL10R0500KE32

SAP Description

PCRL05 0.01 5% E32 e3

PCRL10 0.05 10% E32 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
PCRL	02 03 05 07 10	R = decimal R0100 = 0.01 ohm	F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	STANDARD LEAD FREE PACKAGING CODES E01 = Skin pack E31 = Four layer bulk pack E32 = Two layer bulk pack E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

PCRM



SAP Part Number

PCRM0310K00JE32

PCRM0530K00KE32

SAP Description

PCRM03 10K 5% E32 e3

PCRM05 30K 10% E32 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
PCRM	03 05	R = decimal K = thousand 800R0 = 800 ohm 1K325 = 1,325 ohm	J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	STANDARD LEAD FREE PACKAGING CODES E01 = Skin pack E31 = Four layer bulk pack E32 = Two layer bulk pack E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

RSS



SAP Part Number

RSS05100K0JE66

SAP Description

RSS05 100K 5% E66 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
RSS	05	K = thousand 100K = 100,000 ohm	J = $\pm 5\%$	STANDARD LEAD FREE PACKAGING CODES E66 = Lead free tape and reel pack E51 = Custom pack, per TPI	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

RESISTOR STANDARD



SAP Part Number

RESSTD2M0000E66

RESSTD1M4000E66

SAP Description

RESSTD 2M E66

RESSTD 1.4M E66

MODEL	VALUE	PACKAGING	SPECIAL
6 digits	6 digits	3 digits	Up to 3 digits
RESSTD	R = decimal K = thousand M = million 54R150 = 54.15 ohm 1K3250 = 1,325 ohm 1M4000 = 1,400,000 ohm	STANDARD LEAD FREE PACKAGING CODES E66 = Lead (Pb) – free bulk pack	Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

SM



SAP Part Number

SM-11R000FE6

SM-41K500JE6

SAP Description

SM-1 1 1% E6 e3

SM-4 1.5K 5% E6 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	2 digits	5 digits	1 digit	2 digits	Up to 3 digits
SM	-1 -2 -3 -4 -5	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	B = ± 0.1% C = ± 0.25% D = ± 0.5% F = ± 1.0% H = ± 3.0% J = ± 5.0%	STANDARD LEAD FREE PACKAGING CODES E6 = Lead free tape and reel	NI = NON - INDUCTIVE Dash Numbers 1 - 999 As Applicable

VISHAY HUNTINGTON RESISTORS

TMC



SAP Part Number

TMC0251K000GE02

TMC25010K00KE01

SAP Description

TMC025 1K 2% E02 e4

TMC250 10K 10% E01

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
TMC	005 010 025 050 100 250	R = decimal K = thousand R1500 = 0.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm	F = ± 1% G = ± 2% H = ± 3% J = ± 5% K = ± 10%	STANDARD LEAD FREE PACKAGING CODES E01 = Skin pack E02 = Card pack (TMC005 thru TMC050 only) E51 = Custom pack, per TPI E66 = Special bulk pack	Dash Numbers 1 - 999 As Applicable NI = NON INDUCTIVE



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS



VISHAY DALE NETWORKS CRCA

SAP Part Number
CRCA12E081103121R
CRCA12E081472220E

SAP Description
CRCA12E0801103J121M RB8
CRCA12E0801472J220M E e3

MODEL	SIZE	TERMINAL	PIN COUNT	SCHEMATIC	RESISTANCE VALUE	CAPACITANCE VALUE	PACKAGING	SPECIAL
4 digits	2 digits	1 digit	2 digits	1 digit	3 digits	3 digits	1 digit	1 digit
CRCA	12	S = Convex, square corner E = Convex, scalloped corner	08 10	1 = 01 2 = 02 3 = 03 0 = Custom, per TPI	3-digit numeric code (in ohms) where the first two digits are the significant figures and the last digit is the multiplier. Tolerance is $\pm 5\%$ (J) Check data sheet for available value range	3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier. Tolerance is $\pm 20\%$ (M) Check data sheet for available value range	STANDARD LEAD FREE CODES E = Reel pack, 12mm Embossed tape, 8mm pocket pitch, 7" reel STANDARD TIN/LEAD CODES R = Reel pack, 12mm Embossed tape, 8mm pocket pitch, 7" reel (RB8) NON-STANDARD TIN/LEAD CODES M = Heat seal pack (M11) S = per TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 9 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE NETWORKS

CS201

SAP Part Number

20104D1C222K5P
 20110D3X103K5E
 20108D0S000SSP3
 20108D1C102K5P12

SAP Description

CS20104D1C222K5 P03
 CS20110D3X103K5 E e1
 CS201-08D00-S3 P03
 CS20108D1C102K5-S12 P03

MODEL	PIN COUNT	PACKAGE	SCHEMATIC	CAP. DIELECTRIC	CAP. VALUE	CAP. TOLERANCE	CAPACITOR VOLTAGE	PACKAGING	SPECIAL
3 digits	2 digits	1 digit	1 digit	1 digit	3 digits	1 digit	1 digit	1 digit	Up to 3 digits
201 = CS201	04 05 06 07 08 09 10 11 12 13 14 15 16 17 18	D B (non-std – must be used with Special dash)	1 = Bussed, pin “1” common (01) 3 = Isolated (03; even pin counts only) 4 = Bussed, pin “1” and “n” common (04) 0 = Custom, per TPI (00)	C = C0G X = X7R S = Special	3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier. 000 = Special Check data sheet for available value range	K = ±10% M = ±20% S = Special, per TPI	5 = 50V 1 = 100V S = Special, per TPI	STANDARD LEAD FREE CODES E = Bulk pack STANDARD TIN/LEAD CODES P = Bulk pack (P03) NON-STANDARD TIN/LEAD CODES M = Heat seal pack (M11) S = per TPI (S51) Click to go to Packaging Code definition page	1 thru 999 as required Blank = Standard Examples: 1 = S1 2 = S2 3 = S3 999 = S999



VISHAY DALE NETWORK/ARRAY RESISTORS

CS206

SAP Part Number
 20608MX151J103KP
 20608TC102J101KE
 20608SS000S000SPAA
 20608TC102J101KEAB

SAP Description
 CS20608BMX151J103K P03
 CS20608CTC102J101K E e1
 CS20608C-00-S1 P03
 CS20608CTC102J101K-S2 E e1

MODEL 3 digits	PIN COUNT 2 digits	PACK. & SCHEMATIC 1 digit	CAP. DIELECTRIC 1 digit	RESISTANCE VALUE 3 digits	RESISTANCE TOL. 1 digit	CAPACITANCE VALUE 3 digits	CAPACITANCE TOLERANCE 1 digit	PACKAGING 1 digit	SPECIAL 2 digits
206 = CS206	04 05 06 07 08 09 10 11 12 13 14 15 16 17 18	E = BE M = BM A = EA T = CT S = Special (package height always "C")	C = C0G X = X7R S = Special, per TPI	3-digit numeric code (in ohms) where the first two digits are the significant figures and the last digit is the multiplier. 000 = Special (always null) Check data sheet for available value range	F = ±1% G = ±2% J = ±5% S = Special (always null)	3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier. 000 = Special (always null) Check data sheet for available value range	K = ±10% M = ±20% S = Special, per TPI	STANDARD LEAD FREE CODES E = Bulk pack STANDARD TIN/LEAD CODES P = Bulk pack (P03) NON-STANDARD TIN/LEAD CODES M = Heat seal pack (M11) S = per TPI (S51) Click to go to Packaging Code definition page	AA to ZZ as needed Blank = Standard AA = S1 AB = S2 AC = S3 ZZ = S529 Excludes characters I, O, and X.



VISHAY DALE NETWORKS

CSC (01, 03, 00)

SAP Part Number
CSC06C0347R0GDA
CSC10A011M00GEK

SAP Description
CSC06C-03 47 2% D03
CSC10A-01 1M 2% EK e3

MODEL 3 digits	PIN COUNT 2 digits	PACK. HEIGHT 1 digit	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
CSC	04 05 06 07 08 09 10 11 12 13 14 15 16 17 18	STANDARD A = Low profile B = Medium profile NON-STANDARD C = High profile	STANDARD 01 = Bussed, pin "1" common 03 = Isolated (even pin counts only) NON-STANDARD 02 = Combined group resistors 04 = Bussed, pin "1" and "n" common 06 = Bussed, middle pin common (odd pin counts only) 07 = Bussed, pin "n" common 00 = Custom, per TPI	R = ohms K = kilohms M = Megohms 0000 = 0 ohm jumper or special (value per TPI) Check data sheet for available value range	F = ±1% G = ±2% J = ±5% S = Special, per TPI Z = 0 ohm jumper	STANDARD LEAD FREE CODES EK = Bulk pack NON-STANDARD LEAD FREE CODES EJ = Tube pack NON-STANDARD TIN/LEAD CODES PA = Bulk pack (P03) MA = Heat seal pack (M11) DA = Tube pack (D03) WE = Tray pack (T12) SL = Custom pack, per TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE NETWORKS

CSC (05)

SAP Part Number
CSC10A05500BGDA
CSC06B05102AGEK
CSC08A05131AGPA26

SAP Description
CSC10A-05-820/131G 2% D03
CSC10A-05-152/332G 2% EK e3
CSC08A-05-221/331G-S26 P03

MODEL 3 digits	PIN COUNT 2 digits	PACK. HEIGHT 1 digit	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
CSC	04 05 06 07 08 09 10 11 12 13 14 15 16 17 18	STANDARD A = Low profile B = Medium profile NON-STANDARD C = High profile	05 = Dual Terminator	Impedance code, 2 significant digits 3rd is multiplier, 4th character is an alpha modifier Click to go to Impedance Code definition page	F = ±1% G = ±2% J = ±5% S = Special, per TPI	STANDARD LEAD FREE CODES EK = Bulk pack NON-STANDARD LEAD FREE CODES EJ = Tube pack NON-STANDARD TIN/LEAD CODES PA = Bulk pack (P03) MA = Heat seal pack (M11) DA = Tube pack (D03) WE = Tray pack (T12) SL = Custom pack, per TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE NETWORKS CSRC

SAP Part Number
CSRC07B00S01XXXXXP

SAP Description
CSRC-07B-00-S1 P03

Note: For standard CSRC parts, use the CS206 series

MODEL	PIN COUNT	PACK. HEIGHT	SCHEMATIC	RESISTANCE VALUE	RESISTANCE TOLERANCE	CAP. VALUE	CAP. TOLERANCE	PACKAGING
4 digits	2 digits	1 digit	2 digits	3 digits	1 digit	3 digits	1 digit	1 digit
CSRC	04 05 06 07 08 09 10 11 12 13 14 15 16 17 18	B = Medium profile C = High profile	00 = Special	3 character dash # (S01 thru S99 as applicable) Example S01 = S1 NOTE * Specials will NOT reflect specific values. Use "X" to fill SAP P/N voids.	X = Special	XXX = Special	X = Special	STANDARD LEAD FREE CODES E = Bulk pack STANDARD TIN/LEAD CODES P = Bulk pack (P03) NON-STANDARD TIN/LEAD CODES M = Heat seal pack (M11) S = per TPI (S51) Click to go to Permark codes section



VISHAY DALE NETWORKS

CZA/CZB

SAP Part Number
CZA06S04150300HRT
CZA04S04015050LEA
CZB06S04090050HEA

SAP Description
CZA06S04150300H RG5
CZA04S04015050L EA e3
CZB06S04090050H EA e3

MODEL	SIZE	TERMINAL	PIN COUNT	ATTENUATION	IMPEDANCE	TOLERANCE	PACKAGING	SPECIALS
3 digits	2 digits	1 digit	2 digits	3 digits	3 digits	1 digit	2 digits	1 digit
CZA= Unbalanced pi filter CZB = Balanced Pi filter	04 (CZA only) 06	S = Convex, square corner	04	005 = 0.5 dB 010 = 1 dB 015 = 1.5 dB 020 = 2 dB 030 = 3 dB 040 = 4 dB 050 = 5 dB 060 = 6 dB 070 = 7 dB 080 = 8 dB 090 = 9 dB 100 = 10 dB 110 = 11 dB 120 = 12 dB 130 = 13 dB 140 = 14 dB 150 = 15 dB 160 = 16 dB 170 = 17 dB 180 = 18 dB 190 = 19 dB 200 = 20 dB 000 = 0 dB or 0 ohm jumper	050 = 50 ohm 075 = 75 ohm 100 = 100 ohm 300 = 300 ohm 600 = 600 ohm 000 = 0 ohm jumper NOTE: For 0 dB part, use impedance of 50 ohm to 600 ohm, not "000"	H = ±0.5 dB (for attenuations of 6 dB or greater) L = ±0.3 dB (for attenuations less than 6 dB) Z = 0 ohm jumper	STANDARD LEAD FREE CODES EA = Reel pack, std taping, 7" reel STANDARD TIN/LEAD CODES TD = Reel pack, 8mm paper tape, 2mm pocket pitch, 7" reel (RT7, 04-size only) RT = Reel pack, 8mm embossed tape, 4mm pocket pitch, 7" reel (RG5, 06-size only) Click to go to Packaging Code definition page	Dash #'s 1 thru 9 as applicable Blank = Standard



VISHAY DALE NETWORKS

DFM (Military M83401/03)

SAP Part Number

M8340103MA001GJD05
M8340103K1502FAD05
M8340103M47R0JBD05

SAP Description

DFM14-15-820/131G 2% M M8340103MA001GJ D05
DFM14-12 1.5K 1% K M8340103K1502FA D05
DFM14-11 47 2% M M8340103M47R0JB D05

MILITARY STYLE 6 digits	MIL. SPEC. SHEET 2 digits	TC 1 digit	VALUE 4 digits	TOLERANCE 1 digit	SCHEMATIC 1 digit	PACKAGING 3 digits
M83401	03 = DFM14	K = ±100ppm/°C M = ±300ppm/°C	<p>For A and B schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder.</p> <p>For J schematic: Per std MIL spec resistance designator table (All are in format "Axxx")</p> <p>(NOTE: P/N FORMAT PER MIL-PRF-83401)</p> <p>Check data sheet for available value range</p>	F = ±1% G = ±2% J = ±5%	A = Isolated, pin "n" common (11) B = Bussed (12) J = Dual Terminator (15)	<p>STANDARD TIN/LEAD CODES D05 = Tube pack</p> <p>STANDARD TIN/LEAD SLDC CODES DSL = Tube pack, SLDC</p> <p>NON-STANDARD TIN/LEAD CODES S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S07, S11, S30 special pack available</p> <p>Click to go to Packaging Code definition page</p>



VISHAY DALE NETWORKS

DFP

SAP Part Number

DFP141210K0GD05

DFP1611470RGE05

DFP141149R9FD0560

SAP Description

DFP14-12 10K 2% D05

DFP16-11 470 2% E05 e1

DFP14-11-S60 49R9 1% D05

MODEL 3 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
DFP	14 16	STANDARD 11 = Isolated 12 = Bussed, pin "n" common NON-STANDARD 10 = Custom, per TPI	R = ohms K = kilohms M = Megohms 0000 = 0 ohm jumper XXXX = Special (value per TPI) Check data sheet for available value range	F = ±1% G = ±2% J = ±5% S = Special, per TPI Z = 0 ohm jumper	STANDARD LEAD FREE CODES E05* = Tube pack STANDARD TIN/LEAD CODES D05 = Tube pack NON-STANDARD TIN/LEAD CODES S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S07, S11, S30 special pack available * Leadree version not currently released Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click below to go to Permark codes section



VISHAY DALE NETWORKS

DFRC

SAP Part Number
 DFRC1610D052
 DFRC1610E0510

SAP Description
 DFRC1610-S2 D05
 DFRC1610-S10 E05 e1

MODEL 4 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	PACKAGING 3 digits	SPECIALS 1 to 3 digits
DFRC	16	10 = Custom, per TPI	<p>STANDARD LEAD FREE CODES E05* = Tube pack</p> <p>STANDARD TIN/LEAD CODES D05 = Tube pack</p> <p>NON-STANDARD TIN/LEAD CODES S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S07, S11, S30 special pack available</p> <p>* Leadfree version not currently released</p> <p>Click to go to Packaging Code definition page</p>	<p>1 thru 999 as required</p> <p>Blank = Standard</p> <p>1 = S1 2 = S2 etc...</p> <p>Click to go to Permark codes section</p>



VISHAY DALE NETWORKS

MCMB / MCML / MCMU

SAP Part Number

MCMU32
MCML4
MCMB15
MCMB01S9

SAP Description

MCMU-S32 S51
MCML-S4 S51
MCMB-15 S51
MCMB-01-S9 S51

Standard packaging code S51 for all part numbers

MODEL 4 digits	VERSION Up to 5 digits
MCMB MCML MCMU	1 thru 999 (for all models) and 01S1 thru 04S11 (for MCMB only) as required 1 = S1 2 = S2 01S9 03S11 04S9



VISHAY DALE NETWORKS

MDM (Military M83401/01, /02)

SAP Part Number
M8340102M1003FBD04
M8340101KA001GJD04

SAP Description
MDM16-01 100K 1% M M8340102M1003FB D04
MDM14-05-820/131G 2% K M834010KA001GJ D04

MILITARY STYLE 6 digits	MIL. SPEC. SHEET 2 digits	TC 1 digit	VALUE 4 digits	TOLERANCE 1 digit	SCHEMATIC 1 digit	PACKAGING 3 digits
M83401	01 = MDM14 02 = MDM16	K = $\pm 100\text{ppm}/^\circ\text{C}$ M = $\pm 300\text{ppm}/^\circ\text{C}$	For A and B schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. For J schematic: Per std MIL spec resistance designator table (All are in format "Axxx") (NOTE: P/N FORMAT PER MIL-PRF-83401) Check data sheet for available value range	F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$	A = Isolated (03) B = Bussed, pin "n" common (01) J = Dual Terminator (05)	STANDARD TIN/LEAD CODES D04 = Tube pack STANDARD TIN/LEAD SLDC CODES DSL = Tube pack, SLDC NON-STANDARD TIN/LEAD CODES D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available Click to go to Packaging Code definition page



VISHAY DALE NETWORKS

MDP (01, 03, 00)

SAP Part Number

MDP160112K7FD04
 MDP1405121CGE04
 MDP16030000ZD04
 MDP1400XXXXSD04104

SAP Description

MDP16-01 12.7K 1% D04
 MDP14-05- 221/271G 2% E04 e1
 MDP16-03 0 OHM JUMPER D04
 MDP14-00-S104 D04

MODEL 3 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
MDP	14 16 18	<p>STANDARD</p> <p>01 = Bussed, pin "n" common</p> <p>03 = Isolated</p> <p>NON-STANDARD</p> <p>00 = Custom, per TPI</p>	<p>R = ohms</p> <p>K = kilohms</p> <p>M = Megohms</p> <p>0000 = 0 Ohm Jumper</p> <p>XXXX = Special (value per TPI)</p> <p>Check data sheet for available value range</p>	<p>F = ±1%</p> <p>G = ±2%</p> <p>J = ±5%</p> <p>K = ±10%</p> <p>S = Special, per TPI</p> <p>Z = 0 Ohm Jumper</p>	<p>STANDARD LEAD FREE CODES</p> <p>E04 = Tube pack</p> <p>STANDARD TIN/LEAD CODES</p> <p>D04 = Tube pack</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>D02 = Tube pack, plugged</p> <p>S13 = Tube pack, 5 tube/bundle, with antistatic overpack</p> <p>S14 = Tube pack, 1 tube/bundle, with antistatic overpack</p> <p>S15 = Tube pack, individual unit packaging, antistatic</p> <p>S51 = Custom pack, per TPI</p> <p>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available</p> <p>S03, S10, S11, S30 special pack available</p> <p>Click to go to Packaging Code definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Blank = Standard</p> <p>GENERAL USAGE DASH NUMBERS</p> <p>399 = Backside soldering</p> <p>Click to go to Permark codes section</p>



VISHAY DALE NETWORKS

MDP (45, 46)

SAP Part Number

MDP1646D04
 MDP1645E04
 MDP1645D04122

SAP Description

MDP16-46 D04
 MDP16-45 E04 e1
 MDP16-45-S122 D04

MODEL 3 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	PACKAGING 3 digits	SPECIAL Up to 3 digits
MDP	16	45 = TTL/ECL Translator 46 = Signal Terminator	STANDARD LEAD FREE CODES E04 = Tube pack STANDARD TIN/LEAD CODES D04 = Tube pack NON-STANDARD TIN/LEAD CODES D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 399 = Backside soldering Click to go to Permark codes section



VISHAY DALE NETWORKS

MDP (05)

SAP Part Number
MDP1405121CGD04
MDP1605990AGE04

SAP Description
MDP14-05-221/271G 2% D04
MDP16-05-161/261G 2% E04 e1

MODEL 3 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
MDP	14 16 18	05 = Dual Terminator	Impedance code, 2 significant digits, 3rd is multiplier, 4th character is an alpha modifier Click to go to Impedance Code definition page	F = ±1% G = ±2% J = ±5% K = ±10% S = Special, per TPI	STANDARD LEAD FREE CODES E04 = Tube pack STANDARD TIN/LEAD CODES D04 = Tube pack NON-STANDARD TIN/LEAD CODES D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 399 = Backside soldering Click to go to Permark codes section



VISHAY DALE NETWORKS MDRC

SAP Part Number

**MDRC1641500GE04
MDRC1600XXXSD0410
MDRC1600X03SD045
MDRC1600500GD0415**

SAP Description

**MDRC-1641-500G E04 e1
MDRC-1600-S10 D04
MDRC-1600-03-S5 D04
MDRC-1600-500G-S15 D04**

MODEL 4 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 3 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
MDRC	16	41 42 00	(value in ohms) 3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier. If no value/value code displayed, use "X" as filler Check data sheet for available value range	G = ±2% S = Special, per TPI	STANDARD LEAD FREE CODES E04 = Tube pack STANDARD TIN/LEAD CODES D04 = Tube pack NON-STANDARD TIN/LEAD CODES D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Example: 1 = S1 10 = S10 Click to go to Permark codes section



VISHAY DALE NETWORKS

MSM (Military M83401/04, /05, /06, /07, /08, /09)

SAP Part Number

M8340107K1003GCD03

M8340104KA001GHD03

SAP Description

MSM06A-01 100K 2% K M8340107K1003GC D03

MSM06C-05-820/131G 2% K M8340104KA001GH D03

MILITARY STYLE 6 digits	MIL. SPEC. SHEET 2 digits	TC 1 digit	VALUE 4 digits	TOLERANCE 1 digit	SCHEMATIC 1 digit	PACKAGING 3 digits
M83401	04 = MSM06C 05 = MSM08C 06 = MSM10C 07 = MSM06A 08 = MSM08A 09 = MSM10A	K = ±100ppm/°C M = ±300ppm/°C	For C and G schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. For H schematic: Per std MIL spec resistance designator table (All are in format "Axxx") (NOTE: P/N FORMAT PER MIL-PRF-83401) Check data sheet for available value range	F = ±1% G = ±2% J = ±5%	C = Bussed, pin "1" common (01) G = Isolated (03) H = Dual Terminator (05)	STANDARD TIN/LEAD CODES D03 = Tube pack STANDARD TIN/LEAD SLDC CODES DSL = Tube pack, SLDC NON-STANDARD TIN/LEAD CODES D29 = Tube pack, parts packaged side-by-side S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S30 special pack available Click to go to Packaging Code definition page



VISHAY DALE NETWORKS

MSM (Military M83401/18, /19)

SAP Part Number

M8340118KA002GXD03

M8340119KA007GXD03

SAP Description

MSM06A-18-S2 M8340118KA002GX D03

MSM08A-19-S7 M8340119KA007GX D03

MILITARY STYLE 6 digits	MIL. SPEC. SHEET 2 digits	TC 1 digit	VALUE 4 digits	TOLERANCE 1 digit	SCHEMATIC 1 digit	PACKAGING 3 digits
M83401	18 = MSM06A-18 19 = MSM08A-19	K = ±100ppm/°C	Per std MIL spec resistance designator table (All are in format "Axxx") (Value codes "Axxx" = the dash number, as in examples below) A001 = S1 A003 = S3 A004 = S4 A005 = S5 and so on... (NOTE: P/N FORMAT PER MIL-PRF-83401) The M8340118... series is currently only -S1 and -S2. The M8340119... series is currently -S1 through -S12.	G = ±2%	X	STANDARD TIN/LEAD CODES D03 = Tube pack STANDARD TIN/LEAD SLDC CODES DSL = Tube pack, SLDC NON-STANDARD TIN/LEAD CODES D29 = Tube pack, parts packaged side-by-side S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S30 special pack available Click to go to Packaging Code definition page



VISHAY DALE NETWORKS

MSM (Military M83401/24)

SAP Part Number

M8340124K1001GGD03
M8340124K1001GCD03
M8340124MA008JHD03

SAP Description

MSM10A-03-S2 1K 2% K M8340124K1001GG D03
MSM10A-01-S4 1K 2% K M8340124K1001GC D03
MSM10A-05-220/330J-S3 5% M M8340124MA008JH D03

MILITARY STYLE 6 digits	MIL. SPEC. SHEET 2 digits	TC 1 digit	VALUE 4 digits	TOLERANCE 1 digit	SCHEMATIC 1 digit	PACKAGING 3 digits
M83401	24 = MSM10A	K = ±100ppm/°C M = ±300ppm/°C	<p>For C and G schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder.</p> <p>For H schematic: Per std MIL spec resistance designator table (All are in format "Axxx")</p> <p>(NOTE: P/N FORMAT PER MIL-PRF-83401)</p> <p>Check data sheet for available value range</p>	F = ±1% G = ±2% J = ±5%	C = Bussed, pin "1" common (MSM10A-01-S4) G = Isolated (MSM10A-03-S2) H = Dual Terminator (MSM10A-05-S3)	<p>STANDARD TIN/LEAD CODES D03 = Tube pack</p> <p>STANDARD TIN/LEAD SLDC CODES DSL = Tube pack, SLDC</p> <p>NON-STANDARD TIN/LEAD CODES D29 = Tube pack, parts packaged side-by-side S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S30 special pack available</p> <p>Click to go to Packaging Code definition page</p>



VISHAY DALE NETWORKS

MSP (01, 03, 00)

SAP Part Number
 MSP06C03470RGDA
 MSP08A0310K0FEJ
 MSP09A0000000DA11
 MSP10A0050R0GDA97

SAP Description
 MSP06C-03 470 2% D03
 MSP08A-03 10K 1% EJ e1
 MSP09A-00-S11 D03
 MSP10A-00-S97 50 2% D03

MODEL 3 digits	PIN COUNT 2 digits	HEIGHT 1 digit	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
MSP	06 08 09 10 Even count for 03 schematic	STANDARD A = Low profile C = High profile NON-STANDARD B = Medium profile	STANDARD 01 = Bussed, pin "1" common 03 = Isolated NON-STANDARD 02 = Combined group resistors 04 = Bussed, pin "1" and "n" common 00 = Custom, per TPI	R = ohms K = kilohms M = Megohms 0000 = 0 ohm jumper or special (value per TPI) Check data sheet for available value range	F = ±1% G = ±2% J = ±5% S = Special, per TPI Z = 0 ohm jumper	STANDARD LEAD FREE CODES EJ = Tube pack STANDARD TIN/LEAD CODES DA = Tube pack (D03) NON-STANDARD TIN/LEAD CODES DB = Tube pack, parts packaged side-by-side (D29) SB = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SC = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available SG (S28), SJ (S30) special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 400 = HSD Click to go to Permark codes section



VISHAY DALE NETWORKS

MSP (05)

SAP Part Number
MSP08A05101CGDA
MSP10C05141AGEJ

SAP Description
MSP08A-05-181/241G 2% D03
MSP10C-05-271/271G 2% EJ e1

MODEL 3 digits	PIN COUNT 2 digits	HEIGHT 1 digit	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
MSP	06 08 10	STANDARD A = Low profile C = High profile NON-STANDARD B = Medium profile	05 = Dual Terminator	Impedance code, 2 significant digits and a multiplier, followed by alpha modifier Click to go to Impedance Code definition page	F = ±1% G = ±2% J = ±5% S = Special, per TPI	STANDARD LEAD FREE CODES EJ = Tube pack STANDARD TIN/LEAD CODES DA = Tube pack (D03) NON-STANDARD TIN/LEAD CODES DB = Tube pack, parts packaged side-by-side (D29) SB = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SC = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available SG (S28), SJ (S30) special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 400 = HSD Click to go to Permark codes section



VISHAY DALE NETWORKS

R1C / R4C / R5C

SAP Part Number
R1C16A20K0BEB14

SAP Description
R1C-16A 20K .1% T-9 B14

MODEL 3 digits	PIN COUNT 2 digits	SCHEMATIC 1 digit	VALUE 4 digits	TOLERANCE 1 digit	TC 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
R1C R4C R5C	06 (R4C & R5C) 08 (R4C & R5C) 16 (R1C only)	A (R1C only) B (R4C & R5C)	R = ohms K = kilohms M = Megohms	B = ±0.1% C = ±0.25% D = ±0.5% F = ±1% G = ±2%	Y = ±10ppm/°C (T-13) X = ±15ppm/°C (T-10) E = ±25ppm/°C (T-9) H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1)	STANDARD LEAD FREE CODES E14* = Bulk pack STANDARD TIN/LEAD CODES B14 = Bulk pack NON-STANDARD TIN/LEAD CODES P13 = Tube pack, antistatic S51 = Custom pack, per TPI * Leadfree version not currently released Click to go to Packaging Code Definition page	Dash #'s 1 thru 999 as applicable Blank = Standard Click to go to Permark codes section



VISHAY DALE NETWORKS

SOGC (01, 03, 00)

SAP Part Number

SOGC160133R0GRZ
 SOGC200312K0GEA
 SOGC2001100RGDC399
 SOGC200320K0FRZ399

SAP Description

SOGC-1601 33 2% R61
 SOGC-2003 12K 2% EA e1
 SOGC-2001-S399 100 2% D02
 SOGC-2003-S399 20K 1% R61

MODEL 4 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
SOGC	16 20	STANDARD 01 = Bussed, pin "n" common 03 = Isolated NON-STANDARD 00 = Custom, per TPI	R = ohms K = kilohms M = Megohms 0000 = 0 ohm jumper or special (value per TPI) Check data sheet for available value range	F = ±1% G = ±2% J = ±5% S = Special, per TPI Z = 0 ohm jumper	STANDARD LEAD FREE CODES EA = Reel pack EJ = Tube pack STANDARD TIN/LEAD CODES RZ = Reel pack (R61) DC = Tube pack (D02) NON-STANDARD TIN/LEAD CODES SB = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SC = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SJ (S30) special pack available Click to go to Packaging Code Definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 399 = Backside soldering Click to go to Permark codes section



VISHAY DALE NETWORKS

SOGC (05)

SAP Part Number
SOGC1605750BGRZ
SOGC2005561AFEA

SAP Description
SOGC-1605-121/201G 2% R61
SOGC-2005-6340/4991F 1% EA e1

MODEL 4 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING	SPECIAL Up to 3 digits
					2 digits	
SOGC	16 20	05 = Dual Terminator	Impedance code, 3 digits followed by alpha modifier Click to go to Impedance Code definition page	F = ±1% G = ±2% J = ±5% S = Special, per TPI	STANDARD LEAD FREE CODES EA = Reel pack EJ = Tube pack STANDARD TIN/LEAD CODES RZ = Reel pack (R61) DC = Tube pack (D02) NON-STANDARD TIN/LEAD CODES SB = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SC = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SJ (S30) special pack available Click to go to Packaging Code Definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 399 = Backside soldering Click to go to Permark codes section



VISHAY DALE NETWORKS

SOGC (45, 46)

SAP Part Number

SOGC1645RZ

SOGC2046EA

SAP Description

SOGC-1645 R61

SOGC-2046 EA e1

MODEL	PIN COUNT	SCHEMATIC	PACKAGING	SPECIAL
4 digits	2 digits	2 digits	2 digits	Up to 3 digits
SOGC	16 20	45 = TTL/ECL Translator 46 = Signal Terminator	<p>STANDARD LEAD FREE CODES EA = Reel pack EJ = Tube pack</p> <p>STANDARD TIN/LEAD CODES RZ = Reel pack (R61) DC = Tube pack (D02)</p> <p>NON-STANDARD TIN/LEAD CODES SB = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SC = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SJ (S30) special pack available</p> <p>Click to go to Packaging Code Definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Blank = Standard</p> <p>GENERAL USAGE DASH NUMBERS 399 = Backside soldering</p> <p>Click to go to Permark codes section</p>



VISHAY DALE NETWORKS

SOMC (01, 03, 00)

SAP Part Number

SOMC140133R0GDC
 SOMC20031K20FEA
 SOMC16030000ZRZ
 SOMC140110K0GRZ399
 SOMC1603133KFEJ399

SAP Description

SOMC-1401 33 2% D02
 SOMC-2003 1.2K 1% EA e1
 SOMC-1603 0 OHM JUMPER R61
 SOMC-1401-S399 10K 2% R61
 SOMC-1603-S399 133K 1% EJ e1

MODEL 4 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
SOMC	14 16 20	STANDARD 01 = Bussed, pin "n" common 03 = Isolated NON-STANDARD 00 = Custom, per TPI	R = ohms K = kilohms M = Megohms 0000 = 0 ohm jumper or special (value per TPI) Check data sheet for available value range	F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ S = Special, per TPI Z = 0 ohm jumper	STANDARD LEAD FREE CODES EA = Reel pack EJ = Tube pack STANDARD TIN/LEAD CODES RZ = Reel pack (R61) DC = Tube pack (D02) NON-STANDARD TIN/LEAD CODES SB = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SC = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SJ (S30) special pack available Click to go to Packaging Code Definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 399 = Backside soldering Click to go to Permark codes section



VISHAY DALE NETWORK/ARRAY RESISTORS

SOMC (05)

SAP Part Number
SOMC2005221BGDC
SOMC1405150AFEJ

SAP Description
SOMC-2005-331/681G 2% D02
SOMC-1405-1501/1201F 2% EJ e1

MODEL 4 digits	PIN COUNT 2 digits	SCHEMATIC 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
SOMC	14 16 20	05 = Dual Terminator	Impedance code, 3 digits followed by alpha modifier Click to go to Impedance Code definition page	F = ±1% G = ±2% J = ±5% S = Special, per TPI	STANDARD LEAD FREE CODES EA = Reel pack EJ = Tube pack STANDARD TIN/LEAD CODES RZ = Reel pack (R61) DC = Tube pack (D02) NON-STANDARD TIN/LEAD CODES SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SB = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SF (S30) special pack available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 399 = Backside soldering Click to go to Permark codes section



VISHAY DALE NETWORKS

SPM

SAP Part Number
SPM71S51
SPM101S51
SPM33-2002GS51
SPM152-1000FS51

SAP Description
SPM-71 S51
SPM-101 S51
SPM-33 20K 2% S51
SPM-152 100 1% S51

MODEL	TYPE	VALUE/TOLERANCE INDICATOR	VALUE	TOLERANCE	PACKAGING
3 digits	2 or 3 digits	0 or 1 digit	0 or 4 digits	0 or 1 digit	3 digits
SPM	01 thru 99 or 100 thru 999 as required 71 76 100 101	Blank = Standard Use a “-“ for P/N’s that call out values / tolerances	Blank = Standard 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an “R” is used as a decimal placeholder.	Blank = Standard F = ±1% G = ±2% J = ±5%	STANDARD CODES S51 = Custom pack, per TPI NON-STANDARD CODES M18 = Tray pack, w/ESD R78 = Reel pack, Embossed carrier tape, 7" reel, w/ESD Click to go to Packaging Code Definition page



VISHAY DALE WIREWOUND RESISTORS

HL BRACKETS and ACCESSORIES

SAP Part Number

BRACKET101033E29

BRACKET205

SAP Description

BRACKET101 FOR HLZ033 E29

BRACKET205 B29

MODEL 7 Digits	SIZE 3 Digits	RESISTOR TYPE 3 Digits	PACKAGING 3 Digits
BRACKET	101, 102 or 103 available	010, 011, 012, 020, 025, 026, 050, 051, 060, 065, 080, 100, 120, 130, 160, 175, 225 for all HL types but HLZ 033, 090, 099, 105, 110, 140, 165, 220, 240, 275, 300, 375 for HLZ types	E29 = RoHS Compliant Blank = non-RoHS Compliant
	201, 202, 203, 204, 205, 206 or 208	Not applicable for the 200 Bracket series	
	301, 302 or 303 available	011, 012, 020, 025, 026, 050, 051, 060, 065, 080, 100, 120, 130, 160, 175, 225 for all HL types but HLZ 033, 090, 099, 105, 110, 140, 165, 220, 240, 275, 300, 375 for HLZ types	
MODEL & PACKAGING CODE (RoHS Compliant) 7 Digits		ACCESSORIES DESCRIPTION	
75008602E29		SAP part number for HL Slider 70	
21054401E29		SAP part number for HL Slider 71	
75008603E29		SAP part number for HL Slider 72	
75008604E29		SAP part number for HL Slider 73	
75008605E29		SAP part number for HL Slider 74	



VISHAY DALE NETWORKS

SPMX

SAP Part Number
SPMX183S51

SAP Description
SPMX-183 S51

MODEL 4 digits	TYPE 3 digits	PACKAGING 3 digits
SPMX	001 thru 999 as required 183 192	STANDARD CODES S51 = Custom pack, per TPI Click to go to Packaging Code Definition page



VISHAY DALE NETWORK/ARRAY RESISTORS

TRA

SAP Part Number

TRA06E083100RFTA

TRA06E08310K0GTA

TRA06E08347R5JTA

SAP Description

TRA06E0803 100 1% RT1

TRA06E0803 10K 2% RT1

TRA06E0803 47.5 5% RT1

NOTE: TRA SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 3 digits	SIZE 2 digits	TERMINAL 1 digit	PIN COUNT 2 digits	SCHEMATI C 1 digit	VALUE 4 digits	TOLERANC E 1 digit	PACKAGING 2 digits	SPECIAL 2 digits
TRA	06	E	08 10* 16*	1 = 01* 2 = 02* 8 = 20* 3 = 03 9 = 99*	R = decimal K = thousand 54R1 = 54.1 ohm 1K32 = 1,320ohm Check datasheet for available value range	F = ±1.0% G = ±2.0% J = ±5.0%	TA = RT1 (reel) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE NETWORKS MISCELLANEOUS (cont 1 of 3)

SAP Part Number
81018706B29

SAP Description
810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)

PART NUMBER 6 digits	DASH TYPE 2 digits	PACKAGING 3 digits
2xxxxx 8xxxxx	00 thru 99 as applicable	B29, P03, S27, S31, T03, etc. Click to go to Packaging Code definition page



VISHAY DALE NETWORKS LOT CHARGES (cont 2 of 3)

SAP Part Number
LOTCHG-DALENETWORK

SAP Description
LOTCHG-DALENETWORK S31

Standard packaging code S31 for all part numbers

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	DALENETWORK= Dale Networks (Material Group FN1)



VISHAY DALE NETWORKS FAST TRACK PROGRAM (cont 3 of 3)

SAP Part Number
FSTTRK10DALENETS
FSTTRK20DALENETS

SAP Description
FSTTRK10DALENETS S31
FSTTRK20DALENETS S31

Standard packaging code S31 for all part numbers

CHARGE 6 digits	LEAD TIME 2 digits	RESISTOR STYLE 9 digits
FSTTRK	05 = 5 working days 10 = 10 working days 15 = 15 working days 20 = 20 working days	DALENETS = Dale Networks (Material Group FN1)



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS



VISHAY DALE PLASMA DISPLAYS

ABG / PBG

SAP Part Number
PBG1220501G01

SAP Description
PBG-12205-1 G01

MODEL	PART TYPE	SPECIAL	PACKAGING
3 digits	5 digits	2 digits	3 digits
ABG PBG	00001 thru 99999 or C0000 thru C9999	Dash #'s 00 standard 01 thru 99 as applicable	STANDARD PACKAGING CODES G01 = Individual cardboard pack with cushioning NON-STANDARD PACKAGING CODES G02 = 2 or more units per cardboard box, corner supports G03 = 6 or more boxes palletized and shrink wrapped S50 = Package per front of production card S51 = Package per TPI Click to go to Packaging Code definition page



VISHAY DALE PLASMA DISPLAYS

APD

SAP Part Number

APD240G1200000G01

SAP Description

APD-240G120 G01

MODEL	HORIZONTAL CHARACTERS	TYPE	VERTICAL CHARACTERS	SPECIAL	PACKAGING
3 digits	3 digits	1 digit	3 digits	4 digits	3 digits
APD	001 thru 999 as applicable	A D G M	001 thru 999 as applicable	0000 for standard Specials will be 0A thru 0Z or 00 followed by 00 thru 99 as applicable EXAMPLES: 0A01; 0005; 0A00 All specials will have four (4) digits. as applicable	STANDARD PACKAGING CODES G01 = Individual cardboard pack with cushioning NON-STANDARD PACKAGING CODES G02 = 2 or more units per cardboard box, corner supports M28 = Individual cardboard box, plastic bag w/ etha foam per mil-std-129, bar code added S50 = Package per front of production card S51 = Package per TPI Click to go to Packaging Code definition page

VISHAY DALE PLASMA DISPLAYS

LCD



SAP Part Number

L320G240CTMC00VTS0
L016M001AYYHET0000
L320H240CTMC00VTS0
L016N001AYYHET0000

SAP Description

LCD-320G240C-TMC-VTS G02
LCD-016M001A-YYH-ET G02
LCD-320H240C-TMC-VTS E90 (RoHS Graphic Module)
LCD-016N001A-YYH-ET E90 (RoHS Character Module)

NOTE: Package code is G02 for Display Types M, G, X, C and is E90 for Display Types N, H, Y, D.

MODEL 1 digit	HORIZONTAL FORMAT 3 digits	DISPLAY TYPE 1 digit	VERTICAL FORMAT 3 digits	MODEL SERIAL # 1 digit	BACKLIGHT TYPE 1 digit	LCD MODE 1 digit	LCD POLARIZER TYPE TEMP. RANGE VIEWING DIRECTION 1 digit	IC FONT 2 digits	SPECIAL CODE 4 digits
L = LCD	001 thru 640 as applicable # of pixels or characters horizontally	M G X C N H Y D O M = Matrix G = Graphics X = Tape Auto Bond C = Color N = Matrix (RoHS) H = Graphics (RoHS) Y = Tape Auto Bond (RoHS) D = Color (RoHS) O = COG	001 thru 640 as applicable # of pixels or characters vertically	A thru Z as applicable Version or revision of display	A thru Z as applicable N = w/o backlight B = EL, blue D = EL, green W = EL, white Y = LED, yellow/green A = LED, amber R = LED, red G = LED, green T = LED, white P = LED, blue F = CCFL, white	A thru Z as applicable B = TN positive, gray N = TN negative G = STN positive, gray Y = STN positive Y/G M = STN negative, blue F = FSTN positive T = FSTN negative	A thru Z as applicable A = Reflective, N.T., 6 00 D = Reflective, N.T., 12 00 G = Reflective, W.T., 6 00 J = Reflective, W.T., 12 00 B = Transflective, N.T., 6 00 E = Transflective, N.T., 12 00 H = Transflective, W.T., 6 00 K = Transflective, W.T., 12 00 D = Transmissive, N.T., 6 00 F = Transmissive, N.T., 12 00 I = Transmissive, W.T., 6 00 L = Transmissive, W.T., 12 00 Note:N.T. = Nmal Temp.W.T. = Wide Temp.	AA thru ZZUse 0's N/A JS/JJ/JN/JT = English / Japanese EN/EE/EU/EP/ET = English / European ES/EC = English / European CP = English / Cyrillic HS/HP = Hebrew MG = Mexico Note IC Font is for Character models only and not used for Graphic models	Use 0's for N/A A = Custom V = Negative voltage generator on board T = Negative voltage generator and temperature compensation on board TS = Touch Screen E = Edge LED backlight D = Special Designator Examples: A000 TS00 VTS0



VISHAY DALE PLASMA DISPLAYS

LCG

SAP Part Number

LCGW0TN0010050DG02

SAP Description

LCG-W0TN0010050D G02

MODEL	MANUFACTURING DESIGNATOR	LCD TYPE	DESIGNATOR	DESIGNATOR	VERSION	PACKAGING
3 digits	1 digit	3 digits	3 digits	3 digits	2 digits	3 digits
LCG	A thru Z As applicable	0AA thru ZZZ As applicable	000 thru 999 As applicable	000 thru 999 As applicable	0A thru ZZ As applicable	STANDARD PACKAGING CODES G02 = 2 or more units per cardboard box, corner supports Click to go to Packaging Code definition page



VISHAY DALE PLASMA DISPLAYS

LED

SAP Part Number

LED128G0320000G02

SAP Description

LED-128G032 G02

MODEL	HORIZONTAL CHARACTERS	TYPE	VERTICAL CHARACTERS	SPECIAL	PACKAGING
3 digits	3 digits	1 digit	3 digits	4 digits	3 digits
LED	001 thru 999 as applicable	A D G M		0000 for standard Specials will be 0A thru 0Z or 00 followed by 00 thru 99 as applicable EXAMPLES:0A01;0005 ;0A00 All specials will have four digits. as applicable	STANDARD PACKAGING CODES G02 = 2 or more units per cardboard box, corner supports NON-STANDARD PACKAGING CODES G01 = Individual cardboard pack with cushioning M28 = Individual cardboard box, plastic bad w/ etha foam S50 = Package per front of production card S51 = Package per TPI



VISHAY DALE PLASMA DISPLAYS

PD

SAP Part Number

PD007D02501G01

SAP Description

PD-07D025-1 G01

MODEL	NUMBER OF CHARACTERS	TYPE	CHARACTER HEIGHT	SPECIAL	PACKAGING
2 digits	3 digits	1 digit	3 digits	2 digits	3 digits
PD	001 thru 999 as applicable	A B D G M	001 thru 999 as applicable	00 for standard Dash #'s 01 thru 99 as applicable	<p>STANDARD PACKAGING CODES</p> <p>G01 = Individual cardboard pack with cushioning</p> <p>NON-STANDARD PACKAGING CODES</p> <p>G02 = 2 or more units per cardboard box, corner supports</p> <p>G03 = 6 or more boxes palletized and shrink wrapped</p> <p>S50 = Package per front of production card</p> <p>S51 = Package per TPI</p> <p>Click to go to Packaging Code definition page</p>



VISHAY DALE PLASMA DISPLAYS

OLED

SAP Part Number:

O008N002ALPP5N0000

O128H064CLPP3N0000

SAP Description:

OLED-008N002A-LPP5N00000 E90

OLED-128H064C-LPP3N00000 E90

MODEL	HORIZONTAL FORMAT	DISPLAY TABLE	VERTICAL FORMAT	MODEL SERIES #	EMITTING COLOR	POLARIZAR	DISPLAY MODE	DRIVER VOLTAGE	TOUCH PANEL	SERIAL #
1 Digit	3 Digits	1 Digit	3 Digits	1 Digit	1 Digit	1 Digit	1 Digit	1 Digit	1 Digit	4 Digits
O = OLED	001 thru 999 As applicable # of pixels or characters horizontally	N = Matrix H = Graphics O = COG Y = TAB	001 thru 999 As applicable # of pixels or characters vertically	A thru Z As applicable Version or Revision of the Display	A thru Z As applicable A = Amber Y = Yellow/Green C = Full Color B = Blue W = White L = Yellow G = Green R = Red	P = With Polarizar N = Without Polarizar	P = Passive Matrix (PM) A = Active Matrix (AM)	5 = 5 Volts 3 = 3 Volts	A thru Z As applicable N = w/o Touch panel T = w/ Resistive Touch panel D = w/ Capacitive Touch panel G = w/ Optics Touch panel	0000 thru ZZZZ Any alpha-numeric combination, as applicable

*Package code is always E90.



VISHAY DALE PLASMA DISPLAYS

PDB / PDS

SAP Part Number

SAP Description

MODEL	SPECIAL	PACKAGING	SPECIAL DASH TYPE
3 digits	3 digits	3 digits	Up to 3 digits
PDB PDS	Dash #'s 001 thru 999 as applicable	STANDARD PACKAGING CODES G01 = Individual cardboard pack with cushioning G02 = 2 or more units per cardboard box, corner supports NON-STANDARD PACKAGING CODES G03 = 6 or more boxes palletized and shrink wrapped S50 = Package per front of production card S51 = Package per TPI Click to go to Packaging Code definition page	



VISHAY DALE PLASMA DISPLAYS

TIP

SAP Part Number

TIP3526PCS03G01

SAP Description

TIP-3526PCS-3 G01

MODEL	MATRIX	DISPLAY DESIGNATOR	FILTER DESIGNATOR	SPECIAL	PACKAGING
3 digits	4 digits	2 digits	1 digit	2 digits	3 digits
TIP	0001 thru 9999	AA thru ZZ	A B C D E F S	Dash #'s 00 standard01 thru 99 as applicable	<p>STANDARD PACKAGING CODES</p> <p>G01 = Individual cardboard pack with cushioning</p> <p>NON-STANDARD PACKAGING CODES</p> <p>G02 = 2 or more units per cardboard box, corner supports</p> <p>G03 = 6 or more boxes palletized and shrink wrapped</p> <p>S50 = Package per front of production card</p> <p>S51 = Package per TPI</p> <p>Click to go to Packaging Code definition page</p>



VISHAY DALE PLASMA DISPLAYS

EP

SAP Part Number:

EPOG128096EBLWA000

EPOG200096EBLWA000

SAP Description:

EPOG-128096E-BLWA00000 E90

EPOG-200096E-BLWA00000 E90

MODEL	IC TYPE	DISPLAY TYPE	DISPLAY FONT	MODEL SERIES	DISPLAY COLOR	BACK PLAN TYPE	MODULE TYPE	CONTROL BD	SPECIAL Code
2 Digits	1 Digit	1 Digit	6 Digits	1 Digit	1 Digit	1 Digit	1 Digit	1 Digit	3 Digits
EP	X= TAB C = COB O = GOG	N = Icon H = Character G = Graphic	0 thru 9 As applicable	A – Z As applicable	A – Z As applicable	A – Z As applicable	A – Z As applicable	O = Without Control Board A = With TC Control Board	000 thru 999 As applicable

*Package code is always E90.



VISHAY DALE PLASMA DISPLAYS

MISCELLANEOUS (28xxxx) / CHARGES (cont 1 of 2)

SAP Part Number

28101113G01

SAP Description

281011-13 G01

PART NUMBER

6 digits

DASH TYPE

2 digits

PACKAGING

3 digits

28xxxx

xxxx = 0000

9999

Dash #'s 00 thru 99 as applicable

STANDARD PACKAGING CODES

G01 = Individual cardboard pack with cushioning

NON-STANDARD PACKAGING CODES

B14 = General bulk pack

B29 = Bulk pack for hardware and piece parts

G02 = 2 or more units per cardboard box, corner supports

G03 = 6 or more boxes palletized and shrink wrapped

S50 = Package per front of production card

[Click to go to Packaging Code definition page](#)



VISHAY DALE PLASMA DISPLAYS

CHARGES(cont 2 of 2)

SAP Part Number

SAP Description

LOTCHG-INFODISPLAY

LOT CHARGE FOR INFORMATION DISPLAYS

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	INFODISPLAY = Information Displays



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS



VISHAY DALE THERMISTORS

A (Assemblies)

SAP Part Number

A3071P

SAP Description

A-3071 P06

MODEL	TYPE	PACKAGING	SPECIAL
1 digit	4 digits	1 Digit	Up to 2 digits
A	XXXX	P = P06 - Bulk pack M = S51 - See TPI S = S27 - Sample pack, best method F = E06 = Bulk Click to go to Packaging Code definition page	1 thru 99 A thru ZZ A1 thru Z9 Leave blank if standard as applicable



VISHAY DALE THERMISTORS

B / C / E / F / H / J / M / T / W / X

SAP Part Number

01M5003KP

01M5003KF

SAP Description

1M5003-10 P06

1M5003-10 E06 e3

CURVE 2 digits	MODEL 1 digit	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 1 digit	SPECIAL Up to 2 digits
01 02 03 04 07 08 09 12 13 14 17	B C E F H J M T W X	5003=500,000 5002=50,000 5001=5,000 5000=500 0500=50 Check data sheet for available value range	F = ±1.0% G = ±2.0% H = ±3.0% J = ±5.0% K = ±10.0% S = SPECIAL	LEAD FREE PACK CODES F = E06 - Bulk E = E58 - 8mm, 2000pcs (J Series only) D = E85 - 12mm, 5000pcs (J Series only) C = E07 - 100pc waffle tray TIN/LEAD FREE PACK CODES P = P06 - Bulk R = R58 - 8mm, 2000pcs (J Series only) A = R85 - 12mm, 5000pcs (J Series only) T = T06 - 100pc waffle tray Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 10 11 12 13 14 Leave blank if standard



VISHAY DALE THERMISTORS

DN

SAP Part Number

CA000150R00JR058

SAP Description

CA-1-8 50 5% R05

NOTE: DN SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL	SIZE	CURVE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	1 digit	3 digits	1 digit	1 digit	Up to 2 digits
DN	5004 4005 3003 4008 3005 3508 2304 2707 2004 2508 2005 1705 2008 1708 1104 1004 0804 0704	A B C D	Check data sheet for available value range	J = $\pm 5.0\%$ K = $\pm 10.0\%$	P = P06 - Bulk S = S27 - Sample pack, best method Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 Leave blank if standard



VISHAY DALE THERMISTORS

DN (Continued)

SAP Part Number

SAP Description

MODEL 2 digits	SIZE 4 digits	CURVE 1 digit	VALUE 3 digits	TOLERANCE 1 digit	PACKAGING 1 digit	SPECIAL Up to 2 digits
DN	0503 0504 0404 0407 0904 0406 3506 3004 3308 2701 1704 1204 0605 0607 2705 0408 0410	A B C D	Check data sheet for available value range	K = ±10.0%	P = P06 - Bulk S = S27 - Sample pack, best method Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 Leave blank if standard



VISHAY DALE THERMISTORS

DP

SAP Part Number

SAP Description

NOTE: DP SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL	SIZE	CURVE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	2 digits	3 digits	1 digit	1 digit	Up to 2 digits
DP	5504 4504 4005 3505 3005 5010 2505 3006 4510 2506 2005 2008 2010 3510 5510	DA DB DC DD DE DF DG DH	Check data sheet for available value range	N = ±30.0%	P = P06 - Bulk S = S27 - Sample pack, best method Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 Leave blank if standard



VISHAY DALE THERMISTORS

NTHS

SAP Part Number

NTHS0603N02N1002KR
 NTHS0603N02N1002KE

SAP Description

NTHS-0603N02 10K 10% R58
 NTHS-0603N02 10K 10% E58 e3

MODEL	SIZE	CONDUCTOR	CURVE	T.C	VALUE	TOLERANCE	PACKAGING
4 digits	4 digits	1 digit	2 digits	1 digit	4 digits	1 digit	1 digit
NTHS	0402 0603 0805 1005 1006 1012 1205 1206 1210	J = platinum/ palladium/silver N = nickel barrier	01 02 03 04 05 06 08 10 11 12 14 17	N = non-linear	1001 = 1,000 1000 = 100 Check data sheet for available value range	F = ±1.0% G = ±2.0% H = ±3.0% J = ±5.0% K = ±10.0%	LEAD FREE PACK CODES F = E06 - Bulk E = E58 - 8mm, 2000pcs D = E85 - 12mm, 5000pcs, 13" reel NTHS-1012 size only U = EG6 - 8mm, 5000pcs, 13" reel Q = EG7 - 12mm, 2000pcs, 7" reel NTHS-1012 size only TIN/LEAD FREE PACK CODES P = P06 - Bulk R = R58 - 8mm, 2000pcs A = R85 - 12mm, 5000pcs, 13" reel NTHS-1012 size only G = RG6 - 8mm, 5000pcs, 13" reel B = RG7 - 12mm, 2000pcs, 7" reel, NTHS-1012 size only Click to go to Packaging Code definition page



VISHAY DALE THERMISTORS

PST

SAP Part Number

PST1406DS1501NP

PST1406DS1501NF

SAP Description

PST-1406DS 1.5K 30% P06

PST-1406DS 1.5K 30% E06 e3

MODEL	SIZE	CURVE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	2 digits	4 digits	1 digit	1 digit	Up to 2 digits
PST	0603 0805 1206 1406	DA DB DC DD DE DF DG DH DS	1000 = 100 1001 = 1000 Check data sheet for available value range	M = $\pm 20.0\%$ N = $\pm 30.0\%$	LEAD FREE PACK CODES F = E06 - Bulk TIN/LEAD FREE PACK CODES P = P06 - Bulk Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 Leave blank if standard



VISHAY DALE THERMISTORS

PTFT

SAP Part Number

PTFT0603L1002KZ

PTFT0603L1002KW

SAP Description

PTFT-0603L 10K 10% RG9

PTFT-0603L 10K 10% EG9 e3

MODEL	SIZE	T.C	VALUE	TOLERANCE	PACKAGING
4 digits	4 digits	1 digit	4 digits	1 digit	1 digit
PTFT	0603 0805 1206	L = linear L= linear	1001 = 1,000 1000 = 100 Check data sheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$	LEAD FREE PACK CODES F = E06 - Bulk V = E52 - 1000PC W = EG9 - 5000PC TIN/LEAD FREE PACK CODES P = P06 - Bulk Y = R52 - 1000PC Z = RG9 - 5000PC Click to go to Packaging Code definition page



VISHAY DALE THERMISTORS

SPECIALS B / C / E / F / J / M / N / T / W

SAP Part Number

C12N103P

C12N103F

SAP Description

C12-103 P06

C12-103 E06 e3

MODEL 1 digit	CURVE 2 digits	T.C 1 digit	TYPE 3 digits	PACKAGING 1 digit	SPECIAL Up to 2 digits
B C E F J M N T W	01 02 03 04 07 08 09 12 13 14 17	N = non-linear	000 thru 999 as applicable	LEAD FREE PACK CODES F = E06 = Bulk E = E58 = 8mm, 2000pcs (J Series only) D = E85 = 12mm, 5000pcs (J Series only) N = E51 = See TPI C = E07 = 100pc waffle tray TIN/LEAD FREE PACK CODES P = P06 = BULK R = R58 = 8mm, 2000pcs (J Series only) A = R85 = 12mm, 5000pcs (J Series only) M = S51 = See TPI T = T06 = 100pc waffle tray Click to go to Packaging Code definition page	1 thru 99 A thru ZZ A1 thru Z9 Leave blank if standard as applicable

VISHAY DALE THERMISTORS

SSN



SAP Part Number

SSN0320P

SSN0320P

SAP Description

SSN-320 P06

SSN-320 E06 e3

NOTE: SSN SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 3 digits	SIZE 4 digits	PACKAGING 1 Digit	SPECIAL 2 digits
SSN	0320 0330 0340 0350 0360 0370 0380 0390 0400 0410 0420 0430 0440 0450 0460 0470 0480 0490 0500 0510 0520 0530 0540	TIN/LEAD PACK CODES P = P06 - Bulk S = S27 - Sample pack, best method Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 Leave blank if standard



VISHAY DALE THERMISTORS

SSN (Continued)

SAP Part Number

SAP Description

MODEL 3 digits	SIZE 4 digits	PACKAGING 1 Digit	SPECIAL 2 digits
SSN	0550 0560 0570 0580 0600 0610 0620 0630 0650 1045 1116 1119 1131 1148 1149 1150 1151 1152 1158 1170 1172 1174 1186 1187	TIN/LEAD PACK CODES P = P06 - Bulk S = S27 - Sample pack, best method Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 Leave blank if standard



VISHAY DALE THERMISTORS

SSP

SAP Part Number

SAP Description

NOTE: SSP SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL	SIZE	CURVE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	2 digits	3 digits	1 digit	1 digit	Up to 2 digits
SSP	8004 6004 5504 4504 4004 3005 4006 3505 7510 6010 4505 5510 4008 3507 3508 3504 3506 2508	DA DB DC DE DF	Check data sheet for available value range	M = ±20.0%	P = P06 - Bulk S = S27 - Sample pack, best method Click to go to Packaging Code definition page	01 02 03 04 05 06 07 08 09 Leave blank if standard



VISHAY DALE THERMISTORS

TFPT

SAP Part Number

TFPT0603L1002KZ

TFPT0603L1002KM

SAP Description

TFPT0603 10K 10% RT1

TFPT0603 10K 10% ET1 e3

MODEL	SIZE	CHARACTER	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	1 digits	4 digits	1 digit	1 digits	Up to 2 digits
TFPT	0603 0805 1206	L = linear	1001 = 1,000 1000 = 100 Check data sheet for available value range	C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$	LEAD FREE PACK CODES L = ET5 - 10000 pieces reels V = E52 - 1000 pieces reels M = ET1 - 5000 pieces reels TIN/LEAD PACK CODES X = RT5 - 10000 piece reels Y = R52 - 1000 piece reels Z = RT1 - 5000 piece reels Click to go to Packaging Code definition page	01 thru 99 Leave blank if standard as applicable



VISHAY DALE THERMISTORS MISCELLANEOUS / CHARGES

SAP Part Number

SAP Description

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	THERMISTORS = Thermistors OTHERRES = Other Resistors



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS



VISHAY DALE WIREWOUND RESISTORS

CA

SAP Part Number

CA000150R00JR058

CA5050R5000KE14

SAP Description

CA-1-8 50 5% R05

CA-5050 .5 10% E14 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	5 digits	1 digit	3 digits	Up to 3 digits
CA	0001 0002 4000 thru 4220 5050 thru 5220	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES* E14* = Bulk pack E05* = Tape/reel, 0.2" pitch, 2-7/8" tape spacing, no lead trim (CA0001, CA0002) E70* = Std tape/reel except 1000 pcs STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack R05 = Tape/reel, 0.2" pitch, 2-7/8" tape spacing, no lead trim (CA0001, CA0002) R28 = Tape/reel, 0.2" pitch, 3-3/8" tape spacing, no lead trim (up to CA4175, CA5175) R17 = Tape/reel, 0.2" pitch, 3-7/8" tape spacing, no lead trim (above CA4175, CA5175) NON-STANDARD TIN / LEAD PACKAGING CODES B12 = Bulk pack 100 pieces per box (CA0001, CA0002) S51 = Package per TPI, S70 = Std tape/reel except 1000 pcs, S73 = Std tape/reel except 500 pcs R05, R18, R36, R50, R64, R68, R88, S44 available * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CA HIGH VOLUME

SAP Part Number

CA000150R00JE66

CA0002R5000KE66

SAP Description

CA0001 50 5% E66 e3

CA0002 .5 10% E66 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	5 digits	1 digit	3 digits	Up to 3 digits
CA	0001 0002	R = decimal K = thousand R1500 = .15 ohm 1K000 = 1K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODE E66 = Tape/reel 2,500 pcs/reel	Dash #'s 1 thru 999 as applicable



VISHAY DALE WIREWOUND RESISTORS

CANS

SAP Part Number

CANS04081K00MEK

SAP Description

CANS0408 1K 20% EK

NOTE: CANS SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	4 digits	1 digit	3 digits	Up to 1 digits
CANS	0408 0417 0418 0420 0422 0432	R = decimal K = thousand R150 = .15 ohm 1K50 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$ M = $\pm 20\%$	STANDARD LEAD FREE PACKAGING CODES EK = Bulk pack, 2000pcs ES = Package per TPI	Dash #'s 1 thru 9 as applicable



VISHAY DALE WIREWOUND RESISTORS

CP HIGH VOLUME

SAP Part Number

CP000515R00JE66

CP00101K000KE663

SAP Description

CP0005 15 5% E66 e

CP0010-3 1K 10% E66 e3

MODEL 2 digits	SIZE 4 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CP	0002 0003 0005 0007 0010 0015 0020	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E66 = Bulk pack	Dash #'s 1 thru 999 as applicable



VISHAY DALE WIREWOUND RESISTORS

CPCC / CPCF HIGH VOLUME

SAP Part Number

CPCC0515R00JE66

CPCF0510K00KE66

SAP Description

CPCC05 15 5% E66 e3

CPCF05 10K 10% E66 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
CPCC CPCF	02 03 05 07 10 02 03 05 07	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E66 = Bulk pack	Dash #'s 1 thru 999 as applicable



VISHAY DALE WIREWOUND RESISTORS

CFR

SAP Part Number

CFR562R500JS51

SAP Description

CFR-56 2.5 5% S51

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING
3 digits	2 digits	5 digits	1 digit	3 digits
CFR	01 thru 99 as applicable	R = decimal K = thousand R1500 = .15 ohm 1K000 = 1K ohm Check datasheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD TIN / LEAD PACKAGING CODES R36 = Tape/reel, 0.2in pitch, 2-1/16in tape spacing, lead trim (CFR sizes not listed in R50) R50 = Tape/reel, 0.4in pitch, 2-1/2in tape spacing, lead trim (CFR03, CFR21, CFR22, CFR23 and CFR38 only) B12 = Bulk pack 100 pieces per box NON-STANDARD TIN / LEAD PACKAGING CODES F02 = Foam pack K36 = Ammo pack, tape/reeled per R36 or R50 depending on size call out L03 = Lacer pack M10 = Military pack S27 = Sample pack - best method S51 = Package per TPI S70 = 1,000 pieces per reel, tape/reeled per R36 or R50 depending on size call out Click to go to Packaging Code definition page



VISHAY DALE WIREWOUND RESISTORS

CL

SAP Part Number

CL6200AAR5000KB14

CL4000XX100RJS5110

SAP Description

CL-6200AA .5 10% B14

CL-4000XX-10 100 5% S51

MODEL 2 digits	SIZE 4 digits	LEFT TERMINAL 1 digit	RIGHT TERMINAL 1 digit	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 2 digits
CL	4095 4100 4125 4150 4200 4225 4300 6095 6100 6133 6167 6200 6233 6300	A B C D F X	A B E D F X	R = decimal K = thousand R150 = .15 ohm R150 = 0.15 ohm 1K50 = 1,500 ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack NON-STANDARD TIN / LEAD PACKAGING CODES B31 = Four layer bulk pack S27 = Sample pack - best method S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CP

SAP Part Number

CP000515R00JB1464

CP002510K00KE14

SAP Description

CP-5-64 15 5% B14

CP-25 10K 10% E14 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	5 digits	1 digit	3 digits	Up to 3 digits
CP	0002 = 2 0003 = 3 0005 = 5 0007 = 7 0010 = 10 0015 = 15 0020 = 20 0022 = 22 0025 = 25 002M = 2M	L = milliohm ;(for values below 0.01ohm) R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	F = $\pm 1.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack (CP0002 thru CP0025) E31 = Four layer bulk pack (CP0002 thru CP0025) E01 = Skin pack STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack (CP0002 thru CP0025) B31 = Four layer bulk pack (CP0002 thru CP0025) B37 = CP002M bulk pack, up to 200 pieces per box J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES B37 = Bulk pack, CP0002 thru CP0025 100 pcs per box P07 = CP0002M tube pack, 26 pieces per tube R03 = Body tape/reel (CP0002, CP0003 and CP0005 only) S27 = Sample pack best method S51 = Package per TPI Lead free will not be available until Q3 2005 CP002M will not be available as lead free Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CP Quick Connect (old Colber product)

SAP Part Number

CP26SM15R00JB14

CP026B1K000KE311

SAP Description

CP-26SM 15 5% B14

CP-26B-1 1K 10% E31 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	5 digits	1 digit	3 digits	Up to 3 digits
CP	0026 0050 015B 020B 026B 050B 26SM	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack NON-STANDARD LEAD FREE PACKAGING CODES S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPCC

SAP Part Number

CPCC0515R00JB311

CPCC101K500KE32

SAP Description

CPCC-5-1 15 5% B31

CPCC-10 1.5K 10% E32 e3

MODEL 4 digits	SIZE 2 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CPCC	02 03 05 10	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E31* = Four layer bulk pack E32* = Two layer bulk pack E01* = Skin pack STANDARD TIN / LEAD PACKAGING CODES B31 = Four layer bulk pack B32 = Two layer bulk pack J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES S51 = Package per TPI S66 = See Packaging Code page for definition B49 = 4-layer oriented bulk pack * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPCF

SAP Part Number

CPCF05900R0JB32

CPCF0510K00KE32

SAP Description

CPCF-5 900 5% B32

CPCF-5 10K 10% E32 e3

MODEL 4 digits	SIZE 2 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CPCF	02 03 05	R = decimal K = thousand 100R0 = 100 ohm 1K500 = 1.5K ohm Check datasheet for available value range	F = $\pm 1.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	<p>STANDARD LEAD FREE PACKAGING CODES *</p> <p>E31* = Four layer bulk pack E32* = Two layer bulk pack E01* = Skin pack</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B31 = Four layer bulk pack B32 = Two layer bulk pack J01 = Skin pack</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>S27 = Sample pack - best method S51 = Package per TPI S66 = See Packaging Code page for definition B49 = 4-layer oriented bulk pack</p> <p>* Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page</p>	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPCL

SAP Part Number

CPCL05R0100JB32

CPCL10R1000JE01

SAP Description

CPCL-5 .01 5% B32

CPCL-10 .1 5% E01 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
CPCL	02 03 05 10	L = milliohm (below .01 ohm) R = decimal 5L000 = .005 ohm R1000 = 0.10 ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E31* = Four layer bulk pack E32* = Two layer bulk pack E01* = Skin pack STANDARD TIN / LEAD PACKAGING CODES B31 = Four layer bulk pack B32 = Two layer bulk pack J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES S27 = Sample pack - best method S51 = Package per TPI S66 = See Packaging Code page for definition B49 = 4-layer oriented bulk pack * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPCP

SAP Part Number

CPCP0515R00JB321

CPCP101K700JE01

SAP Description

CPCP-5-1 15 5% B32

CPCP-10 1.7K 5% E01 e3

MODEL 4 digits	SIZE 2 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CPCP	02 03 05 07 10	R=decimal K=thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E31* = Four layer bulk pack E32* = Two layer bulk pack E01* = Skin pack STANDARD TIN / LEAD PACKAGING CODES B31 = Four layer bulk pack B32 = Two layer bulk pack J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES S27 = Sample pack - best method S51 = Package per TPI S66 = See Packaging Code page for definition B49 = 4-layer oriented bulk pack * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPL

SAP Part Number

CPL05R0500JB143

CPL10R1000KE01

SAP Description

CPL-5-3 .05 5% B14

CPL-10 .1 10% E01 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
CPL	03 05 07 10 15	L = milliohm (below .01 ohm) R = decimal 5L000 = .005 ohm R1000 = 0.10 ohm Check datasheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E14* = Bulk pack E31* = Four layer bulk pack E01* = Skin pack STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES B37 = Bulk pack, 100 pcs per box R03 = Body tape/reel (CPL03 and CPL05 only) S27 = Sample pack - best method S51 = Package per TPI * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPR

SAP Part Number

CPR0515R00JB149

CPR202K200KE10

SAP Description

CPR-5-9 15 5% B14

CPR-20 2.2K 10% E10 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
CPR	03 05 07 10 15 20	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E14* = Bulk pack E31* = Four layer bulk pack E10* = Foam pack STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack F10 = Foam pack NON-STANDARD TIN / LEAD PACKAGING CODES S27 = Sample pack - best method S51 = Package per TPI B49 = 4-layer oriented bulk pack * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPR High Volume

SAP Part Number

CPR0515R00JE66

CPR102K200KE6631

SAP Description

CPR05 15 5% E66 e3

CPR10-31 2.2K 10% E66 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
CPR	03 05 07 10 15 20	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm See data sheet for available value range	J = +/-5% K = +/-10%	E66 = Lead free bulk pack Click to go to Packaging Code definition page	Blank = short, 1 pin 30 = long, 1 pin 31 = short, 2 pin 32 = long, 2 pin



VISHAY DALE WIREWOUND RESISTORS

CPS

SAP Part Number

CPS05P100R0KB14

CPS07P2K500JE14

SAP Description

CPS5/2 100 10% B14

CPS7/2 2.5K 5% E14 e3

NOTE: CPS SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL	SIZE	TERMINAL	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	1 digit	5 digits	1 digit	3 digits	Up to 3 digits
CPS	04 05 07	P = /2	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	J = 5.0 K = 10.0	<p>STANDARD LEAD FREE PACKAGING CODES *</p> <p>E14* = Bulk pack</p> <p>E31* = Four layer bulk pack</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B14 = Bulk pack</p> <p>B31 = Four layer bulk pack</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>B49 = 4-layer oriented bulk pack</p> <p>S27 = Sample pack - best method</p> <p>S51 = Package per TPI</p> <p>* Lead free will not be available until Q3 2005</p> <p>Click to go to Packaging Code definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Click to go to Permark codes section</p>



VISHAY DALE WIREWOUND RESISTORS

CPSL

SAP Part Number

CPSL05R0500JB145

CPSL10R1000KE315

SAP Description

CPSL-5-5 .05 5% B14

CPSL-10-5 .1 10% E31 e3

MODEL 4 digits	SIZE 2 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CPSL	03 05 07 10 15	L = milliohm (below .01 ohm) R = decimal 5L000 = .005 ohm R1000 = 0.10 ohm Check datasheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E14* = Bulk pack E31* = Four layer bulk pack STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack NON-STANDARD TIN / LEAD PACKAGING CODES S27 = Sample pack - best method S51 = Package per TPI B49 = 4-layer oriented bulk pack * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPSM

SAP Part Number

CPSM0315R00JB31

CPSM051K000KE31

SAP Description

CPSM-3 15 5% B31

CPSM-5 1K 10% E31 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
CPSM	03 05	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E31* = Four layer bulk pack STANDARD TIN / LEAD PACKAGING CODES B31 = Four layer bulk pack NON-STANDARD TIN / LEAD PACKAGING CODES S27 = Sample pack - best method S51 = Package per TPI * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CPW / CPWN

SAP Part Number

CPW05R5000JB145

CPWN1010K00KE01

SAP Description

CPW-5-5 .5 5% B14

CPWN-10 10K 10% E01 e3

MODEL 3 or 4 digits	SIZE 2 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
CPW CPWN	02 03 05 07 10 15 20	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	D = 0.5 F = 1.0 G = 2.0 H = 3.0 J = 5.0 K = 10	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack E31 = Four layer bulk pack E01 = Skin pack STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES B37 = Bulk pack, 100 pcs per box R03 = Body tape/reel (CPW0002, CPW0003 and CPW0005 only) S27 = Sample pack - best method S51 = Package per TPI B49 = 4-layer oriented bulk pack Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

CR

SAP Part Number

CR405015R00JS519

CR5100R5000KE14

SAP Description

CR-4050-9 15 5% S51

CR-5100 .5 10% E14 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	4 digits	5 digits	1 digit	3 digits	Up to 3 digits
CR	4050 thru 4220 5050 thru 5220	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES * E14* = Bulk pack E31* = Four layer bulk pack STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack NON-STANDARD TIN / LEAD PACKAGING CODES J01 = Skin pack S27 = Sample pack - best method S51 = Package per TPI B49 = 4-layer oriented bulk pack * Lead free will not be available until Q3 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section

VISHAY DALE WIREWOUND RESISTORS

CW



SAP Part Number

CW1/21K000JR363

CW005R5000JE12

SAP Description

CW-1/2-3 1K 5% R36

CW-5 .5 5% E12 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
CW	1/2 001 01M 002 02M 02B 02C 005 007 010	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	<p>STANDARD LEAD FREE PACKAGING CODES</p> <p>E12 = Bulk pack 100 pcs</p> <p>E36 = Tape/reel, 0.2" pitch, 2-1/16" tape spacing, trim leads (CW1/2, CW001, CW01M)</p> <p>E50 = Tape/reel, 0.4" pitch, 2-1/2" tape spacing, trim leads (CW002, CW02B, CW02C, CW02M)</p> <p>E55 = Tape/reel, 0.4" pitch, 2-7/8" tape spacing, trim leads (CW005, CW007)</p> <p>E69 = Tape/reel, 0.4" pitch, 3-3/8" tape spacing, trim leads (CW010)</p> <p>E70 = Std tape/reel except 1000 pcs (smaller than CW005)</p> <p>E73 = Std tape/reel except 500 pcs</p> <p>E74 = Std except 2000 pcs</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B12 = Bulk pack 100 pcs</p> <p>R36 = Tape/reel, 0.2" pitch, 2-1/16" tape spacing, trim leads (CW1/2, CW001, CW01M)</p> <p>R50 = Tape/reel, 0.4" pitch, 2-1/2" tape spacing, trim leads (CW002, CW02B, CW02C, CW02M)</p> <p>R55 = Tape/reel, 0.4" pitch, 2-7/8" tape spacing, trim leads (CW005, CW007)</p> <p>R69 = Tape/reel, 0.4" pitch, 3-3/8" tape spacing, trim leads (CW010)</p> <p>S70 = Std tape/reel except 1000 pcs (smaller than CW005)</p> <p>S73 = Std tape/reel except 500 pcs; S74 = Std except 2000 pcs</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>B14 = Bulk pack</p> <p>K01, K04, K08, K10, K13, K14, K48, K50, K55 and K69 ammo pack available</p> <p>RH9, R05, R06, R07, R08, R16, R18, R20, R21, R29, R30, R34, R39, R40, R44, R47, R48, R64 and R68 available</p> <p>S44, S45, S51, S55, S56, S57, S67 and S75 available</p> <p>Click to go to Packaging Code definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Click to go to Permark codes section</p>



VISHAY DALE WIREWOUND RESISTORS

ERH / ENH*

SAP Part Number
ERH0533R20FC02

SAP Description
ERH-5 33.2 1% C02

*Standard "Failure Rate Level" for ERH, ENH specials (dash/types) will be "R". If the customer specified a "Failure Rate Level" other than "R" (M or P), this other "Failure Rate Level" must be stated in the "Item Comments" section.

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
ERH ENH	05 10 25 50	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	F = ±1.0%	STANDARD TIN / LEAD PACKAGING CODES C02 = Card pack J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES M02, M03, M06, M10, M27, M29 available P08, P28, P29 available S27 = Sample pack - best method S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

ESS / ESW / ESN and EGS / EGW / EGN*

SAP Part Number

EGS0386R60DB1280
ESN2BR1000FB12

SAP Description

EGS-3-80 86.6 .5% B12
ESN-2B .1 1% B12

*Standard "Failure Rate Level" for ESx, EGx specials (dash/types) will be "R". If the customer specified a "Failure Rate Level" other than "R" (M, P or S), this other "Failure Rate Level" must be stated in the "Item Comments" section.

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
ESS ESW ESN EGS EGW EGN	01 02 03 2A 2B 05 10	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	A = ±0.05% B = ±0.1% C = ±0.25% D = ±0.5% F = ±1.0% H = ±3.0% J = ±5.0%	STANDARD TIN / LEAD PACKAGING CODES B12 = Bulk pack 100 pcs L03 = Lacer pack R36 = Tape/reel, 0.2" pitch, 2-1/16" tape spacing, trim leads (Exx01, Exx02, Exx03) R50 = Tape/reel, 0.4" pitch, 2-1/2" tape spacing, trim leads (Exx2B) R55 = Tape/reel, 0.4" pitch, 2-7/8" tape spacing, trim leads (Exx2A, Exx05, EGx10) R69 = Tape/reel, 0.4" pitch, 3-3/8" tape spacing, trim leads (ESx10) K14 - Ammo pack, 0.4" pitch, 2-7/8" tape spacing (Exx2A, Exx05, Egx10) K36 - Ammo pack, 0.2" pitch, 2-1/16" tape spacing (Exx01, Exx02, Exx03) K50 - Ammo pack, 0.4" pitch, 2-1/2" tape spacing (Exx2B) K69 - Ammo pack, 0.4" pitch, 3-3/8" tape spacing (ESx10) S70 = Std tape/reel except 1000 pcs (smaller than 5W) S73 = Std tape/reel except 500 pcs; S74 = Std except 2000 pcs NON-STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack; F02 = Foam pack M02, M03, M06, M10, M14, M21, M27, M29, P28, P29, P66 and P68 available K01, K04, K08, K10, K13 and K55 available R05, R06, R07, R08, R16, R18, R20, R21, R29, R30, R34, R39, R40, R44, R47, R48, R64, R68, R72 and R81 available S44, S45, S51, S55, S57, S67 and S75 available Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

G / GN

SAP Part Number

G0011K500FR3680

GN0107K500FE14

SAP Description

G-1-80 1.5K 1% R36

GN-10 7.5K 1% E14 e3

MODEL 1 or 2 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
G GN	001 002 003 005 006 05C 010 012 015	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	A = $\pm 0.05\%$ B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$	<p>STANDARD LEAD FREE PACKAGING CODES*</p> <p>E12 = Bulk pack 100 pcs E36 = Tape/reel, 0.2" pitch, 2-1/16" tape spacing, trim leads (G001, G002, G003) E50 = Tape/reel, 0.4" pitch, 2-1/2" tape spacing, trim leads (G005, G05C) E55 = Tape/reel, 0.4" pitch, 2-7/8" tape spacing, trim leads (G010) E70 = Std tape/reel except 1000 pcs (smaller than G010) E73 = Std tape/reel except 500 pcs E74 = Std except 2000 pcs</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B12 = Bulk pack 100 pcs R36 = Tape/reel, 0.2" pitch, 2-1/16" tape spacing, trim leads (G001, G002, G003) R50 = Tape/reel, 0.4" pitch, 2-1/2" tape spacing, trim leads (G005, G05C) R55 = Tape/reel, 0.4" pitch, 2-7/8" tape spacing, trim leads (G010) S70 = Std tape/reel except 1000 pcs (smaller than G010) S73 = Std tape/reel except 500 pcs; S74 = Std except 2000 pcs</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>B14 = Bulk pack F02 = Foam pack; L03 = Lacer pack M02, M03, M06, M10, M14, M21, M27, M29, P28, P29 and P65 available K01, K04, K08, K10, K13, K14, K36, K50, K55 and K69 ammo pack available RH9, R05, R06, R07, R08, R16, R18, R19, R20, R21, R29, R34, R39, R44, R47, R48, R64, R68 and R69 available S44, S45, S54, S51, S55, S57 and S67 available</p> <p>Click to go to Packaging Code definition page</p>	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HG / NHG

SAP Part Number

HG02510R00FJ0121

HG025111R0JE02

SAP Description

HG-25-21 10 1% J01

HG-25 111 5% E02 e3

MODEL 2 or 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
HG NHG	005 010 025 050 100 250	L = milliohm (below .01 ohm) R = decimal K = thousand 7L000 = .007 ohm R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$	STANDARD LEAD FREE PACKAGING CODES * E02* = Card pack (HG055 through HG050 only) E01* = Skin pack STANDARD TIN / LEAD PACKAGING CODES C02 = Card pack (HG055 through HG050 only) J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES C06 = Same as C02, except use of staples is not allowed M02 M03 M06 M10 P08 P28 P29 S51 = Package per TPI * Lead free will not be available until Q2 2005 Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HL / NHL

SAP Part Number

HL02506Z4R125JJ15

NHL22507E100R0KE

SAP Description

HL-25-06Z-15 4.125 5% J01

NHL-225-07E 100 10% E01 e3

MODEL 2 or 3 digits	SIZE 3 digits	TERMINAL 2 digits	TERMINALFIN ISH 1 digit	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 1 digit	SPECIAL Up to 2 digits
HL NHL	005 006 010 011 012 015 020 025 026 050 051 060 065 080 100 120 130 160 175 225	01 02 03 04 06 07 14 15 19	E = Lead Free Z = Tin/Lead N = Nickel	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check data sheet for available value range	F = ±1.0% G = ±2.0% H = ±3.0% J = ±5.0% K = ±10%	STANDARD LEAD FREE PACKAGING CODES E = Skin pack STANDARD TIN / LEAD PACKAGING CODES J = J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES D = S51 = Package per TPI M = M02 N = M10 U = M29 NON-STANDARD LEAD FREE PACKAGING CODES K = E51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HL / NHL Flat

SAP Part Number

HL03509Z4R125JJ10

HL07009E2K500JE

SAP Description

HL-35-09Z-10 4.125 5% J01

HL-70-09E 2.5K 5% E01 e3

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 or 3 digits	3 digits	2 digits	1 digit	5 digits	1 digit	1 digit	Up to 2 digits
HL NHL	024 035 055 070 095	08 09 10 16 18	E = Lead Free Z = Tin/Lead N = Nickel	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check data sheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E = Skin pack STANDARD TIN / LEAD PACKAGING CODES J = J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES D = S51 = Package per TPI M = M02 N = M10 U = M29 NON-STANDARD LEAD FREE PACKAGING CODES K = E51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HLA

SAP Part Number

HLA10006Z4R125JJ5

HLA17507E4K250KE

SAP Description

HLA-100-06Z-5 4.125 5% J01

HLA-175-07E 4.25K 10% E01 e3

MODEL 3 digits	SIZE 3 digits	TERMINAL 2 digits	TERMINAL FINISH 1 digit	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 1 digit	SPECIAL Up to 2 digits
HLA	012 015 020 025 026 050 051 060 065 080 100 120 130 160 175 225	02 03 04 05 06 07 14 15 19	E = Lead Free Z = Tin/Lead N = Nickel	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check data sheet for available value range	G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E = Skin pack STANDARD TIN / LEAD PACKAGING CODES J = J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES D = S51 = Package per TPI M = M02 N = M10 U = M29 NON-STANDARD LEAD FREE PACKAGING CODES K = E51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HLM / NHLM / HLMT

SAP Part Number

HLM01010Z4R125JJ

NHLM02010E1K100JE

SAP Description

HLM-10-10Z 4.125 5% J01

NHLM-20-10E 1.1K 5% E01 e3

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 or 4 digits	3 digits	2 digits	1 digit	5 digits	1 digit	1 digit	1 or 2 digits
HLM NHLM HLMT	010 015 020	10	E = Lead Free Z = Tin/Lead N = Nickel	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check data sheet for available value range	F = ±1.0% G = ±2.0% H = ±3.0% J = ±5.0% K = ±10%	STANDARD LEAD FREE PACKAGING CODES E = Skin pack STANDARD TIN / LEAD PACKAGING CODES J = J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES D = S51 = Package per TPI M = M02 N = M10 U = M29 NON-STANDARD LEAD FREE PACKAGING CODES K = E51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 9 as applicable for NHLM / HLMT Dash #'s 1 thru 99 as applicable for HLM Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HLT

SAP Part Number

HLT05006Z4R125JJ

HLT22507E2K500JE10

SAP Description

HLT-50-06Z 4.125 5% J01

HLT-225-07E-10 2.5K 5% E01 e3

MODEL 3 digits	SIZE 3 digits	TERMINAL 2 digits	TERMINAL FINISH 1 digit	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 1 digit	SPECIAL Up to 2 digits
HLT	015 020 025 026 050 051 055 060 065 080 095 100 120 130 160 175 225	02 03 04 05 06 07 08 09 10 14 15 16 18 19	E = Lead Free Z = Tin/Lead N = Nickel	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check data sheet for available value range	G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E = Skin pack STANDARD TIN / LEAD PACKAGING CODES J = J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES D = S51 = Package per TPI M = M02 N = M10 U = M29 NON-STANDARD LEAD FREE PACKAGING CODES K = E51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HLW / NHLW

SAP Part Number

HLW12R1W4R125JJ6

NHLW20A2E1K000JE

SAP Description

HLW-12-R1W-6 4.125 5% J01

NHLW-20-A2E 1K 5% E01 e3

MODEL	SIZE	TERMINAL	TERMINAL FINISH	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 or 4 digits	2 digits	2 digits	1 digit	5 digits	1 digit	1 digit	Up to 2 digits
HLW NHLW	03 05 06 10 12 15 20	A1 R1 A2 R2	E = Lead Free Z = Tin/Lead W = Nickel	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E = Foam pack STANDARD TIN / LEAD PACKAGING CODES J = J01 = Skin pack (OEM and Foreign) F = F01 = (Distributor's) NON-STANDARD TIN / LEAD PACKAGING CODES A = S60 D = S51 = Package per TPI M = M02 N = M10 U = M29 NON-STANDARD LEAD FREE PACKAGING CODES K = E51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

HLZ

SAP Part Number

HLZ30007Z4R125JJ

HLZ09006ER5000KE

SAP Description

HLZ-300-07Z 4.125 5% J01

HLZ-90-06E .5 10% E01 e3

MODEL 3 digits	SIZE 3 digits	TERMINAL 2 digits	TERMINAL FINISH 1 digit	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 1 digit	SPECIAL Up to 2 digits
HLZ	033 090 099 105 110 140 165 220 240 275 300 375	03 04 06 07 14 15 19	E = Lead Free Z = Tin/Lead N = Nickel	L = milliohm (below .01 ohm) R = decimal 5L000 = .005 ohm R1500 = .15 ohm Check data sheet for available value range	G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES E = Skin pack STANDARD TIN / LEAD PACKAGING CODES J = J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES D = S51 = Package per TPI M = M02 N = M10 U = M29 NON-STANDARD LEAD FREE PACKAGING CODES K = E51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

LVR

SAP Part Number

LVR055L000FR5531

LVR03R0100FE12

SAP Description

LVR-5-31 .005 ohm 1% R55

LVR-3 .01 1% E12 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
LVR	01 02 03 05 10	R = decimal L = milliohm (below 0.01 ohm) R1500 = .15 ohm 7L000 = .007 ohm Check datasheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	<p>STANDARD LEAD FREE PACKAGING CODES</p> <p>E12 = Bulk pack 100 pcs (LVR01,02,03,05) E36 = Tape/reel, 0.2" pitch, 2-1/16" tape spacing, trim leads (LVR01) E50 = Tape/reel, 0.4" pitch, 2-1/2" tape spacing, trim leads (LVR02,03) E55 = Tape/reel, 0.4" pitch, 2-7/8" tape spacing, trim leads (LVR05) E03 = Lacer pack (LVR02,03,05,10) E02 = Foam pack (LVR10) E70 = Std tape/reel except 1000 pcs (LVR01,02,03) or 500 pcs (LVR05) E73 = Std tape/reel except 500 pcs E74 = Std except 2000 pcs</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B12 = Bulk pack 100 pcs (LVR01,02,03,05) R36 = Tape/reel, 0.2in. pitch, 2-1/16in. tape spacing, trim leads (LVR01) R50 = Tape/reel, 0.4in. pitch, 2-1/2in. tape spacing, trim leads (LVR02,03) R55 = Tape/reel, 0.4in. pitch, 2-7/8in. tape spacing, trim leads (LVR05) L03 = Lacer pack (LVR02,03,05,10) F02 = Foam pack (LVR10) S70 = Std tape/reel except 1000 pcs (LVR01,02,03) or 500 pcs (LVR05) S73 = Std tape/reel except 500 pcs; S74 = Std except 2000 pcs</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>K04, K14, K36, K48, K50 and K55 ammo pack available RE3, R06, R07, R12, R16, R39, R44, R47, R48 and R68 available S45, S51, S56, S63, S67 and S75 available</p> <p>Click to go to Packaging Code definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Click to go to Permark codes section</p>



VISHAY DALE WIREWOUND RESISTORS

NSR

SAP Part Number

230630990035000000

230630990055000000

SAP Description

NSR-1035 5K 20% 20uH E51

NSR-2055 5.2K 13% 54uH E51

MODEL 7 digits	SPECIAL 5 digits	000000 6 digits
2306309	90xxx Where xxx is any number between 001 and 999 This number is assigned by engineering for each new part number	000000 Needed to make part Number work on both Visions and SAPPAS



VISHAY DALE WIREWOUND RESISTORS

PCT

SAP Part Number

PCT405015R00JB14

PCT4080R5000KB31

SAP Description

PCT-4050 15 5% B14

PCT-4080 .5 10% B31

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	3 digits	Up to 2 digits
PCT	4050 4065 4085 4105 4145 4185 4215	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack NON-STANDARD TIN / LEAD PACKAGING CODES S27 = Sample pack - best method S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

PH

SAP Part Number

PH0504R125FJ01

SAP Description

PH-50 4.125 1% J01

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
PH	010 10A 025 25A 050 100	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD TIN / LEAD PACKAGING CODES J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES M10 = Heat seal military pack P28 = available P29 = available S27 = Sample pack best method S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

RE

SAP Part Number

RE65G1001C02

RE60N33R0C02150

SAP Description

RH-10 1K 1% RE65G1001 C02

NH-5-150 33 1% RE60N33R0 C02

MODEL 4 digits	CHARACTERISTIC 1 digit	VALUE 4 digits	PACKAGING 3 digits	SPECIAL Up to 3 digits
RE60 (RH-5 Type) RE65 (RH-10 Type) RE70 (RH-25 Type) RE75 (RH-50 Type) RE77 (RH-100 Type) RE80 (RH-250 Type)	G = (Standard) N = (Non-inductive)	1st 3 digits = significant digits, 4th digit = # of zeroes R = decimal 49R9 = 49.9 ohm 1000 = 100 ohm 1001 = 1000 ohm All tolerances are 1% Check datasheet for available value range	STANDARD TIN / LEAD PACKAGING CODES C02 = Card pack (RE60 thru RE75 only) J01 = Skin pack NON-STANDARD TIN / LEAD PACKAGING CODES C06 = Same as C02, except use of staples is not allowed M02, M03, M06, M10, M27 and M29 available P08, P28 and P29 available S27 = Sample pack best method	150 = Hot solder dip (RE60 - RE75 only)



VISHAY DALE WIREWOUND RESISTORS

RER

SAP Part Number

RER65F1001RC02

RER70FR140MC0230

SAP Description

ERH-10 1K 1% RER65F1001R C02

ERH-25-30 .14 1% RER70FR140M C02

MODEL 5 digits	TOLERANCE 1 digit	VALUE 4 digits	FAILURE RATE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RER40 (ENH-5 Type) RER45 (ENH-10 Type) RER50 (ENH-25 Type) RER55 (ENH-50 Type) RER60 (ERH-5 Type) RER65 (ERH-10 Type) RER70 (ERH-25 Type) RER75 (ERH-50 Type)	F = ±1.0%	1st 3 digits = significant digits, 4th digit = # of zeroes R = decimal 49R9 = 49.9 ohm 1000 = 100 ohm 1001 = 1000 ohm Check datasheet for available value range	M P R X used when value is outside qualified value range NO JAN BRAND must be added to Sales Text	STANDARD TIN / LEAD PACKAGING CODES C02 = Card pack J01 = Skin pack STANDARD TIN / LEAD SLDC PACKAGING CSL = SLDC Card Pack NON-STANDARD TIN / LEAD PACKAGING CODES C06 = Same as C02, except use of staples is not allowed - Contact Marketing - Click to go to Packaging Code definition page	30 = Hot solder dip 81 = Hot solder dip after Group A



VISHAY DALE WIREWOUND RESISTORS

RF

SAP Part Number

RF88215R0JB14

SAP Description

RF-88 215 5% B14

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING
2 digits	2 digits	5 digits	1 digit	3 digits
RF	01 thru 99	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack B31 = Four layer bulk pack J01 = Skin pack R03 = Body tape/reel R05 = Tape/reel, 0.2" pitch, 2-7/8" tape spacing, no lead trim R17 = Tape/reel, 0.2" pitch, 3-7/8" tape spacing, no lead trim R28 = Tape/reel, 0.2" pitch, 3-3/8" tape spacing, no lead trim S27 = Sample pack best method S70 = Std tape/reel except 1000 pcs or 500 pcs S73 = Std tape/reel except 500 pcs S74 = Std except 2000 pcs S51 = Package per TPI Click to go to Packaging Code definition page



VISHAY DALE WIREWOUND RESISTORS

RH / NH

SAP Part Number

RH0054R125FC02

RH0502K300DE03

SAP Description

RH-5 4.125 1% C02

RH-50 2.3K .5% E03 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	3 digits	5 digits	1 digit	3 digits	Up to 3 digits
RH NH	005 010 025 050 100 250	L = milliohm (below .01 ohm) R = decimal K = thousand 7L000 = .007 ohm R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	A = $\pm 0.05\%$ B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$	STANDARD LEAD FREE PACKAGING CODES E02 = Card pack (RH005 thru RH050 only) E01 = Skin pack STANDARD TIN / LEAD PACKAGING CODES C02 = Card pack (RH005 thru RH050 only) J01 = Skin pack NON-STANDARD LEAD FREE PACKAGING CODES E05 = Card pack 100 pieces (RH005 thru RH050 only) NON-STANDARD TIN / LEAD PACKAGING CODES C05 = Card pack 100 pieces (RH005 thru RH050 only) C06 = Same as C02, except use of staples is not allowed M02, M03, M06, M10, M27 and M29 available P08, P28 and P29 available S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

RLV (M49465/01, /06, /07)

SAP Part Number

M4946506TR0500FB12

M4946507TR0100FR55

SAP Description

LVR-3-26 .05 1% M4946506TR0500F B12

LVR-5-26 .01 1% M4946507TR0100F R55

MODEL 6 digits	SPEC. SHEET NUMBER 2 digits	CHARACTERIS TIC 1 digit	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits
M49465	01 (RLV10 or SPR-1005-26) 06 (RLV30 or LVR-3-26) 07 (RLV31 or LVR-5-26)	T	R = decimal R1500 = .15 ohm Check datasheet for available value range	F = $\pm 1.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD TIN / LEAD PACKAGING CODES B12 = Bulk pack 100 pcs (RLV30, RLV31) R50 = Tape/reel (RLV30) R55 = Tape/reel (RLV31) L03 = Lacer pack (RLV30, RLV31) J01 = Skin pack (RLV10) K14 = Ammo pack (RLV31) K50 = Ammo pack (RLV30) NON-STANDARD TIN / LEAD PACKAGING CODES S51 = Package per TPI (RLV10) S70 = Std tape/reel except 1000 pcs (RLV30) or 500 pcs (RLV31) per reel S73 = Std tape/reel except 500 pcs S74 = Std except 2000 pcs K55 = Ammo pack Click to go to Packaging Code definition page



VISHAY DALE WIREWOUND RESISTORS

RS / NS

SAP Part Number

RS1/21K000FR363

NS010R1000JE12

SAP Description

RS-1/2-3 1K 1% R36

NS-10 .1 5% E12 e3

MODEL	SIZE	VALUE	TOLERANC	PACKAGING	SPECIAL
2 digits	3 digits	5 digits	E 1 digit	3 digits	Up to 3 digits
RS NS	1/8 1/4 1/2 01A 01M 002 02M 02B 02C 005 007 010	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	A = ±0.05% B = ±0.1% C = ±0.25% D = ±0.5% F = ±1.0% G = ±2.0% H = ±3.0% J = ±5.0% K = ±10.0%	<p>STANDARD LEAD FREE PACKAGING CODES</p> <p>E12 = Bulk pack 100 pcs</p> <p>E36 = Tape/reel, 0.2 in. pitch, 2-1/16 in. tape spacing, trim leads (RS1/4, RS1/2, RS01A, RS01M)</p> <p>E50 = Tape/reel, 0.4 in. pitch, 2-1/2 in. tape spacing, trim leads (RS002, RS02B, RS02C, RS02M)</p> <p>E55 = Tape/reel, 0.4 in. pitch, 2-7/8 in. tape spacing, trim leads (RS005, RS007)</p> <p>E69 = Tape/reel, 0.4 in. pitch, 3-3/8 in. tape spacing, trim leads (RS010)</p> <p>E70 = Std tape/reel except 1000 pcs (smaller than RS005)</p> <p>E73 = Std tape/reel except 500 pcs</p> <p>E74 = Std except 2000 pcs</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B12 = Bulk pack 100 pcs</p> <p>R36 = Tape/reel, 0.2 in. pitch, 2-1/16 in. tape spacing, trim leads (RS1/4, RS1/2, RS01A, RS01M)</p> <p>R50 = Tape/reel, 0.4 in. pitch, 2-1/2 in. tape spacing, trim leads (RS002, RS02B, RS02C, RS02M)</p> <p>R55 = Tape/reel, 0.4 in. pitch, 2-7/8 in. tape spacing, trim leads (RS005, RS007)</p> <p>R69 = Tape/reel, 0.4 in. pitch, 3-3/8 in. tape spacing, trim leads (RS010)</p> <p>S70 = Std tape/reel except 1000 pcs (smaller than RS005)</p> <p>S73 = Std tape/reel except 500 pcs; S74 = Std except 2000 pcs</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>B14 = Bulk pack</p> <p>F02 = Foam pack, L03 = Lacer pack</p> <p>M02, M03, M06, M10, M14, M21, M27, M29, P28 and P29 available</p> <p>K01, K04, K08, K10, K13, K14, K36, K48, K50, K55 and K69 ammo pack available</p> <p>RE3, RH9, R05, R06, R07, R08, R16, R18, R20, R21, R29, R30, R34, R39, R40, R44, R47, R48, R64 and R68 available</p> <p>S44, S45, S51, S55, S56, S57, S67 and S75 available</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Click to go to Permark codes section</p>



VISHAY DALE WIREWOUND RESISTORS

RSE

SAP Part Number

RSE104K990FF02

RSE02R1500JL03

SAP Description

RSE-10 4.99K 1% F02

RSE-2 .15 5% L03

MODEL 3 digits	SIZE 2 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RSE	02 2A 2B 05 5M 07 10	R = decimal K = thousand R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	A = $\pm 0.05\%$ B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ H = $\pm 3.0\%$	STANDARD TIN / LEAD PACKAGING CODES F02 = Foam pack L03 = Lacer pack STANDARD TIN / LEAD PACKAGING CODES R50 R55 R69 S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section

VISHAY DALE WIREWOUND RESISTORS

RW



SAP Part Number

RW80UR249FR36

RW69V101R50

SAP Description

G-3-125 .249 1% RW80UR249F R36

RS-2C-23 100 5% RW69V101 R50

MODEL	CHARACTERISTIC	VALUE	TOLERANCE	PACKAGING
4 digits	1 digit	3 or 4 digits	1 digit	3 digits
RW67 RW68 RW69 RW70 RW74 RW78 RW79 RW80 RW81	U V	<p>4 for U CHARACTERISTIC</p> <p>1st 3 digits = significant digits 4th digit = # of zeroes R = decimal 49R9 = 49.9 ohm 1000 = 100 ohm 1001 = 1000 ohm</p> <p>3 for V CHARACTERISTIC</p> <p>1st 2 digits = significant digits 3rd digit = # of zeroes R = decimal 4R7 = 4.7 ohm 101 = 100 ohm 102 = 1000 ohm 49R9 = 49.9 ohm 1000 = 100 ohm 1001 = 1000 ohm</p> <p>Check datasheet for available value range</p>	<p>B = $\pm 0.1\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$</p> <p>This column is used for U Characteristic only!</p>	<p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B12 = Bulk pack 100 pcs R36 = Tape/reel, 0.2in. pitch, 2-1/16in. tape spacing, trim leads (RW70, RW80, RW81) R50 = Tape/reel, 0.4in. pitch, 2-1/2in. tape spacing, trim leads (RW69, RW79) R55 = Tape/reel, 0.4in. pitch, 2-7/8in. tape spacing, trim leads (RW67, RW74) R69 = Tape/reel, 0.4in. pitch, 3-3/8in. tape spacing, trim leads (RW68, RW78) K14 - Ammo pack, 0.4in. pitch, 2-7/8in. tape spacing (RW67, RW74) K36 - Ammo pack, 0.2in. pitch, 2-1/16in. tape spacing (RW70, RW80, RW81) K50 - Ammo pack, 0.4in. pitch, 2-1/2in. tape spacing (R69, RW79) K69 - Ammo pack, 0.4in. pitch, 3-3/8in. tape spacing (RW68, RW78) S70 = Std tape/reel except 1000 pcs (RW69, RW70, RW79, RW80, RW81) S73 = Std tape/reel except 500 pcs</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>B14 = Bulk pack L03 = Lacer pack M02, M03, M06, M10, M14, M21, M27, M29 and P28 available K01, K04, K08, K10, K13 and K55 available RE3, R05, R06, R07, R08, R16, R18, R20, R21, R29, R30, R34, R39, R40, R44, R47, R48, R64 and R68 available S74 = Std except 2000 pcs S44, S45, S55, S57, S67 and S75 available = S27, S44, S45, S55, S57, S67 and S75 available</p>



VISHAY DALE WIREWOUND RESISTORS

RWR

SAP Part Number

RWR74S1210FRR55

SAP Description

ESS-5 121 1% RWR74S1210FR R55

MODEL 5 digits	TERMINAL WIRE 1 digit	VALUE 4 digits	TOLERANCE 1 digit	FAILURE RATE 1 digit	PACKAGING 3 digits
RWR71 RWR74 RWR78 RWR80 RWR81 RWR82 RWR84 RWR89	S N W Z	1st 3 digits = significant digits 4th digit = # of zeroes R = decimal 49R9 = 49.9 ohm 1000 = 100 ohm 1001 = 1000 ohm Check datasheet for available value range	B = $\pm 0.1\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$	M P R S X X - used when value is outside qualified value range Also, "NO JAN BRAND" must be added to Sales Text	<p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>B12 = Bulk pack 100 pcs L03 = Lacer pack R36 = Tape/reel, 0.2" pitch, 2-1/16" tape spacing, trim leads (RWR80, RWR81, RWR82) R50 = Tape/reel, 0.4" pitch, 2-1/2" tape spacing, trim leads (RWR89) R55 = Tape/reel, 0.4" pitch, 2-7/8" tape spacing, trim leads (RWR71, RWR74, RWR84) R69 = Tape/reel, 0.4" pitch, 3-3/8" tape spacing, trim leads (RWR78) K14 - Ammo pack, 0.4" pitch, 2-7/8" tape spacing (RWR71, RWR74, RWR84) K36 - Ammo pack, 0.2" pitch, 2-1/16" tape spacing (RWR80, RWR81, RWR82) K50 - Ammo pack, 0.4" pitch, 2-1/2" tape spacing (RWR89) K69 - Ammo pack, 0.4" pitch, 3-3/8" tape spacing (RWR78)</p> <p>STANDARD TIN / LEAD SLDC PACKAGING CODES</p> <p>BSL = SLDC Bulk pack 100 pcs RSL = SLDC Tape/reel 100 pcs min S70 = Std tape/reel except 1000 pcs (smaller than 5W) S73 = Std tape/reel except 500 pcs</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>S74 = Std except 2000 pcs - Contact Marketing - Click to go to Packaging Code definition page</p>



VISHAY DALE WIREWOUND RESISTORS

SPR

SAP Part Number

SPR06762L0000DD26

SPR2156200R00BD

SAP Description

SPR-676-26 .002 .5% S51

SPR-2156 200 .1% S51

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	6 digits	1 digit	1 digit	Up to 2 digits
SPR	0001 thru 9999	L = milliohm (below 0.01 ohm) R = decimal K = thousand 5L0000 = 0.005 ohm R15000 = 0.15 ohm 1K5000 = 1.5K ohm Check Datasheet for available value range	T = $\pm 0.01\%$ Q = $\pm 0.02\%$ P = $\pm 0.025\%$ A = $\pm 0.05\%$ B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ U = $\pm 1.5\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$ Z = Blank for module	PACKAGING CODES A = S60 C = S52 D = S51 E = S50 F = F01 G = F04 H = B14 J = J01 K = E51 (Pb-free) M = M02 N = M10 P = M15 R = R86 S = S27 T = R36 U = M29 W = M30 Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

SPU

SAP Part Number

SPU1043L0000FD

SPU0521L0000FE

SAP Description

SPU-104 .003 1% S51

SPU-52 .001 1% E51 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	3 digits	6 digits	1 digit	1 digit	Up to 2 digits
SPU	050 051 052 053 101 thru 116 118 120 121 122	L = milliohm (below 0.01 ohm) R = decimal K = thousand 5L000 = 0.005 ohm R1500 = 0.15 ohm 1K500 = 1,500 ohm Check datasheet for available value range	B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ U = $\pm 1.5\%$ G = $\pm 2.0\%$	STANDARD LEAD FREE PACKAGING CODES E = E51 STANDARD TIN / LEAD PACKAGING CODES D = S51 Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

SR

SAP Part Number

SR55L000JS511

SR5R0100FE14

SAP Description

SR5-1 .005 5% S51

SR5 .01 1% E14 e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
2 digits	1 digit	5 digits	1 digit	3 digits	Up to 3 digits
SR	1 3 5	L = milliohm (below .01 ohm) R = decimal 5L000 = .005 ohm R1500 = .15 ohm Check datasheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$	STANDARD LEAD FREE PACKAGING CODES E14 = Bulk pack E51 = Bulk pack, 1,000 pcs per box STANDARD TIN / LEAD PACKAGING CODES B14 = Bulk pack NON-STANDARD TIN / LEAD PACKAGING CODES S51 = Bulk pack, 1,000 pcs per box Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSBS

SAP Part Number

WSBS8518L1000JK

SAP Description

WSBS8518 .0001 5% K

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	1 digit	Up to 3 digits
WSBS	8518 5216 6761 7220 8536	L = milliohm (ie. .0001 = L1000) Check data sheet for available value range	F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$ L = $\pm 15\%$	STANDARD LEAD FREE PACKAGING CODE K = Bulk Pack E = Tape/Reel T = Tray Pack D = Magazine Pack Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSMS

SAP Part Number

WSMS5515L1600JK

SAP Description

WSMS5515 .00016 5% K

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	1 digit	Up to 3 digits
WSMS	2906 2908 3124 3902 5515 7807	L = milliohm (ie. .0001 = L1000) Check data sheet fo availabler value range	F = $\pm 1.0\%$ J = $\pm 5.0\%$	STANDARD LEAD FREE PACKAGING CODE K = Bulk Pack E = Tape/reel Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSBS

SAP Part Number

WSMS5515L1600JK

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	1 digit	Up to 3 digits
WSBS	2906 2908 3124 3902 5515 7807	L = milliohm (ie. .0001 = L1000) Check data sheet for available value range	J = $\pm 5\%$ L = $\pm 15\%$	STANDARD LEAD FREE PACKAGING CODE K = Bulk Pack E = Tape/Reel T = Tray Pack D = Magazine Pack Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSC / WSN

SAP Part Number

WSC01/2R7000FTA10

WSC251510R00FEA

SAP Description

WSC-1/2-10 .7 1% R86

WSC2515 10 1% EA e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	2 digits	Up to 3 digits
WSC WSN	01/2 0001 2515 0002 4527 6927	R = decimal K = thousand R1500 = .15 ohm 54R15 = 54.15 ohm Check datasheet for available value range	D = ±0.5% F = ±1.0% G = ±2.0% H = ±3.0% J = ±5.0% K = ±10%	<p>STANDARD LEAD FREE PACKAGING CODES</p> <p>EA = Tape/reel full reel quantity</p> <p>EK = Bulk pack 100 pcs</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>TA = Tape/reel full reel quantity (R86)</p> <p>BA = Bulk pack 100 pcs (B43)</p> <p>NON-STANDARD LEAD FREE PACKAGING CODES</p> <p>EB = Tape/reel 1000 pcs (note EB is not available on 6927 size)</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>TB = Tape/reel 1000 pcs (R79 - note:R79 is not available on 6927 size)</p> <p>TE = AT&T 19.685in. trailer (RA1)</p> <p>TF = DaimlerChrysler 1400 pc reels (RF3)</p> <p>SC = Packaging defined on Prod Card (S50)</p> <p>SB = Packaging defined on TPI (S51)</p> <p>SC = Packaging defined on Prod Card (S50)</p> <p>Click to go to Packaging Code definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Click to go to Permark codes section</p>



VISHAY DALE WIREWOUND RESISTORS

WSE

SAP Part Number

WSE08051K100DXTG

WSE080549R90CEEA

SAP Description

WSE0805 1.1K .5% 15 RT1

WSE0805 49.9 .1% 25 EA e3

MODEL	SIZE	VALUE	TOLERANCE	T.C	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	1 digit	2 digits	Up to 2 digits
WSE	0805	R = decimal K = thousand 100R0 = 100 ohm 1K500 = 1.5K ohm Check datasheet for available value range	C = $\pm 0.1\%$ B = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$	X = $\pm 15\text{ppm}/^\circ\text{C}$ E = $\pm 25\text{ppm}/^\circ\text{C}$	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (RT1) BA = Bulk pack 100 pcs (B43) NON-STANDARD TIN / LEAD PACKAGING CODES TB = Tape/reel 7" reels (R79) TC = Tape/reel 13" reels (RG3) SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSF

SAP Part Number

WSF25151K435JKBA8

WSF452720K00FHEA

SAP Description

WSF2515-8 1.435K 5% T-1 B43

WSF4527 20K 1% T-2 EA e3

MODEL	SIZE	VALUE	TOLERANCE	T.C	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	1 digit	2 digits	Up to 2 digits
WSF	2012 2515 4527	R = decimal K = thousand 50R00 = 50 ohm 1K000 = 1K ohm Check datasheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	E = 25 ppm/ $^{\circ}$ C=T-9 H = 50 ppm/ $^{\circ}$ C=T-2 K = 100 ppm/ $^{\circ}$ C=T-1	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86) BA = Bulk pack 100 pcs (B43) NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs NON-STANDARD TIN / LEAD PACKAGING CODES TB = Tape/reel 1000 pcs TE = AT&T 19.685" trailer (RA1) TF = DaimlerChrysler 1400 pc reels (RF3) SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section

VISHAY DALE WIREWOUND RESISTORS

WSL



SAP Part Number

WSL2010R0150FTA5

SAP Description

WSL-2010-5 .015 1% R86

NOTE: Sample kit part number is VDKWSL/WSR

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	2 digits	Up to 3 digits
WSL	0603 0805 1206 2010 2512 2726 2752 2816 3637 3921 4026 4727 5931 1020	L = milliohm (below 0.01 ohm) R = decimal 5L000 = .005 ohm R1500 = .15 ohm Check data sheet for available value range	B = 0.1% C = 0.25% D = 0.5% F = 1.0% G = 2.0% J = 5.0% Z = blank value for jumper	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EH = Tape/reel 2000 pcs (2816 only) EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86, not for 0603/0805) TG = Tape/reel full reel quantity (RT1, 0603 0805 sizes) TH = Tape/reel 2000 pcs (RJ9, 2816 only) BA = Bulk pack 100 pcs (B43) NON-STANDARD TIN / LEAD PACKAGING CODES TB = Tape/reel 1000 pcs only (R79) TC = Tape/reel 13" reels (RG3) TD = Tape/reel WSL2512 4mm pitch (RF1) TE = AT&T 19.685" trailer (RA1) TF = DaimlerChrysler 1400 pc reels (RF3) SB = Packaging defined on TPI (S51) NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs ED = Tape/reel WSL2512 4mm pitch EC = Tape/reel 13" reels (1206 & larger only) EJ = Tape/reel 12mm ES = Packaging defined on TPI (E51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSK

SAP Part Number

WSK25122L000FEK

SAP Description

WSK-2512 .002 1% EK e3

NOTE: Sample kit part number is VDKWSL/WSR

MODEL 3 digits	SIZE 4 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
WSK	0612 1206 2512	L = milliohm (below 0.01 ohm) R = decimal 5L000 = .005 ohm R1500 = .15 ohm Check data sheet for available value range	D = 0.5% F = 1.0% G = 2.0% J = 5.0% Z = blank value for jumper	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs EC = Tape/reel 13" reels (1206 & larger only) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSLC

SAP Part Number

WSLC2512R0100JEA
WSLC1206R1500KEA

SAP Description

WSLC2512 .01 5% EA e3
WSLC1206 .15 10% EA e3

MODEL 4 digits	SIZE 4 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
WSLC	0603 0805 1206 2010 2512 2816	L = milliohm (below 0.01 ohm) R = decimal 5L000 = 0.005 ohm R1500 = 0.15 ohm Check datasheet for available value range	J = $\pm 5.0\%$ K = $\pm 10.0\%$	<p>STANDARD LEAD FREE PACKAGING CODES</p> <p>EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>TA = Tape/reel full reel quantity (R86, not for 0603/0805) TG = Tape/reel full reel quantity (RT1, 0603 & 0805 sizes) BA = Bulk pack 100 pcs (B43)</p> <p>NON-STANDARD LEAD FREE PACKAGING CODES</p> <p>EB = Tape/reel 1000 pcs ES = Packaging defined on TPI (E51)</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>TB = Tape/reel 1000 pcs only (R79) SB = Packaging defined on TPI (S51)</p> <p>Click to go to Packaging Code definition page</p>	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSH

SAP Part Number

WSH2818R0100FEA

SAP Description

WSH2818 .01 1% EA e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	2 digits	Up to 2 digits
WSH	2818	L = milliohm (below 0.01 ohm) R = decimal 8L000 = 0.008 ohm R0100 = 0.01 ohm Check data sheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs ES = Packaging defined on TPI (E51) NON-STANDARD TIN / LEAD PACKAGING CODES SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSLM

SAP Part Number

WSLM1206R0100FEA

WSLM12065L000FEK

SAP Description

WSLM1206 .01 1% EA e3

WSLM1206 .005 1% EK e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	2 digits	Up to 2 digits
WSLM	1206	L = milliohm (below 0.01 ohm) R = decimal 5L000 = 0.005 ohm R1500 = 0.15 ohm Check data sheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs ES = Packaging defined on TPI (E51) STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86, not for 0603/0805) TG = Tape/reel full reel quantity (RT1, 0603 & 0805 sizes) BA = Bulk pack 100 pcs (B43) NON-STANDARD TIN/LEAD PACKAGING CODES TB = Tape/reel 1000 pcs only (R79) SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSLP

SAP Part Number

WSLP1206R0100FTA

WSLP1206R0500FEA

SAP Description

WSLP1206 .01 1% R86

WSLP1206 .05 1% EA e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	2 digits	Up to 2 digits
WSLP	0603 0805 1206 2010 2512 2726 2816 3921 4026 5931	L = milliohm (below 0.01 ohm) R = decimal 5L000 = 0.005 ohm R1500 = 0.15 ohm Check data sheet for available value range	B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86, not for 0603/0805) TG = Tape/reel full reel quantity (RT1, 0603 & 0805 sizes) BA = Bulk pack 100 pcs (B43) NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs EJ = Tape/reel 12mm EC = Tape/reel 13" reels (1206 & larger only) ES = Packaging defined on TPI (E51) NON-STANDARD TIN/LEAD PACKAGING CODES TB = Tape/reel 1000 pcs only (R79) SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSL....E

SAP Part Number

WSL1506E10D0ETA

WSL2512E10E0EEA

SAP Description

WSL-1506E 10 1% 25 R86

WSL-2512E 10K 1% 25 EA e3

MODEL 3 digits	SIZE 5 digits	VALUE AND TOLERANCE 4 digits	T.C 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
WSL	1506E 2010E 2512E	0.5 -X1- W 0.5 -X1,000- X 0.5 -X1,000,000- Y 1.0 -X1- D 1.0 -X1,000- E 1.0 -X1,000,000- F 10W0 = 10 0.5% 100D = 100 1% 3E50 = 3.5K 1% Check datasheet for available value range	X = 15 ppm/K E = 25 ppm/K H = 50 ppm/K K = 100 ppm/K	STANDARD LEAD FREE = STANDARD LEAD FREE* EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86) BA = Bulk pack 100 pcs (B43) NON-STANDARD LEAD FREE PACKAGE CODES EB = Tape/reel 1000 pcs NON-STANDARD TIN / LEAD PACKAGING CODES TB = Tape/reel 1000 pcs only (R79) TC = Tape/reel 13 reels (RG3) TD = Tape/reel 4mm pitch (RF1) SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSLS

SAP Part Number

WSLS2512R0100FHEA

WSLS2512R0500FBEA

SAP Description

WSLS2512 .01 1% H EA e3

WSLS2512 .05 1% B EA e3

MODEL 4 digits	SIZE 4 digits	VALUE 5 digits	TOLERANCE 1 digit	TCR / STABILITY 1 digit	PACKAGING 2 digits	SPECIAL 1 digit
WSLS	2512	L = milliohm (below 0.01 ohm) R = decimal 5L000 = 0.005 ohm R1500 = 0.15 ohm Check data sheet for available value range	B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$	A = 10PPM/ $^{\circ}$ C TCR, $\pm 0.05\%$ B = 10PPM/ $^{\circ}$ C TCR, $\pm 0.1\%$ C = 10PPM/ $^{\circ}$ C TCR, $\pm 0.25\%$ D = 10PPM/ $^{\circ}$ C TCR, $\pm 0.5\%$ E = 75PPM/ $^{\circ}$ C TCR, $\pm 0.05\%$ F = 75PPM/ $^{\circ}$ C TCR, $\pm 0.1\%$ G = 75PPM/ $^{\circ}$ C TCR, $\pm 0.25\%$ H = 75PPM/ $^{\circ}$ C TCR, $\pm 0.5\%$	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity BA = Bulk pack 100 pcs NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs ES = Packaging defined on TPI (E51) NON-STANDARD TIN / LEAD PACKAGING CODES TB = Tape/reel 1000 pcs only SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 9 as applicable



VISHAY DALE WIREWOUND RESISTORS

WSLT

SAP Part Number

WSLT2512R0100FTA
WSLT2512R1000FEA

SAP Description

WSLT2512 .01 1% R86
WSLT2512 .1 1% EA e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	2 digits	Up to 2 digits
WSLT	0603 0805 1206 2010 2512 2726 2816 3637 3921 4026 4727 5931	L = milliohm (below 0.01 ohm) R = decimal 5L000 = 0.005 ohm R1500 = 0.15 ohm Check data sheet available for value range	B = 0.1% C = 0.25% D = 0.5% F = 1.0% G = 2.0% J = 5.0%	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86, not for 0603/0805) TG = Tape/reel full reel quantity (RT1, 0603 & 0805 sizes) BA = Bulk pack 100 pcs (B43) NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs EC = Tape/reel 13" reels (1206 & larger only) ED = Tape/reel WSL2512 4mm pitch EJ = Tape/reel 12mm ES = Packaging defined on TPI (E51) NON-STANDARD TIN/LEAD PACKAGING CODES TB = Tape/reel 1000 pcs only (R79) SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSP

SAP Part Number

WSP2512R0100FEA

SAP Description

WSP-2512 .01 1% EA e3

NOTE: Sample kit part number is VDKWSL/WSR

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	2 digits	Up to 3 digits
WSP	2512	L = milliohm (below 0.01 ohm) R = decimal 5L000 = .005 ohm R1500 = .15 ohm Check data sheet for available value range	D = 0.5 F = 1.0 G = 2.0 J = 5.0 Z = blank value for jumper	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86, not for 0603/0805) TG = Tape/reel full reel quantity (RT1, 0603 0805 sizes) BA = Bulk pack 100 pcs (B43) NON-STANDARD TIN / LEAD PACKAGING CODES TB = Tape/reel 1000 pcs only (R79) TC = Tape/reel 13" reels (RG3) TE = AT&T 19.685" trailer (RA1) TF = DaimlerChrysler 1400 pc reels (RF3) SB = Packaging defined on TPI (S51) NON-STANDARD LEAD FREE PACKAGING CODES EB = Tape/reel 1000 pcs EC = Tape/reel 13" reels ES = Packaging defined on TPI (E51) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSPS

SAP Part Number

WSPS03FSR0105JK

SAP Description

WSPS03FS .0105 5% E51

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	1 digit	Up to 2 digits
WSPS	03FS thru 9999	L = milliohm (below .01 ohm) R = decimal 5L000 = .005 ohm R0105 = .0105 ohm Check datasheet for available value range	F = $\pm 1.0\%$ U = $\pm 1.5\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$ Z = blank for module	PACKAGING CODES D = S51 K = E51 (Pb-free) Click to go to Packaging Code definition page	Dash #'s 1 thru 99 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WSR

SAP Part Number

WSR2R0400FTA8

WSR31L400JEA

SAP Description

WSR-2-8 .04 1% R86

WSR-3 .0014 5% EA e2

NOTE: Sample kit part number is VDKWSL/WSR

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	1 digit	5 digits	1 digit	2 digits	Up to 3 digits
WSR	2 3 5	L = milliohm (below .01 ohm) R = decimal 5L000 = .005 ohm R1500 = .15 ohm Check datasheet for available value range	D = ±0.5% F = ±1.0% G = ±2.0% J = ±5.0% Z = blank value for jumper	<p>STANDARD LEAD FREE PACKAGING CODES</p> <p>EA = Tape/reel full reel quantity (all sizes)</p> <p>EK = Bulk pack 100 pcs</p> <p>STANDARD TIN / LEAD PACKAGING CODES</p> <p>TA = Tape/reel full reel quantity (R86)</p> <p>BA = Bulk pack 100 pcs (B43)</p> <p>NON-STANDARD TIN / LEAD PACKAGING CODES</p> <p>TB = Tape/reel 1000 pcs only (R79)</p> <p>TE = AT&T 19.685" trailer (RA1)</p> <p>TF = DaimlerChrysler 1400 pc reels (RF3)</p> <p>SB = Packaging defined on TPI (S51)</p> <p>NON-STANDARD LEAD FREE PACKAGING CODES</p> <p>EB = Tape/reel 1000 pcs</p> <p>ES = Packaging defined on TPI (E51)</p> <p>Click to go to Packaging Code definition page</p>	<p>Dash #'s 1 thru 999 as applicable</p> <p>Click to go to Permark codes section</p>



VISHAY DALE WIREWOUND RESISTORS

WSZ

SAP Part Number

WSZ75321K000JBA1

WSZ7532R5000JEA

SAP Description

WSZ7532-1 1K 5% B43

WSZ7532 .5 5% EA e3

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	5 digits	1 digit	2 digits	Up to 3 digits
WSZ	7532	R = decimal K = thousand R1500 = 54.15 ohm 54R15 = 54.15 ohm 1K325 = 1,325 ohm Check datasheet for available value range	F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10\%$	STANDARD LEAD FREE PACKAGING CODES EA = Tape/reel full reel quantity (all sizes) EK = Bulk pack 100 pcs STANDARD TIN / LEAD PACKAGING CODES TA = Tape/reel full reel quantity (R86) BA = Bulk pack 100 pcs (B43) NON-STANDARD TIN / LEAD PACKAGING CODES SB = Packaging defined on TPI (S51) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

WWA

SAP Part Number

WWA133K000FS5118

SAP Description

WWA-13-18 3K 1% S51

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	2 digits	5 digits	1 digit	3 digits	Up to 3 digits
WWA	13 24 26 36 48	L = milliohm (below 0.01 ohm) R = decimal K = thousand 7L000 = .007 ohm R1500 = .15 ohm 1K500 = 1.5K ohm Check datasheet for available value range	A = $\pm 0.05\%$ B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ H = $\pm 3.0\%$	STANDARD TIN / LEAD PACKAGING CODES F02 = Foam pack L03 = Lacer pack S51 = Package per TPI Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY DALE WIREWOUND RESISTORS

MISCELLANEOUS (cont 1 of 3)

SAP Part Number

SAP Description

81054202S31

810542-02 S31

PART NUMBER 6 digits	DASH TYPE 2 digits	PACKAGING 3 digits
2xxxxx 8xxxxx	00 thru 99 as applicable	



VISHAY DALE WIREWOUND RESISTORS

CHARGES (cont 2 of 3)

SAP Part Number

SAP Description

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	DALEWWSM = Dale Wirewound SMD DALEWWMIL = Dale Wirewound Military DALEWWPOWER = Dale Wirewound Power DALEWWCOM = Dale Wirewound Commercial OTHERRES = Other Resistors



VISHAY DALE WIREWOUND RESISTORS

CHARGES (cont 3 of 3)

SAP Part Number

SAP Description

CHARGE 6 digits	LEAD TIME 2 digits	RESISTOR STYLE 9 digits
FSTTRK	05 = 5 working days 10 = 10 working days 15 = 15 working days	DALEWWSMD = Dale Wirewound SMD DALEWWPOW = Dale Wirewound Power DALEWWMIL = Dale Wirewound Military DALEWWCOM = Dale Wirewound Commercial



VISHAY DALE WIREWOUND RESISTORS

WSBM

SAP Part Number

WSBM8518L1000JK

SAP Description

WSBM8518 .0001 5% K

MODEL	SIZE	VALUE	TOLERANCE	PACKAGING	SPECIAL
4 digits	4 digits	5 digits	1 digit	1 digit	Up to 3 digits
WSBM	8518	L = milliohm (ie. .0001 = L1000) Check data sheet for available value range	J = $\pm 5.0\%$	STANDARD LEAD FREE PACKAGING CODE K = Bulk Pack E = Tape/reel T = Tray Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS



VISHAY TECHNO FILM RESISTORS CDHV

SAP Part Number
CDHVAA20M0J2500GSB
CDHVAA20M0J3000GFT

SAP Description
CDHV2512AA20M0J2500G SB
CDHV2512AA20M0J3000G FT e2

MODEL	TERMINATION STYLE	TERMINATION MATERIAL	RESISTANCE VALUE (R ₁)	ABS. TOL.	RATIO (R ₁ /R ₂)	RATIO TOL.	PACKAGING	
							SOLDER TERMINATION 1 Digit	PACKAGING TYPE 1 Digit
4 Digits	1 Digit	1 Digit	4 Digits	1 Digit	4 Digit	1 Digit		
CDHV (2512-size only)	A = 3-sided, wraparound B = Flip chip (top side only)	A = Palladium Silver B = Platinum Gold C = Gold D = Platinum Silver E = Platinum Palladium Gold F = Nickel Barrier	M = Megohms G = Gigohms	F = ±1% G = ±2% H = ±3% J = ±5% K = ±10% M = ±20%	First 3 Digits are significant, and the last Digit specifies the number of zeros to follow Examples: 2500 = 250:1 3000 = 300:1 7000 = 700:1	G = ±2% H = ±3% J = ±5%	STANDARD LEADFREE CODES E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/Ag5, HSD (e2) N = No Solder (all Termination Materials except Nickel barrier) STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD NON-STANDARD TIN/LEAD CODES R = Sn60/Pb40 P = Sn63/Pb37, HSD *NOTE – Package code includes both Solder Termination and Packaging Type	STANDARD CODES B = Bulk pack F = Reel pack, Embossed carrier tape, 7" reel, full reel quantity 1 = Reel pack (std taping except 1,000pcs/reel) 5 = Reel pack (std taping except 500pcs/reel) T = Reel pack (std taping except 250pc min/reel) W = Tray pack NON-STANDARD CODES R = Reel pack, ESD (std taping except 250pc min/reel) M = Reel pack (std taping except 250pcs/reel) 2 = Reel pack (std taping except 2,000pc/reel)



VISHAY TECHNO FILM RESISTORS CDHV (CUSTOM)

SAP Part Number
 CDHVTCX0917-0000FT
 CDHVTCX0118-0001SW

SAP Description
 CDHVTCX0917 FT e2
 CDHVTCX0118-1 SW

MODEL	CUSTOM PART NUMBER	PACKAGING	
		SOLDER TERMINATION 1 Digit	PACKAGING TYPE 1 Digit
4 Digits	12 Digits		
CDHV	TCXxxxx-xxxx (If no Digit code is displayed, use "0" as filler) Examples: TCX2017-0000 = TCX2017 TCX0917-0001 = TCX917-1	STANDARD LEADFREE CODES E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/, HSD (e2) N = No Solder (all Termination Materials except Nickel barrier) STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD NON-STANDARD TIN/LEAD CODES R = Sn60/Pb40 P = Sn63/Pb37, HSD *NOTE – Package code includes both Solder Termination and Packaging Type	STANDARD CODES B = Bulk pack F = Reel pack, Embossed carrier tape, 7" reel, full reel quantity 1 = Reel pack (std taping except 1,000pcs/reel) 5 = Reel pack (std taping except 500pcs/reel) T = Reel pack (std taping except 250pc min/reel) W = Tray pack NON-STANDARD CODES R = Reel pack, ESD (std taping except 250pc min/reel) M = Reel pack (std taping except 250pcs/reel) 2 = Reel pack (std taping except 2,000pc/reel)



VISHAY TECHNO FILM RESISTORS

RC (former CR)

SAP Part Number

RC0575AA1K00GKSB
 RC1206AE500KKLFW
 RC2010BC1M00FKNB2

SAP Description

RC0575AA 1K 2% 100 SB
 RC1206AE 500K 10% 150 FW e2
 RC2010BC-2 1M 1% 100 NB

Model	Size	Termination Style	Termination Material	Resistance Value	Tolerance	TCR	Packaging		Special
							Solder Termination	Pack Type	
2 Digits	4 Digits	1 Digit	1 Digit	4 Digits	1 Digit	1 Digit	1 Digit	1 Digit	Up to 2 digits
RC	0540 = CR1 0550 = CR5050 0575 = CR2 5100 = CR3 1100 = CR1010 1206 = CR1206 5150 = CR4 7225 = CR5 2010 = CR2010	A = 3-sided, Wraparound B = Flip chip (top side only) C = 5-sided, Wraparound	A = Palladium Silver B = Platinum Gold C = Gold D = Platinum Silver E = Platinum Palladium Gold	R = ohms K = kilohms M = Megohms 0000 = 0 ohm jumper Examples 100R = 100R 1K00 = 1K 10M0 = 10M	F = ±1% G = ±2% J = ±5% K = ±10% M = ±20% Z = 0 ohm jumper	K = ±100ppm L = ±150ppm N = ±200ppm W = ±350ppm S = Special 0 ohm jumper	STANDARD LEADFREE CODES E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/Ag5, HSD (e2) N = No Solder STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD NON-STANDARD TIN/LEAD CODES R = Sn60/Pb40 P = Sn63/Pb37, HSD *NOTE – Package code includes both Solder Termination and Packaging Type	STANDARD CODES B = Bulk pack F = Reel pack, full reel quantity 1 = Reel pack, 1000pcs/reel 5 = Reel pack, 500pcs/reel T = Reel pack, 250pc min/reel W = Tray pack NON-STANDARD CODES R = Reel pack, ESD, 250pc min/reel M = Reel pack, 250pcs/reel 2 = Reel pack, 2000pc/reel	Dash #'s 1 thru 99 as applicable



VISHAY TECHNO FILM RESISTORS

CRHV

SAP Part Number
 CRHV1210BA20M0FKST
 CRHV1206AF1G00JNFB

SAP Description
 CRHV1210BA 20M 1% 100 ST
 CRHV1206AF 1G 5% 200 FB e2

MODEL	SIZE	TERMINATION STYLE	TERMINATION MATERIAL	RESISTANCE	TOLERANCE	TC	PACKAGING	
							SOLDER TERMINATION 1 Digit	PACKAGING TYPE 1 Digit
4 Digits	4 Digits	1 Digit	1 Digit	4 Digits	1 Digit	1 Digit		
CRHV	1206 1210 2010 2510 2512	A = 3-sided, Wraparound B = Flip chip (top side only) C = 5-sided, Wraparound	A = Palladium Silver B = Platinum Gold C = Gold D = Platinum Silver E = Platinum Palladium Gold F = Nickel Barrier	M = Megohms G = Gigohms	F = ±1% G = ±2% J = ±5% K = ±10% M = ±20%	K = ±100ppm/°C L = ±150ppm/°C N = ±200ppm/°C R = ±250ppm/°C M = ±300ppm/°C W = ±350ppm/°C P = ±500ppm/°C	STANDARD LEADFREE CODES E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/5, HSD (e2) N = No Solder (for all Termination Materials except Nickel barrier) STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD NON-STANDARD TIN/LEAD CODES R = Sn60/Pb40 P = Sn63/Pb37, HSD *NOTE – Package code includes both Solder Termination and Packaging Type	STANDARD CODES B = Bulk pack F = Reel pack, Embossed carrier tape, 7" reel, full reel quantity 1 = Reel pack (std taping except 1,000pcs/reel) 5 = Reel pack (std taping except 500pcs/reel) T = Reel pack (std taping except 250pc min/reel) W = Tray pack NON-STANDARD CODES R = Reel pack, ESD (std taping except 250pc min/reel) M = Reel pack (std taping except 250pcs/reel) 2 = Reel pack (std taping except 2,000pc/reel)



VISHAY TECHNO FILM RESISTORS CRHV (CUSTOM)

SAP Part Number
CRHVTCX0917-0000FT
CRHVTCX0216-0012NB

SAP Description
CRHVTCX0917 FT e2
CRHVTCX0216-12 NB

Model	Custom Part Number	Packaging	
		Solder Termination 1 Digit	Pack Type 1 Digit
4 Digits	12 Digits		
CRHV	<p>TCXxxxx-xxxx</p> <p>(If no Digit code is displayed, use "0" as filler)</p> <p>Examples: TCX0917-0000 TCX0917-0001=TCX917-1</p>	<p>STANDARD LEADFREE CODES</p> <p>E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/AG5, HSD (e2) N = No Solder</p> <p>STANDARD TIN/LEAD CODES</p> <p>T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>R = Sn60/Pb40 P = Sn63/Pb37, HSD</p> <p>*NOTE – Package code includes both Solder Termination and Packaging Type</p>	<p>STANDARD CODES</p> <p>B = Bulk pack F = Reel pack, full reel quantity 1 = Reel pack, 1000pcs/reel 5 = Reel pack, 500pcs/reel T = Reel pack, 250pc min/reel W= Tray pack</p> <p>NON-STANDARD CODES</p> <p>R = Reel pack, ESD, 250pc min/reel M = Reel pack, 250pcs/reel 2 = Reel pack, 2000pc/reel</p>



VISHAY TECHNO FILM RESISTORS

CRMV

SAP Part Number
 CRMV1210AF1K00FLET
 CRMV2510BC49M9JLSW

SAP Description
 CRMV1210AF 1K 1% 150 ET e3
 CRMV2510BC 49.9M 5% 150 SW

Model	Size	Termination Style	Termination Material	Resistance	Tol	TCR	Packaging	
							Solder Termination	Pack Type
4 Digits	4 Digits	1 Digit	1 Digit	4 Digits	1 Digit	1 Digit	1 Digit	1 Digit
CRMV	1206 1210 2010 2510 2512	A = 3-sided, Wraparound B = Flip chip (top side only)	A = Palladium Silver B = Platinum Gold C = Gold D = Platinum Silver E = Platinum Palladium Gold F = Nickel Barrier	R = ohms K = kilohms M = Megohms Examples 4M70 = 4.7M 10M0 = 10M 10G0 = 10G	F = ±1% G = ±2% J = ±5% K = ±10% M = ±20%	K = ±100ppm L = ±150ppm N = ±200ppm R = ±250ppm M = ±300ppm W = ±350ppm P = ±500ppm	STANDARD LEADFREE CODES E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/Ag5, HSD (e2) N = No Solder (for all Termination Materials except Nickel barrier) STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD NON-STANDARD TIN/LEAD CODES R = Sn60/Pb40 P = Sn63/Pb37, HSD *NOTE – Package code includes both Solder Termination and Packaging Type	STANDARD CODES B = Bulk pack F = Reel pack, full reel quantity 1 = Reel pack, 1000pcs/reel 5 = Reel pack, 500pcs/reel T = Reel pack, 250pc min/reel W = Tray pack NON-STANDARD CODES R = Reel pack, ESD, 250pc min/reel M = Reel pack, 250pcs/reel 2 = Reel pack, 2000pc/reel



VISHAY TECHNO FILM RESISTORS

CRMV (CUSTOM)

SAP Part Number

CRMVTCX2163-0000TB
 CRMVTCX2117-0000FT
 CRMVTCX2216-0012NB

SAP Description

CRMVTCX2163 TB
 CRMVTCX2117 FT e2
 CRMVTCX2216-12 NB

Model 4 Digits	Custom Part Number 12 Digits	Packaging *	
		Solder Termination 1 Digit	Pack Type 1 Digit
CRMV	<p>TCXxxxx-xxxx</p> <p>(If no Digit code is displayed, use "0" as filler)</p> <p>Examples: TCX0916-0000 = TCX916 TCX0917-0001 = TCX917-1</p>	<p>STANDARD LEADFREE CODES E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/Ag5, HSD (e2) N = No Solder</p> <p>STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD</p> <p>NON-STANDARD TIN/LEAD CODES R = Sn60/Pb40 P = Sn63/Pb37, HSD</p> <p>*NOTE – Package code includes both Solder Termination and Packaging Type</p>	<p>STANDARD CODES B = Bulk pack F = Reel pack, full reel quantity 1 = Reel pack, 1000pcs/reel 5 = Reel pack, 500pcs/reel T = Reel pack, 250pc min/reel W = Tray pack</p> <p>NON-STANDARD CODES R = Reel pack, ESD, 250pc min/reel M = Reel pack, 250pcs/reel 2 = Reel pack, 2000pc/reel</p>



VISHAY TECHNO FILM RESISTORS

FHV

SAP Part Number

FHV1001G00FKES

FHV40010M0GNRB

FHV151820MJKRS

FHV07549M9FKEB1

SAP Description

FHV100 1G 1% 100 ES e3

FHV400 10M 2% 200 RB

FHV151 820M 5% 100 RS

FHV075-1 49.9M 1% 100 EB e3

Model	Size	Resistance	Tol	Temperature Coefficient	Terminal Finish / Packaging	Special
3 Digits	3 Digits	4 Digits	1 Digit	1 Digit	2 Digits	Up to 3 digits
FHV	Radial-leaded sizes: 025 050 075 100 150 160 200 400 500 Axial-leaded sizes: 026 051 076 101 151 161 201 401 501	R = ohms K = kilohms M = Megohms G = Gigohms Examples 400R = 400 10M0 = 10M 10G0 = 10G	D = ±0.5% F = ±1% G = ±2% J = ±5% K = ±10% M = ±20%	H = ±50ppm K = ±100ppm L = ±150ppm N = ±200ppm M = ±300ppm P = ±500ppm	STANDARD LEADFREE CODES EB = Bulk pack, Sn100 terminal finish (e3) ES = Strip pack, Sn100 terminal finish (e3) STANDARD TIN/LEAD CODES RB = Bulk pack, Sn60/Pb40 terminal finish RS = Strip pack, Sn60/Pb40 terminal finish	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 1 = Flameproof coating



VISHAY TECHNO FILM RESISTORS FHV (CUSTOM)

SAP Part Number
FHVTCX0647-0000ES
FHVTCX0926-0014RB

SAP Description
FHVTCX0647 ES e3
FHVTCX0926-14 RB

Model 3 Digits	Custom part number 12 Digits	Terminal Finish / Packaging 2 Digits
FHV	TCXxxxx-xxxx (If no Digit code is displayed, use "0" as filler, dash numbers progress from right to left) Examples: TCX0647-0000 TCX0647-0001 = TCX0647-1	STANDARD LEADFREE CODES EB = Bulk pack, Sn100 terminal finish (e3) ES = Strip pack, Sn100 terminal finish (e3) NB = Bulk pack, No solder NS = Strip pack, No solder STANDARD TIN/LEAD CODES RB = Bulk pack, Sn60/Pb40 terminal finish RS = Strip pack, Sn60/Pb40 terminal finish



VISHAY TECHNO FILM RESISTORS

HML

SAP Part Number

HML0110K0FKE05

HML012M00JME05

SAP Description

HML01 10K 1% K E05 e3

HML01 2M 5% M E05 e3

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	SPECIAL
3 digits	2 digits	4 digits	1 digit	1 digit	3 digits	Up to 3 digits
HML	01	R = ohms K = kilohms M = Megohms 0000 = 0 ohm jumper or special Check data sheet for available value range	F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$ Z = 0 ohm jumper	K = $\pm 100\text{ppm}$ N = $\pm 200\text{ppm}$ M = $\pm 300\text{ppm}$ S = Special	STANDARD LEAD FREE PACKAGING CODES E05 = Lacer pack Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Click to go to Permark codes section



VISHAY TECHNO FILM RESISTORS TD (CUSTOM)

SAP Part Number
 TDTCX0667-0001EB
 TDTCX1001-0000RS

SAP Description
 TDTCX0667-1 EB e3
 TDTCX1001 RS

Model 2 Digits	Custom part number 12 Digits	Terminal Finish / Packaging 2 Digits
TD	TCXxxxx-xxxx (If no Digit code is displayed, use "0" as filler) Examples: TCX0667-0000 TCX0667-0001= TCX0667-1	STANDARD LEADFREE CODES EB = Bulk pack, Sn100 terminal finish (e3) ES = Strip pack, Sn100 terminal finish (e3) STANDARD TIN/LEAD CODES RB = Bulk pack, Sn60/Pb40 terminal finish RS = Strip pack, Sn60/Pb40 terminal finish NON-STANDARD LEADFREE CODES EW = Tray pack, Sn100 terminal finish (e3) NON-STANDARD TIN/LEAD CODES RW = Tray pack, Sn60/Pb40 terminal finish PB = Bulk pack, Sn63/Pb37 terminal finish PS = Strip pack, Sn63/Pb37 terminal finish PW = Tray pack, Sn63/Pb37 terminal finish



VISHAY TECHNO FILM RESISTORS

TR

SAP Part Number
 TR03C350RDKEB
 TR20X1T00JSRS
 TR05D49K9FKES1

SAP Description
 TR03C 350 .5% 100 EB e3
 TR20X 1T 5% RS
 TR05D-1 49.9K 1% 100 ES e3

Model	Size / Power Rating	Resistance	Tol.	TCR	Terminal Finish / Packaging	Special
	3 Digits	4 Digits	1 Digit	1 Digit	2 Digits	Up to 3 digits
TR	03C = 0.25 W 03X = 0.25 W, max voltage 05D = 0.5 W 05X = 0.5 W, max voltage 10F = 1 W 10X = 1 W, max voltage 15G = 1.5 W 15X = 1.5 W, max voltage 20H = 2 W 20X = 2 W, max voltage 30J = 3 W 30X = 3 W, max voltage	R = ohms K = kilohms M = Megohms G = Gigohms T = Teraohms Examples 400R = 400 10M0 = 10M 3T00 = 3T	C = ±.25% D = ±0.5% F = ±1% G = ±2% H = ±3% J = ±5% K = ±10% M = ±20%	K = ±100ppm L = ±150ppm N = ±200ppm M = ±300ppm Q = ±400ppm P = ±500ppm T = ±600ppm G = ±700ppm U = ±1000ppm S = Special (TC undefined)	STANDARD LEADFREE CODES EB = Bulk pack, Sn100 terminal finish (e3) ES = Strip pack, Sn100 terminal finish (e3) STANDARD TIN/LEAD CODES RB = Bulk pack, Sn60/Pb40 terminal finish RS = Strip pack, Sn60/Pb40 terminal finish	Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 1 = Flameproof coating



VISHAY TECHNO FILM RESISTORS TR (CUSTOM)

SAP Part Number
TRTCX0843-0000EB
TRTCX0122-0002RS

TRTCX0843 EB e3
TRTCX0112-2 RS

SAP Description

Model 2 Digits	Custom Part Number 12 Digits	Terminal Finish / Packaging 2 Digits
TR	<p style="text-align: center;">TCXxxxx-xxxx</p> <p style="text-align: center;">(If no Digit code is displayed, use "0" as filler)</p> <p style="text-align: center;">Examples: TCX0843-0000 TCX0843-0001= TCX0843-1</p>	<p>STANDARD LEADFREE CODES EB = Bulk pack, Sn100 terminal finish (e3) ES = Strip pack, Sn100 terminal finish (e3)</p> <p>STANDARD TIN/LEAD CODES RB = Bulk pack, Sn60/Pb40 terminal finish RS = Strip pack, Sn60/Pb40 terminal finish</p> <p>NON-STANDARD LEADFREE CODES EW = Tray pack, Sn100 terminal finish (e3) EC = Custom pack, per TPI, Sn100 terminal finish (e3) NB = Bulk pack, No Solder NS = Strip pack, No Solder NW = Tray pack, No Solder NC = Custom pack, per TPI, No Solder</p> <p>NON-STANDARD TIN/LEAD CODES RW = Tray pack, Sn60/Pb40 terminal finish RC = Custom pack, per TPI, Sn60/Pb40 terminal finish</p>



VISHAY TECHNO FILM RESISTORS
MISCELLANEOUS / CHARGES (cont 1 of 3)

SAP Part Number

SAP Description

81018706B29 (Part number for 810187-06 reel plug, packaged B29)

PART NUMBER 6 Digits	DASH TYPE 2 Digits	PACKAGING 3 Digits
2xxxxx 8xxxxx		B29, P03, S27, S31, T03, etc.



VISHAY TECHNO FILM RESISTORS

CHARGES (cont 2 of 3)

SAP Part Number

SAP Description

LOTCHG-TECHNOSMD (Part number for Techno Film surface mount charges, packaging S31)

CHARGE 7 Digits	RESISTOR STYLE Up to 11 Digits
LOTCHG-	TECHNOLEAD = (Techno Leaded Film) TECHNOSMD = (Techno SMD Film)



VISHAY TECHNO FILM RESISTORS FAST TRACK PROGRAM (cont 3 of 3)

SAP Part Number

SAP Description

CHARGE 6 digits	LEAD TIME 2 digits	RESISTOR STYLE 6 digits
FSTTRK	05 = 5 working days 10 = 10 working days 15 = 15 working days	TECHNO



VISHAY TECHNO NETWORKS

MCN

SAP Part Number
MCN0501N101KTB
MCN1009X103MCB

SAP Description
MCN05-01N-101K TB
MCN10-09X-103M CB e1

MODEL	PIN COUNT	SCHEMATIC	CAPACITOR DIELECTRIC	CAPACITANCE VALUE	CAPACITANCE TOLERANCE	PACKAGING
3 Digits	2 Digits	2 Digits	1 Digit	3 Digits	1 Digit	2 Digits
MCN	08 09 10	01 02 09	N = NPO X = X7R *NPO capacitors may be substituted for XR7 capacitors	3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.	K = $\pm 10\%$ M = $\pm 20\%$	STANDARD LEADFREE CODES CB = Bulk pack STANDARD TIN/LEAD CODES TB = Bulk pack



VISHAY TECHNO NETWORKS

MRCN

SAP Part Number
 MRCN082N101J500KTW
 MRCN103X102J470MCB

SAP Description
 MRCN08-20N-101J/500K TW
 MRCN10-30X-102J/470M CB e1

MODEL 4 Digits	PIN COUNT 2 Digits	SCHEMATIC 1 Digits	CAPACITOR DIELECTRIC 1 Digit	RESISTANCE VALUE 3 Digits	RESISTANCE TOLERANCE 1 Digits	CAPACITANCE VALUE 3 Digit	CAPACITANCE TOLERANCE 1 Digit	PACKAGING 2 Digits
MRCN	08 10	1 = 10 2 = 20 3 = 30	N = NPO X = X7R *NPO capacitors may be substituted for XR7 capacitors	3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier.	F = ±1% G = ±2% J = ±5%	3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.	K = ±10% M = ±20%	STANDARD LEADFREE CODES CB = Bulk pack CW = Tray pack STANDARD TIN/LEAD CODES TB = Bulk pack TW = Tray pack



VISHAY TECHNO NETWORKS NETxTCX (CUSTOM SIPs, DIPs)

SAP Part Number
NETSTCX0843-0000FB
NETDTCX0567-0023ST

SAP Description
NETSTCX0843 FB e2
NETDTCX0567-23 ST

MODEL 4 Digits	CUSTOM PART NUMBER 12 Digits	PACKAGING	
		TERMINAL FINISH 1 Digit	PACKAGING TYPE 1 Digit
NETC = Coated SIP NETD = Molded DIP NETS = Molded SIP	TCXxxxx-xxxx (If no Digit code is displayed, use "0" as filler) Examples: TCX1002-0000 = TCX1002 TCX0843-0001 = TCX0843-1	STANDARD LEADFREE CODES D = Sn95/Ag5, HSD (e2) C = Sn95.5/Ag3.9/Cu0.6 (e1) N = No Solder STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD R = Sn60/Pb40 P = Sn63/Pb37, HSD * NOTE – Package code includes both Terminal Finish and Packaging Type	STANDARD CODES B = Bulk pack T = Tube pack W = Tray pack C = Custom pack, per TPI



VISHAY TECHNO NETWORKS QUADTCX (CUSTOM QUADs)

SAP Part Number
QUADTCX0368-0001RB

SAP Description
QUAD TCX0368-1 RB

MODEL 4 Digits	CUSTOM PART NUMBER 8 Digits	PACKAGING 2 Digits
QUAD	TCXxxxx-xxxx (If no digit code is displayed, use "0" as filler) Examples: TCX0377-0000 = TCX0377 TCX0368-0001 = TCX0368-1	STANDARD TIN/LEAD CODES RB = Bulk pack RT = Reel pack



VISHAY TECHNO FILM RESISTORS

RCHR

SAP Part Number
 RCHR1206AF750MJPEW
 RCHR1005AF1G00KPEB

SAP Description
 RCHR1206AF 750M 5% 500 EW e3
 RCHR1005AF 1G 10% 500 EB e3

MODEL	SIZE	TERMINATION STYLE	TERMINATION MATERIAL	RESISTANCE	TOL	TCR	PACKAGING	
							SOLDER TERMINATION	PACK TYPE
4 Digits	4 Digits	1 Digit	1 Digit	4 Digits	1 Digit	1 Digit	1 Digit	1 Digit
RCHR	0805 1005 1206	A = 3-sided, Wraparound B = Flip chip (top side only)	C = Gold F = Nickel Barrier	K = kilohm M = Megohms G = Gigohms 4M70 = 4.7M 10M0 = 10M 10G0 = 10G	J = ±5% K = ±10% V = ±25%	P = ±500ppm	STANDARD LEADFREE CODES E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/Ag5, HSD (e2) N = No Solder (for Gold terminations) STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD *NOTE – Package code includes this column and the next	STANDARD CODES B = Bulk pack F = Reel pack, full reel quantity 1 = Reel pack, 1000pcs/reel 5 = Reel pack, 500pcs/reel T = Reel pack, 250pc min/reel W = Tray pack NON-STANDARD CODES R = Reel pack, ESD, 250pc min/reel M = Reel pack, 250pcs/reel 2 = Reel pack, 2000pc/reel



VISHAY TECHNO FILM RESISTORS RCHRTCX (CUSTOM)

SAP Part Number
RCHRTCX0917-0000FT
RCHRTCX0216-0012NB

SAP Description
RCHRTCX0917 FT e2
RCHRTCX0216-12 NB

Model	Custom Part Number	Packaging	
		Solder Termination 1 Digit	Pack Type 1 Digit
4 Digits	12 Digits		
RCHR	<p>TCXxxxx-xxxx</p> <p>(If no Digit code is displayed, use "0" as filler)</p> <p>Examples: TCX0917-0000 TCX0917-0001=TCX917-1</p>	<p>STANDARD LEADFREE CODES</p> <p>E = Sn100 (e3) F = Sn95/Ag5 (e2) D = Sn95/AG5, HSD (e2) N = No Solder</p> <p>STANDARD TIN/LEAD CODES</p> <p>T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>R = Sn60/Pb40 P = Sn63/Pb37, HSD</p> <p>*NOTE – Package code includes both Solder Termination and Packaging Type</p>	<p>STANDARD CODES</p> <p>B = Bulk pack F = Reel pack, full reel quantity 1 = Reel pack, 1000pcs/reel 5 = Reel pack, 500pcs/reel T = Reel pack, 250pc min/reel W= Tray pack</p> <p>NON-STANDARD CODES</p> <p>R = Reel pack, ESD, 250pc min/reel M = Reel pack, 250pcs/reel 2 = Reel pack, 2000pc/reel</p>



VISHAY TECHNO NETWORKS

TxxL

SAP Part Number

T14L1025K0TT
T16L08100KCT
T16LR850K0TT

SAP Description

T14L10 25K TT
T16L08 100K CT e1
T16LR8 50K TT

MODEL 6 Digits	SCHEMATIC 2 Digits	RESISTANCE VALUE (R) 4 Digits	PACKAGING 2 Digits
T14L = 14 pin T16L = 16 pin	10 (T14L only) 08 (T16L only) R8 (T16L only)	K = kilohms Reference: If R = 100K Then 2R = 200K	STANDARD LEADFREE CODES CT = Tube pack STANDARD TIN/LEAD CODES TT = Tube pack NON-STANDARD LEADFREE CODES NT = Tube pack



VISHAY TECHNO NETWORKS TCN

SAP Part Number
TCN1201X104MTB
TCN1009N102KCB

SAP Description
TCN12-01X-104M TB
TCN10-09N-102K CB e1

MODEL 3 Digits	PIN COUNT 2 Digits	SCHEMATIC 2 Digit	CAPACITOR DIELECTRIC 1 Digit	CAPACITANCE VALUE 3 Digits	CAPACITANCE TOLERANCE 1 Digit	PACKAGING 2 Digits
TCN	06 07 08 09 10 11 12	01 02 09	N = NPO X = X7R *NPO capacitors may be substituted for XR7 capacitors	3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.	K = ±10% M = ±20%	STANDARD LEADFREE CODES CB = Bulk pack STANDARD TIN/LEAD CODES TB = Bulk pack



VISHAY TECHNO NETWORKS

TCX*

SAP Part Number
 TCX0843-0000EB
 TCX0145-0100NS

SAP Description
 TCX0843 EB e3
 TCX0145-100 NS

* Note: To be used for the custom products that would not fall under any of the other TCX family groups.

MODEL 2 Digits	CUSTOM PART NUMBER 8 Digits	PACKAGING	
		TERMINAL FINISH 1 Digit	PACKAGING TYPE 1 Digit
TCX	<p>xxxx-xxxx</p> <p>(If no Digit code is displayed, use "0" as filler)</p> <p>Examples: 1002-0000 = TCX1002 0843-0001 = TCX0843-1</p>	<p>STANDARD LEADFREE CODES E = Sn100 (e3) D = Sn95/Ag5, HSD (e2) C = Sn95.5/Ag3.9/Cu0.6 (e1) N = No Solder</p> <p>STANDARD TIN/LEAD CODES T = Sn90/Pb10 S = Sn62/Pb36/Ag2, HSD R = Sn60/Pb40 P = Sn63/Pb37, HSD</p> <p>OTHER CODES X=Special, per TPI (termination material specified by customer)</p>	<p>STANDARD CODES B = Bulk pack S = Strip pack T = Tube pack W= Tray pack C = Custom pack, per TPI</p>
*NOTE – Package code includes this column and the next			



VISHAY TECHNO NETWORKS TRC

SAP Part Number
TRC0801N101J560KTB
TRC0901X220G390KCB

SAP Description
TRC08-01N-101J/560K TB
TRC09-01X-220G/390K CB e1

MODEL 3 Digits	PIN COUNT 2 Digits	SCHEMATIC 2 Digits	CAPACITOR DIELECTRIC 1 Digit	RESISTANCE VALUE 3 Digits	RESISTANCE TOLERANCE 1 Digit	CAPACITANCE VALUE 3 Digits	CAPACITANCE TOLERANCE 1 Digit	PACKAGING 2 Digits
TRC	06 07 08 09 10 11 12	01 02 09	N = NPO X = X7R *NPO capacitors may be substituted for XR7 capacitors	3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier.	F = ±1% G = ±2% J = ±5%	3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.	K = ±10% M = ±20%	STANDARD LEADFREE CODES CB = Bulk pack STANDARD TIN/LEAD CODES TB = Bulk pack



VISHAY TECHNO NETWORKS

TSR

SAP Part Number

TSR100RFFCB

TSR20R0CDRS

SAP Description

TSR100RFF CB e1

TSR20R0CD RS

MODEL 3 Digits	RESISTANCE VALUE 4 Digits	RESISTANCE TOLERANCE 1 Digit	RATIO TOLERANCE 1 Digit	PACKAGING 2 Digits
TSR	R = ohms	C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1\%$	C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1\%$	STANDARD LEADFREE CODES CB = Bulk pack (SnAgCu solder) CS = Strip pack (SnAgCu solder) STANDARD TIN/LEAD CODES RB = Bulk pack RS = Strip pack



VISHAY TECHNO NETWORKS TSR (CUSTOM)

SAP Part Number
TSRTCX0843-0001CB
TSRTCX0054-0000RB

SAP Description
TSRTCX0843-1 CB e1
TSRTCX0054 RB

MODEL 3 Digits	CUSTOM PART NUMBER 12 Digits	PACKAGING 2 Digits
TSR	TCXxxxx-xxxx (If no Digit code is displayed, use "0" as filler) Examples: TCX1002-0000= TCX1002 TCX0843-0001= TCX0843-1	STANDARD LEADFREE CODES CB = Bulk pack (SnAgCu solder) CS = Strip pack (SnAgCu solder) STANDARD TIN/LEAD CODES RB = Bulk pack RS = Strip pack



VISHAY TECHNO NETWORKS

TxxS

SAP Part Number

T10S08100KRB
T08S0650K0FB

SAP Description

T10S-08 100K RB
T08S-06 50K FB e2

MODEL 4 Digits	NO. OF BITS 2 Digits	RESISTANCE VALUE (R) 4 Digits	PACKAGING 2 Digits
T06S = 6 pin T07S = 7 pin T08S = 8 pin T09S = 9 pin T10S = 10 pin	04 =4 bits (T06S only) 05 =5 bits (T07S only) 06 = 6 bits (T08S only) 07 = 7 bits (T09S only) 08 = 8 bits (T10S only)	K = Thousand Examples 5K00 = 5K OHMS 5K10 = 5.1 K OHMS 100K = 100K OHMS Reference Schematic: IF R=100K, THEN 2R=200K IF R=5K, THEN 2R=10K	STANDARD LEADFREE CODES CB = Bulk pack, Sn95.5/Ag3.9/Cu0.6 terminal finish (e1) STANDARD TIN/LEAD CODES RB = Bulk pack, Sn60/Pb40 terminal finish



VISHAY TECHNO FILM RESISTORS / NETWORKS MISCELLANEOUS (cont 1 of 3)

SAP Part Number

81018706B29

SAP Description

810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)

PART NUMBER 6 digits	DASH TYPE 2 digits	PACKAGING 3 digits
2xxxxx 8xxxxx	00 thru 99 as applicable	B29, P03, S27, S31, T03, etc. Click to go to Packaging Code definition page



VISHAY TECHNO FILM RESISTORS / NETWORKS

LOT CHARGES (cont 2 of 3)

SAP Part Number
LOTCHG-TECHNOSMD

SAP Description
LOTCHG-TECHNOSMD S31

Standard packaging code S31 for all part numbers

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	TECHNOLEAD = Techno Leaded Film TECHNOSMD= Techno SMD Film TECHNONETS = Techno Networks



VISHAY TECHNO FILM RESISTORS / NETWORKS FAST TRACK PROGRAM (cont 3 of 3)

SAP Part Number
FSTTRK10TECHNO
FSTTRK20TECHNO

SAP Description
FSTTRK10TECHNO S31
FSTTRK20TECHNO S31

Standard packaging code S31 for all part numbers

CHARGE 6 digits	LEAD TIME 2 digits	RESISTOR STYLE 9 digits
FSTTRK	05 = 5 working days 10 = 10 working days 15 = 15 working days 20 = 20 working days	TECHNO = Techno Networks (Material Group FN2)



SAP PART NUMBERING MANUAL

**WIREWOUND, FILM AND NETWORK/ARRAY
RESISTORS**

PLASMA DISPLAYS

THERMISTORS



VISHAY ANGSTROHM FILM RESISTORS

HDN (Military - RNR / RNN)

SAP Part Number
RNN55C1002FSM76
RNR65E10R0FSRJ865

SAP Description
HDN-55 10K 1% T-2 RNN55C1002FS M76
HDN-65-65 10 1% T-9 RNR65E10R0FS RJ8

MODEL 3 digits	SIZE 2 digits	T.C. 1 digit	VALUE 4 digits	TOLERANCE 1 digit	FAILURE RATE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RNN RNR	55 57 60 65 70 75	E = ±25ppm/°C (T-9) C = ±50ppm/°C (T-2) J = ±25ppm/°C (T-9, 75-size only)	4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. (NOTE: P/N FORMAT PER MIL-PRF-55182) Check data sheet for available Value Range	B = ±0.1% D = ±0.5% F = ±1%	M = 1% P = 0.1% R = 0.01% S = 0.001%	STANDARD CODES M76 = Foil Bag pack, Antistatic bag, Heat-seal (for sizes except 65, 70, and 75) M77 = Foil Bag pack, Antistatic bag, Heat-seal (for 65, 70, and 75-size only) RJ7 = Reel pack. 0.200" pitch, 2-1/16" tape spacing, w/lead trim, small reel flange, black conductive bag (for 55, 57 & 60-size) RJ8 = Reel pack. 0.375" pitch, 2 7/8" tape spacing, w/lead trim, small reel flange, black conductive bag (for 65, 70 & 75-size) STANDARD SLDC CODES BSL = Foil Bag pack, SLDC RSL = Reel pack, std taping, SLDC NON-STANDARD CODES K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, w/lead trim (for 55, 57 & 60-size) K68 = Ammo pack, 0.375" pitch, 2-7/8" tape spacing, w/lead trim (for 65, 70 & 75-size) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable Blank = Standard 1 = HSD (57, 60 & 75-size) 4 = HSD (70-size) 65 = HSD (55 & 65-size)



VISHAY ANGSTROHM FILM RESISTORS

HDN (Specials) (Typically to Customer Source Control Drawings)

SAP Part Number
 HDN60H536R00FMR97
 HDN57E10K000BCS122

SAP Description
 HDN-60-97 536 1% T-2 M76
 HDN-57-122 10K .1% T-9 RJ7

MODEL 3 digits	SIZE 2 digits	T.C. 1 digit	VALUE 6 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
HDN	55 57 60 65 70 75	E = ± 25 ppm/ $^{\circ}$ C (T-9) H = ± 50 ppm/ $^{\circ}$ C (T-2)	R = ohms K = kilohms M = Megohms Check data sheet for available value range	A = $\pm 0.05\%$ B = $\pm 0.1\%$ D = $\pm 0.5\%$ F = $\pm 1\%$	STANDARD CODES MR = Foil Bag pack, Antistatic bag, Heat-seal (M76, for all except 75-size) MS = Foil Bag pack, Antistatic bag, Heat-seal (M77, for 75-size only) CS = Reel pack. 0.200" pitch, 2-1/16" tape spacing, with lead trim, small reel flange, black conductive bag (RJ7, for 55, 57 & 60-size) CT = Reel pack. 0.375" pitch, 2 7/8" tape spacing, with lead trim, small reel flange, black conductive bag (RJ8, for 65, 70 & 75-size) STANDARD SLDC CODES BS = Foil Bag pack, SLDC (BSL) UL = Reel pack, std taping, SLDC (RSL) NON-STANDARD CODES KA = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, w/lead trim (K36, for 55, 57 & 60-size) KC = Ammo pack, 0.375" pitch, 2-7/8" tape spacing, w/lead trim (K68, for 65, 70 & 75-size) Click to go to Packaging Code definition page	Dash #'s 1 thru 999 as applicable



VISHAY ANGSTROHM FILM RESISTORS

HMS (Hermetic Matched Sets)

SAP Part Number

HMS110
HMS090S2

SAP Description

HMS-110 S51
HMS-90-2 S51

Standard packaging code S51 for all part numbers

MODEL 3 digits	TYPE 3 digits	SPECIAL Up to 4 digits
HMS	001 thru 999 074 = 74 090 = 90 110 = 110	Sxxx (only if needed, where xxx = 001 thru 999)



VISHAY ANGSTROHM FILM RESISTORS MISCELLANEOUS (cont 1 of 3)

SAP Part Number
81018706B29

SAP Description
810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)

PART NUMBER 6 digits	DASH TYPE 2 digits	PACKAGING 3 digits
2xxxxx 8xxxxx	00 thru 99 as applicable	B29, P03, S27, S31, T03, etc. Click to go to Packaging Code definition page



VISHAY ANGSTROHM FILM RESISTORS

LOT CHARGES (cont 2 of 3)

SAP Part Number
LOTCHG-ANGHERMMIL

SAP Description
LOTCHG- ANGHERMMIL S31

Standard packaging code S31 for all part numbers

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	ANGHERMMIL = Angstrohm Hermetic Leaded-Film, Military ANGHERMCOM= Angstrohm Hermetic Leaded-Film, Commercial ANGHERMCUS = Angstrohm Hermetic Leaded-Film, Custom



VISHAY ANGSTROHM FILM RESISTORS FAST TRACK PROGRAM (cont 3 of 3)

SAP Part Number

FSTTRK10ANGHFIL
FSTTRK20ANGHFCOM

SAP Description

FSTTRK10ANGHFIL S31
FSTTRK20ANGHFCOM S31

Standard packaging code S31 for all part numbers

CHARGE 6 digits	LEAD TIME 2 digits	RESISTOR STYLE 9 digits
FSTTRK	05 = 5 working days 10 = 10 working days 15 = 15 working days 20 = 20 working days	ANGHFIL = Angstrohm Hermetic Leaded-Film, Military ANGHFCOM = Angstrohm Hermetic Leaded-Film, Commercial ANGHFCUS = Angstrohm Hermetic Leaded-Film, Custom

REVISION INFORMATION:

REVISION DATE	REVISION DESCRIPTION
October 19, 2001	<ol style="list-style-type: none"> 1) Added C = 0.25% to Dale Wirewound RH page 2) Added HL-5, HL-6 and HL-10 sizes to Dale Wirewound HL page 3) Added per marks C93 and C94 4) Fixed example #3, removed the 2 after the J on Dale Network CS206 page 5) Added quantities to clarify packaging codes on Dale Film FP page 6) Added Models B, E and X to Thermistors 7) Added B14 bulk pack as non-standard code on Exx and RWR pages
November 16, 2001	<ol style="list-style-type: none"> 1) Corrected standard reeling codes for Dale Wirewound RWR84, Eqx-10 and Esx-10 resistors.
December 7, 2001	<ol style="list-style-type: none"> 1) Added Model E to Thermistor Special page 2) Corrected resistance value in SAP part number example and added note to TC column on Draloric Film FPR page. 3) Corrected resistance value in SAP part number example on Draloric Wirewound GWK 4) Added another part number example and clarified # of digits in Optional Construction and Special columns on Dale Film ROX page
January 16, 2002	<ol style="list-style-type: none"> 1) Added F=1% tolerance to Dale Wirewound HL/NHL, HL/NHL Flat pages 2) Added F02 foam pack code to Dale Wirewound RS/NS page 3) Added R1=3300, R2=6800 row to Impedance Table page 4) Added Standard / Non-Standard Column to FP / C6 Spec Codes page 5) Noted that the CCF-55 and CCF-07 will be available as of 02/01/2002 on Dale Film CCF page 6) Added CP=R55 packaging code on Dale Film ERL (Specials) page
March 6, 2002	<ol style="list-style-type: none"> 1) Added per marks C95, C96, C97, H1 and W17. 2) Added packaging code M10 to Dale Wirewound CFR page. 3) Added vinyl and mylar options to Dale Film D / G page. 4) Added "Brackets and Accessories" page to Draloric WW section. 5) Added conversions for LX and XX to B29 and S27 pack codes on Draloric WW pages. 6) Added TC's A, B and C to Draloric WW KKA page. 7) Added P=FST and LX = B29 on Draloric Film HGR page. 8) Clarified SAP vs Draloric vs Dale pack codes for avisert and panisert lead forming on Draloric Film LCA, SMA and SXA pages and updated Table of Contents to include the ..R and ..V part numbers.
May 3, 2002	<ol style="list-style-type: none"> 1) Changed resistance value digits from 3 to 6 on CMF07 and CMF20 limited to E24 values only on Dale Film CMF (Commercial) page. 2) Added G-6 to the Dale WW G, GN page. 3) Added per marks C98 and C99. 4) Removed B14 (H) packaging code option and correct part number example on Dale WW SPU page. 5) Removed B05 as packaging option in part number example and fixed resistance values in VALUE column so that they are 6 digits in lieu of 5 digits on Dale WW SPR page. 6) Added LA package code and clarified Legacy pack code conversions on Draloric WW SKF page. 7) Added Draloric and Dale Legacy pack codes for SAP pack code 41 on Draloric Film SXA page. 8) Clarified SAP vs Draloric vs Dale pack codes and fixed example part number on Draloric Film SK page. 9) Added conversion of ZX = S51 for pack codes on Draloric WW pages. 10) Clarified example for -68 on Dale Film RC_M page. 11) <u>Noted R79 is not available on 6927 size on Dale WW WSC/WSN and WSF pages.</u>
July 15, 2002	<ol style="list-style-type: none"> 1) Added D = 0.5% to Dale Film ROX page. 2) Add "Note: NI also known as SWI" on applicable Draloric WW pages. 3) Added per mark H2 and W17. 4) Added WSZ family to Dale WW and Draloric WW sections. 5) Added WSL....E family to Dale WW section. 6) Added 3921 size to Dale WW WSL page. 7) <u>Updated packaging code page to DPS-327 revision GN.</u>
August 30, 2002	<ol style="list-style-type: none"> 1) Changed packaging code M=RG7 to B=RG7 and added curves 05 and 06 to Dale Thermistor NTHS page. 2) Added LCD family to Plasma Display section. 3) Added 0603, 2816 and 5931 sizes to Dale WW WSL page. 4) Clarified coding for specials on the Dale Film RCW page. 5) Added 130 R1, 130 R2 row to Impedance Table. 6) Added 4 and 5 watt sizes to Dale WW WSR page.

REVISION DATE	REVISION DESCRIPTION
November 25, 2002	<ol style="list-style-type: none"> 1) Added J=5% on Dale Thermistor DN page. 2) Corrected sample part number (SR5-1 is correct type) on Dale WW SR page. 3) Added per marks W8, P21, CA1 and CA2. 4) Corrected pack codes from D02 & D04 to DO2 & DO4 on Draloric Film LCA and SMA pages. 5) Added fusible (SI) information to Draloric Film M10, M11, M12, M25 page. 6) Added 04N terminal option to Dale WW HL page. 7) Added Dale and Draloric legacy pack codes to Draloric Film WK page. 8) Modified BRACKET description to BRACKETR and SPRICLIP on Draloric WW Brackets page. 9) Fixed legacy part number examples on NKS and SKS Draloric Film pages. 10) Added RCA family to Vishay Dale Film section. 11) Added B14 packaging code to Dale WW SR page.
March 14, 2003	<ol style="list-style-type: none"> 1) Added Dale and Draloric legacy pack codes to Draloric Film WR page. 2) Added per mark P22 and CA3. 3) Added T = T06 100 pc waffle tray to Dale Thermistor B / C / E, etc. page. 4) Added X = 15 PPM to Dale WW WSL...E page. 5) Stated RT7 is for 04 only and RG5 is for 06 only on Dale Network/Arrays CZA page. 6) Added LCG family to Dale Plasma Displays section. 7) Added Dale Legacy pack codes to Draloric WW G200, KKA/KKE and Z300 pages. 8) Added 0402, 2010 and 2512 sizes to Dale Film TNPW page. 9) Added (B/H)BR to Dale Film B / H page. 10) Added O4 and O2 packaging codes to Draloric Film NMA page. 11) Fixed example P/N to RK20207 on Draloric Film RK2 page.
August 5, 2003	<ol style="list-style-type: none"> 1) Added Dale and Draloric legacy pack codes to Draloric Film HCA, UCA, SMM and SMA pages. 2) Added RE4 or WG to all applicable axial leaded Dale Film pages. 3) Added 4 = SWI in TC / Material column on Draloric WW Z300 page. 4) Added 112A, 241A, 252A, 401B, 950B and 990C code to Impedance Codes page. 5) Added 0309 size to Draloric Film NMA page. 6) Added per mark CA4. 7) Added TD = RT7 pack code and Z = zero ohm jumper tolerance on Dale Network/Arrays CRA page. 8) Added additional Special Characters to Draloric WW GWS page. 9) Added B=100ppm and C=50ppm to Draloric Film WK page. 10) Changed LX = B14 on Draloric WW SKF page. 11) Added A=200ppm, G = 2% tolerance, and several pack codes to the Draloric Film ZMA page. 12) Added CW-2B/RS-2B page to Draloric WW section. 13) Added P=500ppm and HR on Draloric Film D10, D11, D12, D25 page. 14) Added pack code TG for 2512 size on Dale Film TNPW page.
September 15, 2003	<ol style="list-style-type: none"> 1) Added 0207 as being able to be packed as B3 on Draloric Film SMM page. 2) Added PST family to Dale Thermistor section. 3) Added Y=R52 package code to Dale Thermistor PTFT page. 4) Added packaging min/mult info for Draloric Film HGR page.
November 20, 2003	<ol style="list-style-type: none"> 1) Added LAB – MINI LABS page to Draloric Film section. 2) Added 5 = Part Marking (-65) to Dale Film RC_M page. 3) Changed MODEL SIZE format on Draloric Film NKS and SKS pages. 4) Added Draloric packaging codes and corrected 0309 packaging info on Draloric Film LCA page 1. 5) Added per mark CA5. 6) Updated packaging code information to DPS-327 Rev. GW.

REVISION DATE	REVISION DESCRIPTION
May 17, 2004	<ol style="list-style-type: none"> 1) Added 07 size for Dale Wirewound CPCP page. 2) Added C05 pack code to Dale Wirewound RH/NH page. 3) Added WSE Dale Wirewound page 4) Added C, GKK, GW, KFA, KNA, SKA, TW, VC, VNA and ZWO families to Draloric WW section. 5) Changed T.C. & special columns for CRCW Film 6) Added CRCW_BC Film page 7) Changed packaging column for PMMO Film 8) Numerous changes to the Draloric Film Section 9) Changed special column for B / C / E / F / H / J / M / T / W / X Thermistor 10) Changed curve column for NTHS Thermistor 11) Added 20% tolerance to PST Thermistor
August 23, 2004	<ol style="list-style-type: none"> 1) Changed BA/B43 and B12 = 100 pc per box for all applicable Dale WW pages. 2) Added Lead free packaging codes to Dale WW pages. 3) Added FastTrack charge part numbering to Dale Wirewound and Dale Film Miscellaneous pages. 4) Added FD family to Draloric WW section. 5) Added 5 = SW1 to Draloric WW GBS page. 6) Added TC of D and 51 pack code to Draloric WW KKA/KKE page. 7) Added ZDV series, F value multiplier and 8B and 40 pack codes to Draloric WW Z300 page. 8) Added 308D size and 0 TC to Draloric WW ZBS page. 9) Added size 1412, 0 TC and 0 tolerance to Draloric WW ZW page. 10) Removed SMA0207 replacement note from Dale Film CCF page. 11) Added BG and R6 pack codes to Dale Film CMF (Commercial) page. 12) Removed CT55 from Dale Film CMF Military (RN) page. 13) Removed 0805 size from Dale Film CRCC page. 14) Added NA and E3 to Specials on Dale Film CRCW page. 15) Added /12 to Dale Film RC_M page. 16) Added 0603 and 0402 sizes to Dale Film RCWP page. 17) Added 0603 size to Dale Film RCWPM-99 page. 18) Added obsolescence note to Dale Film TNPWM page. 19) Added CFA, EK, HMM, LAB-MINI-LABS, LCE, LCL, LCR, LCS, LCV, MS1, NME, NML, NMR, NMS, NMV, OME, OML, OMR, OMS, OMV, PME, PML, PMR, PMS, PMV, RN, SME, SML, SMR, SMS, SMV, SXE, SXL, SXR, SXS, SXV, UBA, UCS, VK, WRM, ZMV, Yageo 4xx and 5xx pages to Draloric Film section. 20) Added new Special Characteristics, TC, Tolerances, Pack Codes and Specials to Draloric Film D series page. 21) Added G special characteristic and 2C and 21 pack codes to Draloric Film MK page. 22) Removed 06 size from Network/Arrays CRCA page. 23) Added 09 Pin Count to MSP (01, 03, 00) 24) Noted availability of TRA06E083.... only as of 7/1/2004 on Network/Arrays TRA page. 25) Added D=0.5% tolerance and C=0.25% tolerance to Thermistor TFPT page. 26) Added per mark W18.
February 25, 2005	<ol style="list-style-type: none"> 1) Allowed S70 and S73 for CA-4000, CA-5000 series on Dale Wirewound CA page. 2) Added CA, CP and CPCC/CPCF High Volume pages to Dale Wirewound section. 3) Added comments to Draloric WW G200 and Z300 pages that the Lx pack codes are for sample only. 4) Moved TNPW from Dale Film to Draloric Film section 5) Changed to 0=jumper for TC, added 4=+20% in tolerance on Draloric Film Dxx page. 6) Added Leadfree CRCW / D page to Draloric Film section 7) Changed pack code from 7B to 2B and IC to DC on Draloric Film LCA page. 8) Changed Special Character option from B to 0 on Draloric Film SKS page. 9) Removed 0207 from B3 pack code option, changed 2nd example from Y to W on Draloric Film SMM page. 10) Added TNPW from Dale section and TNPW Leadfree page to Draloric Film section 11) Added pack code S9 = S90 (reel) on Dale Network SOGC and SOMC pages. 12) Added PDB to Dale Plasma Displays PDS page and index. 13) Removed DN, DP and SSP families from the Dale Thermistor Section 14) Added lead free package codes to all Dale Thermistor Pages

REVISION DATE	REVISION DESCRIPTION																																													
March 9, 2005	<ol style="list-style-type: none"> 1) Removed 1, 3 and 4 TC options from Draloric Wirewound KKA / KKE page. 2) Fixed example to code 221B on Dale Network SOMC (05) page. 3) Added WA = 210W to Per Mark table. 																																													
March 15, 2005	<ol style="list-style-type: none"> 1) Updated Dale Film CRCW page, added M and 1 tolerances and HL, NL specials. Removed BC and E3 specials. 2) Updated Draloric Film TNPW page, changed special value call out and removed some tolerance, TC and package codes options. 3) Changed Draloric Film HMA and NMA pages such that pack code 12 is used instead of 14. 4) Added value multiplier 6 to Draloric Film D10 page. 5) Added Dale Legacy pack codes to Draloric Film LCA page. 6) Added Dale Legacy pack codes to Draloric Film SXA page. 																																													
March 17, 2005	<ol style="list-style-type: none"> 1) Removed Special Character B and added 0 = neutral on Draloric Film NKS page. 2) Removed packaging code G5 from Draloric Film WK page. 3) Added LED series to Dale Plasma Displays section. 																																													
June 24, 2005	<ol style="list-style-type: none"> 1) Modified part number examples and descriptions on Dale pages for SAPPAS harmonization clarification 2) Added CANS family to Dale Wirewound section. 3) Added 07 size to Dale Wirewound CPCC/CPCF High Volume page. 4) Added 8027 size to Draloric Wirewound WSZ page. 5) Removed 2X, 3X, 8X pack codes from Draloric WW Z300 page. 6) Added lead free and preferred pack codes to Dale Film and Network sections. 7) Moved CCF55 / 07, CRCW and CRCW_BC pages into Draloric Film section. 8) Added CCF55 / 07 lead free page to Draloric Film section. 9) Removed Chip Kit info from CRCW page and created new Design Kit pages in Draloric Film section. 10) Removed Pb Free info, added T TC, changed 6=106 multiplier and added L tol to Draloric Film D10.. page. 11) Added LABS-MINI LABS lead free page to Draloric Film section. 12) Removed lead free package option from Thermistor SSN pages. 13) Added permark code H3 																																													
April 1, 2009	<ol style="list-style-type: none"> 1) Pack code E = Tape/reel was added to WSBS/WSMS page 																																													
July 31, 2009	<ol style="list-style-type: none"> 1) Removed Suffix R1, R2, R3, R4, R5, R6, R7, and RA from PERMARK Code Table. 2) Added the following to the PERMARK Code Table. <table border="0" style="margin-left: 20px;"> <tr><td>0811-2188</td><td>CA6</td><td>WW</td></tr> <tr><td>0811-0229</td><td>CA7</td><td>WW</td></tr> <tr><td>77P5766</td><td>CA8</td><td>WW</td></tr> <tr><td>177664,2W</td><td>CA9</td><td>WW</td></tr> <tr><td>91637,44R2F</td><td>CB1</td><td>WW</td></tr> <tr><td>42G3139</td><td>CB2</td><td>WW</td></tr> <tr><td>S10404-99</td><td>H4</td><td>WW</td></tr> <tr><td>S10404-136</td><td>H8</td><td>WW</td></tr> <tr><td>S10404-134</td><td>H9</td><td>WW</td></tr> <tr><td>S10404-112</td><td>J1</td><td>WW</td></tr> <tr><td>S10404-132</td><td>J2</td><td>WW</td></tr> <tr><td>S10404-127</td><td>J3</td><td>WW</td></tr> <tr><td>S10404-135</td><td>J4</td><td>WW</td></tr> <tr><td>30731437-272</td><td>P23</td><td>FILM</td></tr> <tr><td>30731437-203</td><td>P24</td><td>FILM</td></tr> </table> 3) Changed Col to WW in the Origin column of the PERMARK Code Table 4) Changed Nor to Film in the Origin column of the PERMARK Code Table 5) Added the K package code to the Packaging column under a new category NON-STANDARD LEAD FREE PACKAGING CODES to the HL Wire wound Resistor Types. 	0811-2188	CA6	WW	0811-0229	CA7	WW	77P5766	CA8	WW	177664,2W	CA9	WW	91637,44R2F	CB1	WW	42G3139	CB2	WW	S10404-99	H4	WW	S10404-136	H8	WW	S10404-134	H9	WW	S10404-112	J1	WW	S10404-132	J2	WW	S10404-127	J3	WW	S10404-135	J4	WW	30731437-272	P23	FILM	30731437-203	P24	FILM
0811-2188	CA6	WW																																												
0811-0229	CA7	WW																																												
77P5766	CA8	WW																																												
177664,2W	CA9	WW																																												
91637,44R2F	CB1	WW																																												
42G3139	CB2	WW																																												
S10404-99	H4	WW																																												
S10404-136	H8	WW																																												
S10404-134	H9	WW																																												
S10404-112	J1	WW																																												
S10404-132	J2	WW																																												
S10404-127	J3	WW																																												
S10404-135	J4	WW																																												
30731437-272	P23	FILM																																												
30731437-203	P24	FILM																																												

REVISION DATE	REVISION DESCRIPTION																																																
August 14, 2009	1) Added new package codes to NETxTCX page. FC = Sn95/Ag5=e2, per TPI PC = Sn63/Pb37, per TPI RC = Sn60/Pb40, per TPI SC = Sn62/Pb36/Ag2, per TPI TC = Sn90/Pb10, per TPI NC = No solder, per TPI																																																
October 12, 2009	1) Removed " * Leadfree version not currently released " footnote and asterisk from " STD LEAD FREE CODES ", " EA ", " EB ", and " EK " Packaging codes from CMF (Commercial) page 2) Removed asterisk from " EK ", " EL ", and " EE " Packaging codes and from " STD TIN/LEAD CODES (HVW/HVX) " from MVW / HVW / HVX) page. Changed footnote " * Leadfree version not currently released " to " *MVW product does not contain lead " 3) Removed footnote " * Lead free will not be available until Q3 2005 " from CPW/CPWN page. 3) Added PSF Dale Film register page																																																
October 22, 2009	1) Added TOC entry "CHARGES (3 of 3)" and page "VISHAY TECHNO FILM RESISTORS FAST TRACK PROGRAM (cont 3 of 3)" to VISHAY TECHNO RESISTORS section.																																																
October 30, 2009	1) Removed CCF-2 page and book mark from Dale Film Parts Manual. 2) Removed B, C, and D tolerance from CCF page. 3) Removed E = T-9 T.C. from CCF page.																																																
March 02, 2010	1) Added the following to the PERMARK Code Table (in alphabetical order) S10404-139 H5 WW S10404-138 H6 WW S10404-137 H7 WW S10404-144 J5 WW 12W W24 WW 2) Removed "Lead free will not be available until Q3 2005" from VISHAY DALE WIREWOUND RESISTORS - SPU page 3) Added new "RCWPM-99 (Military 32159 Jumper Thick Film)" page, under VISHAY DALE FILM RESISTORS.																																																
May 4, 2010	1) For the MCN, TCN, TRC and TxxS (T06S, T07S, T08S, T09S & T10S) products, added the pack code "CB". 2) For the TxxL (T14L & T16L) products, added the pack code "CT". 3) For the MRCN product, added the pack codes "CB" and "CW". 4) For the TSR product, added the pack codes "CB" and "CS". 5) For the NETxTCX (NETCTCX, NETDTCX & NETSTCX) products, added the pack codes "CB", "CC", "CT" and "CW". 6) For the TCX product, added the pack codes "CB", "CS", "CT" and "CW".																																																
May 20, 2010	1) Added the following to the IMPEDANCE CODES (in alphabetical order) <table border="1"> <thead> <tr> <th>R1 (OHMS)</th> <th>R2 (OHMS)</th> <th>IMPEDANCE CODE</th> <th>CODE SUFFIX</th> <th>LEGACY 1%</th> <th>LEGACY 2%, 5%</th> </tr> </thead> <tbody> <tr> <td>180</td> <td>360</td> <td>121</td> <td>F</td> <td>1800/3600</td> <td>181/361</td> </tr> <tr> <td>260</td> <td>162</td> <td>101</td> <td>G</td> <td>2600/1620</td> <td>n/a</td> </tr> <tr> <td>310</td> <td>470</td> <td>191</td> <td>C</td> <td>3100/4700</td> <td>311/471</td> </tr> <tr> <td>330</td> <td>180</td> <td>121</td> <td>J</td> <td>3300/1800</td> <td>331/181</td> </tr> <tr> <td>360</td> <td>180</td> <td>121</td> <td>G</td> <td>3600/1800</td> <td>361/181</td> </tr> <tr> <td>390</td> <td>180</td> <td>121</td> <td>H</td> <td>3900/1800</td> <td>391/181</td> </tr> <tr> <td>5000</td> <td>5000</td> <td>252</td> <td>B</td> <td>5001/5001</td> <td>502/502</td> </tr> </tbody> </table> 2) Updated the following from VISHAY DALE NETWORK/ARRAY RESISTORS CSRC: a. Remove the top 2 sample part (CSRC08C30102J10KP and CSRC10B21510J103ME) b. Remove schematic 20, 21 and 30 in the SCHEMATIC column c. Added "Note: For standard CSRC parts, use the CS206 series in the RESISTANCE VALUE column d. Leaved only comment from Special, to the word voids in the RESISTANCE VALUE column e. Removed G and J in the RESISTANCE/TOLERANCE column f. Leaved only XXX = Special in CAP. VALUE column g. Removed K and M in CAP. TOLERANCE column 3) Added the following to the VISHAY TECHNO FILM RESISTORS TR T = 600ppm G = 700ppm U = 1000ppm And Combined the two columns which are Size column and Power Rating column	R1 (OHMS)	R2 (OHMS)	IMPEDANCE CODE	CODE SUFFIX	LEGACY 1%	LEGACY 2%, 5%	180	360	121	F	1800/3600	181/361	260	162	101	G	2600/1620	n/a	310	470	191	C	3100/4700	311/471	330	180	121	J	3300/1800	331/181	360	180	121	G	3600/1800	361/181	390	180	121	H	3900/1800	391/181	5000	5000	252	B	5001/5001	502/502
R1 (OHMS)	R2 (OHMS)	IMPEDANCE CODE	CODE SUFFIX	LEGACY 1%	LEGACY 2%, 5%																																												
180	360	121	F	1800/3600	181/361																																												
260	162	101	G	2600/1620	n/a																																												
310	470	191	C	3100/4700	311/471																																												
330	180	121	J	3300/1800	331/181																																												
360	180	121	G	3600/1800	361/181																																												
390	180	121	H	3900/1800	391/181																																												
5000	5000	252	B	5001/5001	502/502																																												

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September 24, 2010	<ol style="list-style-type: none"> 1) Added product RCHR to VISHAY TECHNO FILM RESISTORS 2) Added product CRMV to VISHAY TECHNO FILM RESISTORS 3) Added ' C = Custom' custom packaging type to product TCX (VISHAY TECHNO NETWORKS) 4) Changed package code note for E70 and E73 on the CW product. (VISHAY DALE WIREWOUND RESISTORS) E70 = Std tape/reel except 1000 pcs or 500 pcs (Smaller than CW005) E73 = Std tape/reel except 500 pcs (CW005 and larger)
December 10, 2010	<ol style="list-style-type: none"> 1) CW page - E12 pack code had comment "(standard bulk for CW1/2, CW001, CW01M)" removed. 2) CW page - E70 pack code had "or 500 pcs" removed from comment. 3) CW page - E73 pack code had comment "(CW005 and larger)" removed. 4) CW page - B12 pack code had comment "(standard bulk for CW1/2, CW001, CW01M)" removed and was moved to NON-STANDARD TIN/LEAD PACKAGING CODES. 5) CW page - S70 pack code had comment "or 500 pcs (CW005, CW007, CW010)" changed to "(smaller than CW005)" and moved to STANDARD TIN/LEAD PACKAGING CODES. 6) CW page - S73 pack code was moved to STANDARD TIN/LEAD PACKAGING CODES. 7) G/GN page - E12 pack code had comment "(standard bulk for G001, G002, G003)" removed. 8) G/GN page - E14 pack code was removed. 9) G/GN page - E70 pack code had comment "or 500 pcs (Exx2A, Exx05, Exx10)" change to "(smaller than G010)". 10) G/GN page - B12 pack code had comment "(standard bulk for G001, G002, G003)" removed. 11) G/GN page - B14 pack code had comment "(standard for G005, G05C, G010, G012, G015)" removed and moved to NON-STANDARD TIN/LEAD PACKAGING CODES. 12) G/GN page - S70 pack code had comment "(or 500 pcs (Exx2A, Exx05, Exx10)" changed to "(smaller than G010)" and moved to STANDARD TIN/LEAD PACKAGING CODES. 13) G/GN page - S73 pack code was moved to STANDARD TIN/LEAD PACKAGING CODES. 14) LVR page - Note "Lead free will not be available until 2005" was removed. 15) LVR page - S70 and S73 pack codes were moved to STANDARD TIN/LEAD PACKAGING CODES. 16) RS/NS page - E12 pack code had comment "(standard bulk on RS1/4 to RS01M)" removed. 17) RS/NS page - E14 pack code was removed. 18) RS/NS page - E70 pack code had comment "or 500 pcs (RS005, RS007, RS010)" replaced with "(smaller than RS005)". 19) RS/NS page - B12 pack code had comment "(standard bulk on RS1/4 to RS01M)" removed. 20) RS/NS page - B14 pack code had comment "(standard bulk for RS002 through RS010)" removed and moved to NON-STANDARD TIN/LEAD PACKAGING CODES. 21) RS/NS page - S70 pack code had comment "or 500 pcs (RS005, RS007, RS010)" changed to "(smaller than RS005)" and moved to STANDARD TIN/LEAD PACKAGING CODES. 22) RS/NS page - S73 pack code was move to STANDARD TIN/LEAD PACKAGING CODES. 23) RW page - B12 pack code had comment "(standard bulk for RW70, RW80, and RW81)" removed. 24) RW page - B14 pack code had comment "(standard bulk for RW67, RW68, RW69, RW74, RW78, RW79)" removed and moved to STANDARD TIN/LEAD PACKAGING CODES. 25) RW page - S70 pack code had comment "or 500 pcs (RW67, RW74, RW68, RW78)" changed to "(RW69, RW70, RW79, RW80, RW81)" and moved to STANDARD TIN/LEAD PACKAGING CODES. 26) RW page - S73 pack code was moved to STANDARD TIN/LEAD PACKAGING CODES. 27) ESS/ESW/ESN and EGS/EGW/EGN page - S70 pack code had comment "or 500 pcs (Exx2A, Exx05, Exx10)" changed to "(smaller than 5W)" and moved to STANDARD TIN/LEAD PACKAGING CODES. 28) ESS/ESW/ESN and EGS/EGW/EGN page - S73 pack code was moved to STANDARD TIN/LEAD PACKAGING CODES. 29) RWR page - S70 pack code had comment "or 500 pcs" changed to "(smaller than 5W)" and moved to STANDARD TIN/LEAD PACKAGING CODES. 30) RWR page - S73 pack code was moved to STANDARD TIN/LEAD PACKAGING CODES. 31) HLM/NHLM/HLMT page - 1% tolerance was added. 32) HLW/NHLW page - 1% tolerance was added. 33) CRHV page - F pack code was changed to Full Reel and M, 5, 1, and 2 pack codes were added.
January 21, 2011	<ol style="list-style-type: none"> 1) Added S = Special/undefined to the available TC codes
February 09, 2011	<ol style="list-style-type: none"> 1) WSL - Added packaging options EH and TH for case size 2816 only. 2) RCWE - Added packaging option EI for case size 1206 only. 3) RCWL - Added packaging option EI for case size 1206 only.

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February 24, 2011	1) Added page for WSLM 2) WSBS - added size 5216 3) WSMS - added sizes 2906, 3124, 3902, and 7807 4) WSLP - added sizes 2726, 3921, 4026, and 5931
June 06, 2011	1) Added EJ package code to WSL/WSLT/WSLP 2) Added size 1206 to WSK 3) Added RJ9 to PACKAGING CODE DEFINITIONS 4) Added 10% tolerance to FP/C6 SPEC CODES for FP01/2 SPEC 5610
July 21, 2011	VISHAY DALE NETWORKS MSM (Military M83401/24) 1) Change VISHAY DALE NETWORK/ARRAY RESISTORS MSM10A-01, -03, -05 (Military M83401/24) to VISHAY DALE NETWORKS MSM (Military M83401/24) 2) Model Column 8 digits to MILITARY STYLE 6 digits Military Style Columns 3) change M8340124 to M83401 Mil. Spec. Sheet 4) change K = 100ppm to K = $\pm 100\text{ppm}/^{\circ}\text{C}$ and M = 300ppm to M = $\pm 300\text{ppm}/^{\circ}\text{C}$ 5) added ne column „TC“ Value Column 6) change „Per std. Mil. Spec. F = $\pm 1.0\%$ C = MSM10A-01-S4 STD LEAD FREE CODES -01 and 03 schematics are three digits plus multiplier. -05 is A001 thru A020. Check datasheet for available value range“ TO „For C and G schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an “R” is used as a decimal placeholder. For H schematic: Per std MIL spec resistance designator table (All are in format “Axxx”) (NOTE: P/N FORMAT PER MIL-PRF-83401) Check data sheet for available value range“. Tolerance Column 7) Change F = $\pm 1.0\%$, G = $\pm 2.0\%$, J = $\pm 5.0\%$ TO F = $\pm 1\%$, G = $\pm 2\%$, J = $\pm 5\%$ Schematic Column 8) change C = MSM10A-01-S4, G = MSM10A-03-S2, H = MSM10A-05-S3 TO C = Bussed, pin “1” common(MSM10A01-S4), G = Isolated (MSM10A-03-S2), H = Dual Terminator (MSM10A-05-S3) Packaging Column 9) change STD LEAD FREE CODES to STANDARD TIN/LEAD CODES Standard Tin/Lead Codes Column 10) change D03 =tube TO D03 = Tube pack 11) change STD TIN/LEAD SLDC CODES TO STANDARD TIN/LEAD SLDC CODES Standard Tin/Lead SLDC Codes Column 12) change DSL = Tube TO DSL = Tube pack, SLDC 13) change NON-STD TIN/LEAD CODES TO NON-STANDARD TIN/LEAD CODES

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Non-Standard TIN/LEAS Codes Column
14) Removed –Contact Marketing - and Added D29 = Tube pack, parts packaged side-byside, S13 = Tube pack, 5 tube/bundle, with antistatic overpack, S14 = Tube pack, 1 tube/bundle, with antistatic overpack, S15 = Tube pack, individual unit packaging,antistatic, M02, M03, M04, M05, M06, M07, M10, M11,M12, M13, M14, M15 heat seal pack available S03, S30 special pack available.
Vishay Dale Networks MSP (01,03,00)
15) change VISHAY DALE NETWORK/ARRAY RESISTORS MSP (01, 03, 00) TO VISHAY DALE NETWORKS MSP (01, 03, 00)
16) change sap description MSP08A-03 10K 1% EJ e3 TO MSP08A-03 10K 1% EJ e1
Schematic Column
17) add Standard and Non-Standard
Standard
18) change 01 TO 01 = Bussed, pin “1” common AND 03 TO 03 = Isolated
Non-Standard
19) add 02 = Combined group resistors, AND 04 = Bussed, pin “1” and “n” common AND change 00 TO 00 = Custom, per TPI
Value Column
20) change R = DECIMAL TO R = ohms, K = THOUSAND TO K = kilohms, M = MILLION TO M = Megohms
21) add 0000 = 0 ohm jumper or special (value per TPI)
Tolerance Column
22) change F = ±1.0%, G = ±2.0%, J = ±5.0% TO F = ±1%, G = ±2%, J = ±5%
23) add S = Special, per TPI, Z = 0 ohm jumper
Packaging
24) change STD LEAD FREE CODES* TO STANDARD LEAD FREE CODES
25) change STD TIN/LEAD CODES TO STANDARD TIN/LEAD CODES
26) change NON-STD TIN/LEAD CODES TO NON-STANDARD TIN/LEAD CODES
Standard Lead Free Codes
27) change EJ* = Tube TO EJ = Tube pack
Standard Tin/Lead Codes
28) change DA = Tube TO DA Tube pack (D03)
Non-Standard TIN/LEAD Codes
29) remove –contact marketing- and *Leadfree version not currently released
30) add DB = Tube pack, parts packaged side-by-side (D29),
 SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13)
 S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14)
 SB = Tube pack, individual unit packaging,antistatic (S15)
 SL = Custom pack, per TPI (S51)
 M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available SD (S28), SF (S30) special pack available
Special Column
31) add Blank = Standard GENERALUSAGE DASH NUMBERS 400 = HSD
Vishay Dale Networks MSP (05)
32) change VISHAY DALE NETWORK/ARRAY RESISTORS TO VISHAY DALE NETWORKS
Height Column
33) add Standard AND Non-Standard

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Standard

34) change A and C TO A = Low profile and C = High profile

Non-Standard

35) change B TO B = Medium profile

Schematic Column

36) change 05 TO 05 = Dual Terminator

Tolerance Column

37) change F = $\pm 1.0\%$, G = $\pm 2.0\%$, J = $\pm 5.0\%$ TO F = $\pm 1\%$, G = $\pm 2\%$, J = $\pm 5\%$

38) add S = Special, per TPI

Packaging Column

39) change STD LEAD FREE CODES* TO STANDARD LEAD FREE CODES, STD TIN/LEAD CODES TO STANDARD TIN/LEAD CODES, NON-STD TIN/LEAD CODES TO NON-STANDARD TIN/LEAD CODES

Standard Lead Free Codes

40) change EJ* = Tube TO EJ = Tube pack

Standard TIN/LEAD Codes

41) change DA = Tube TO DA = Tube pack (DO3)

Non-Standard TIN/LEAD Codes

42) remove –contact marketing- and *Leadfree version not currently released

43) add DB = Tube pack, parts packaged side-by-side (D29)

SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13)

S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14)

SB = Tube pack, individual unit packaging, antistatic (S15)

SL = Custom pack, per TPI (S51)

M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available SD (S28), SF (S30) special pack available

Special Column

44) add Blank = Standard, GENERAL USAGE DASH NUMBERS 400 = HSD

Vishay Dale Networks R1C / R4C / R5C

45) change VISHAY DALE NETWORK/ARRAY RESISTORS TO VISHAY DALE NETWORKS

Pin Count Column

46) Removed 06, 08, and 16.

47) change 06 - R4C, R5C, 08 - R4C, R5C, 16 - R1C only TO 06 (R4C & R5C), 08 (R4C & R5C), 16 (R1C only).

Schematic Column

48) removed A and B

49) change A – R1c only TO A(R1c only) AND B – R4C, R5C TO B (R4C & R5C)

Value Column

50) change R = decimal, K = thousand, M = million TO R = ohms K = kilohms, M = Megohms

51) removed „Check datasheet for available range“.

Tolerance Column

52) change F = $\pm 1.0\%$, G = $\pm 2.0\%$ TO F = $\pm 1\%$, G = $\pm 2\%$

TC Column

53) change Y = T-13 = 10PPM TO Y = $\pm 10\text{ppm}/^\circ\text{C}$ (T-13)

54) change X = T-10 = 15PPM TO X = $\pm 15\text{ppm}/^\circ\text{C}$ (T-10)

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	<p>55) change E = T-9 = 25PPM TO E = $\pm 25\text{ppm}/^{\circ}\text{C}$ (T-9) 56) change H = T-2 = 50PPM TO H = $\pm 50\text{ppm}/^{\circ}\text{C}$ (T-2) 57) change K = T-1 = 100PPM TO K = $\pm 100\text{ppm}/^{\circ}\text{C}$ (T-1) Packaging Column 58) change STD LEAD FREE CODES TO STANDARD LEAD FREE CODES. 59) change STD TIN/LEAD CODES TO STANDARD TIN/LEAD CODES 60) change NON-STD TIN/LEAD CODES TO NON-STANDARD TIN/LEAD CODES Standard Lead Free Codes 61) change E14* = Bulk TO E14* Bulk pack 62) removed E12* = Bulk Standard TIN/LEAD Codes 62) change B14 = Bulk TO B14 = Bulk pack 63) removed B12 = Bulk S51 = see TPI Non-Standard TIN/LEAD Codes 64) removed „Contact Marketing =“ 65) add P13 = Tube pack, antistatic and S51 = Custom pack, per TPI Special Column 66) add Blank = Standard Vishay Dale Networks SOGC (01, 03, 00) 67) change VISHAY DALE NETWORK/ARRAY RESISTORS TO VISHAY DALE NETWORKS Schematic Column 68) add Standard AND Non-Standard Standard 69) change 01 TO 01 = Bussed, pin “n” common 70) change 03 TO 03 = Isolated Non-Standard 71) change 00 TO 00 = Custom, per TPI Value Column 72) change R = decimal TO R = ohms 73) change K = thousand TO K = kilohms 74) remove 1R00 = .1 ohm 2K75 = 2,750 ohm 75) add M = Megohms 76) change „0000 = 0 ohm jumper or special not defined” TO „0000 = 0 ohm jumper or special (value per TPI)” Packaging Column 77) change STD LEAD FREE CODES* TO STANDARD LEAD FREE CODES 78) change STD TIN/LEAD CODES TO STANDARD TIN/LEAD CODES 79) change NON-STD TIN/LEAD CODES TO NON-STANDARD TIN/LEAD CODES Standard Lead Free Codes 80) change EA* = Reel TO EA = Reel pack 81) change EJ* = Tube TO EJ = Tube pack Standard TIN/LEAD Codes 82) change RZ = Reel TO RZ = Reel pack (R61) 83) change DC = Tube TO DC = Tube pack (D02)</p>

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	<p>Non-Standard TIN/LEAD Codes</p> <p>84) Remove „-Contact Marketing“ and „*Leadfree version not currently released“</p> <p>85) add SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SB = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SF (S30) special pack available Special Column</p> <p>86) add „Blank = Standard“</p> <p>87) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering“</p> <p>Vishay Dale Networks SOGC (05)</p> <p>88) change „Vishay Dale Network/Array Resistors“ TO „Vishay Dale Networks“ Schematic Column</p> <p>89) change 05 TO 05 = Dual Terminator Tolerance Column</p> <p>90) change F = $\pm 1.0\%$ TO F = $\pm 1\%$</p> <p>91) change G = $\pm 2.0\%$ TO G = $\pm 2\%$</p> <p>92) change J = $\pm 5.0\%$ TO J = $\pm 5\%$</p> <p>93) add S = Special, per TPI Packaging Column</p> <p>94) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“</p> <p>95) change „STD TIN/LEAD FREE CODES“ TO „STANDARD TIN/LEAD CODES“</p> <p>96) change „NON-STD TIN/LEAD FREE CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>97) add „Click to go to Packaging Code Definition page“ STANDARD LEAD FREE CODES“</p> <p>98) change EA* = Reel TO EA = Reel pack</p> <p>99) change EJ = Tube TO EJ = Tube pack STANDARD TIN/LEAD CODES“</p> <p>100) change RZ = Reel TO RZ = Reel pack (R61)</p> <p>101) change DC = Tube TO DC = Tube pack (D02) NON-STANDARD TIN/LEAD CODES“</p> <p>102) add SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SB = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SF (S30) special pack available</p> <p>103) Remove „-Contact Marketing“ and „*Leadfree version not currently released“ Special Column</p> <p>104) add „Blank = Standard“</p> <p>105) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering“</p>

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	<p>Vishay Dale Networks (SOGC 45, 46)</p> <p>106) change „VISHAY DALE NETWORK/ARRAY RESISTORS SOGC (45, 46)“ TO „VISHAY DALE NETWORKS SOGC (45, 46)“ Schematic Column</p> <p>107) remove 16 and 20</p> <p>108) add 45 = TTL/ECL Translator, 46 = Signal Terminator Packaging Column</p> <p>109) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“</p> <p>110) change „STD TIN/LEAD FREE CODES“ TO „STANDARD TIN/LEAD CODES“</p> <p>111) change „NON-STD TIN/LEAD FREE CODES“ TO „NON-STANDARD TIN/LEAD CODES“ STANDARD LEAD FREE CODES“</p> <p>112) change EA* = Reel TO EA = Reel pack</p> <p>113) change EJ* = Tube TO EJ = Tube pack STANDARD TIN/LEAD CODES“</p> <p>114) change RZ = Reel TO RZ = Reel pack (R61)</p> <p>115) change DC = Tube TO DC = Tube pack (D02) NON-STANDARD TIN/LEAD CODES“</p> <p>116) add SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13) S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14) SB = Tube pack, individual unit packaging, antistatic (S15) SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SF (S30) special pack available</p> <p>117) Remove „-Contact Marketing“ and „*Leadfree version not currently released“ Special Column</p> <p>118) add „Blank = Standard“</p> <p>119) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering“</p> <p>Vishay Dale Networks SOMC (01, 03, 00)</p> <p>120) change „VISHAY DALE NETWORK/ARRAY RESISTORS SOMC (01, 03, 00)“ TO „VISHAY DALE NETWORKS SOMC (01, 03, 00)“ Schematic Column</p> <p>121) add Standard and Non-Standard Standard</p> <p>123) change 01 TO 01 = Bussed, pin “n” common</p> <p>124) change 03 TO 03 = Isolated Non-Standard</p> <p>125) change 00 TO 00 = Custom, per TPI Tolerance Column</p> <p>126) change F = ±1.0% TO F = ±1%</p> <p>127) change G = ±2.0% TO G = ±2%</p> <p>128) change J = ±5.0% TO J = ±5%</p> <p>129) change Z = 0 ohm jumper TO Z = 0 ohm jumper</p> <p>130) change S = Special To S = Special, per TPI</p> <p>131) arrange order as (F, G, J, S, Z)</p>

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Packaging Column
132) change „STD LEAD FREE CODES**“ TO „STANDARD LEAD FREE CODES“
133) change „STD TIN/LEAD FREE CODES“ TO „STANDARD TIN/LEAD CODES“
134) change „NON-STD TIN/LEAD FREE CODES“ TO „NON-STANDARD TIN/LEAD CODES“
STANDARD LEAD FREE CODES“
135) change EA* = Reel TO EA = Reel pack
136) change EJ* = Tube TO EJ = Tube pack
STANDARD TIN/LEAD CODES“
137) change RZ = Reel TO RZ = Reel pack (R61)
138) change DC = Tube TO DC = Tube pack (D02)
NON-STANDARD TIN/LEAD CODES“
139) add SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13)
 S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14)
 SB = Tube pack, individual unit packaging, antistatic (S15)
 SL = Custom pack, per TPI (S51)
 M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack
available SF (S30) special pack available
140) add „Click to go to Packaging Code Definition page“
Special Column
141) add „Blank = Standard“
142) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering“
Vishay Dale Network/Array Resistors SOMC (05)
Schematic Column
143) change 05 TO 05 = Dual Terminator
Tolerance Column
144) change F = ±1.0% TO F = ±1%
145) change G = ±2.0% TO G = ±2%
146) change J = ±5.0% TO J = ±5%
147) add S = Special, per TPI
Packaging Column
148) change „STD LEAD FREE CODES**“ TO „STANDARD LEAD FREE CODES“
149) change „STD TIN/LEAD FREE CODES“ TO „STANDARD TIN/LEAD CODES“
150) change „NON-STD TIN/LEAD FREE CODES“ TO „NON-STANDARD TIN/LEAD CODES“
STANDARD LEAD FREE CODES“
151) change EA* = Reel TO EA = Reel pack
152) change EJ* = Tube TO EJ = Tube pack
STANDARD TIN/LEAD CODES“
153) change RZ = Reel TO RZ = Reel pack (R61)
154) change DC = Tube TO DC = Tube pack (D02)
NON-STANDARD TIN/LEAD CODES“
155) add SA = Tube pack, 5 tube/bundle, with antistatic overpack (S13)
 S7 = Tube pack, 1 tube/bundle, with antistatic overpack (S14)
 SB = Tube pack, individual unit packaging, antistatic (S15)

Special Column

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	<p>SL = Custom pack, per TPI (S51) M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available RY (R60), R1 (R97), S9 (S90) reel pack available SF (S30) special pack available</p> <p>Value Column 156) change „Impedance code, (2 significant digits and a multiplier followed by an alpha modifier)" TO „Impedance code, 3 digits followed by alpha modifier" Special Column 157) add „Blank = Standard" 158) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering"</p> <p>Vishay Dale Networks SPM 159) change „VISHAY DALE NETWORK/ARRAY RESISTORS SPM" TO „VISHAY DALE NETWORKS SPM" Type Column 160) change „00 to 999 as required" TO „01 thru 99 or 100 thru 999 as required" 161) removed „Use 2 digits for types below 100" 162) removed „Use 3 digits for types 100 and above"</p> <p>Value Column 163) change „First 3 significant digits. Last digit specifies # of 0's. Use "R" for the decimal place in values below 100 ohms." TO „4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder." Tolerance Column 164) change F = $\pm 1.0\%$ TO F = $\pm 1\%$ 165) change G = $\pm 2.0\%$ TO G = $\pm 2\%$ 166) change J = $\pm 5.0\%$ TO J = $\pm 5\%$</p> <p>Packaging Column 167) change „STD CODES" TO „STANDARD CODES" 168) change „NON-STD CODES" TO „NON-STANDARD CODES" STANDARD CODES" 169) change „S51 = per TPI" TO „S51 = Custom pack, per TPI" NON-STD CODES 170) remove „-Contact Marketing-" 171) add M18 = Tray pack, w/ESD 172) add R78 = Reel pack, Embossed carrier tape, 7" reel, w/ESD</p> <p>Vishay Dale Networks SPMX 173) change „VISHAY DALE NETWORK/ARRAY RESISTORS SPMX" TO „VISHAY DALE NETWORKS SPMX" Type Column 174) add „001 thru 999 as required" Packaging Column 175) change „STD CODES" TO „STANDARD CODES" STANDARD CODES" 176) change „S51 = per TPI" TO „51 = Custom pack, per TPI" 177) add „Click to go to Packaging Code Definition page"</p>

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	<p>Vishay Techo Film Resistors CDHV</p> <p>178) change „Resistance Value of R1 4 Digits“ TO „Resistance Value (R1) 4 Digits“ Model Column</p> <p>179) change „CDHV 2512 Size Only“ TO „CDHV (2512-size only)“ Termination Style Column</p> <p>180) change „A = Wrap Around“ TO „A = 3-sided, wraparound“</p> <p>181) change „B = Top Only“ TO „B = Flip chip (top side only)“ Resistance Value (R1) columns</p> <p>182) removed Examples removed 20M0 = 20M removed 80M0 = 800M removed 20G0 = 20G</p> <p>183) change „M = Million“ TO „M = Megohms“</p> <p>184) change „G = Billion“ TO „G = Gigohms“</p> <p>Abs. Tol. Column</p> <p>185) change „F = 1%“ TO „F = ±1%“</p> <p>186) change „G = 2%“ TO „G = ±2%“</p> <p>187) change „H = 3%“ TO „H = ±3%“</p> <p>188) change „J = 5%“ TO „J = ±5%“</p> <p>189) change „K = 10%“ TO „K = ±10%“</p> <p>190) change „M = 20%“ TO „M = ±20%“</p> <p>Ratio Tol. Column</p> <p>191) removed „F = 1%“</p> <p>192) change „G = 2%“ TO „G = ±2%“</p> <p>193) change „H = 3%“ TO „H = ±3%“</p> <p>194) change „J = 5%“ TO „J = ±5%“</p> <p>Packaging Column</p> <p>195) change „Pkg Type“ TO „PACKAGING“</p> <p>196) add „SOLDER TERMINATION“ column and „PACKAGING TYPE“ column inside PACKAGING Column</p> <p>SOLDER TERMINATION Column</p> <p>197) add STANDARD LEADFREE CODES</p> <p>198) add STANDARD TIN/LEAD CODES</p> <p>199) add NON-STANDARD TIN/LEAD CODES</p> <p>200) add „*NOTE – Package code includes both Solder Termination and Packaging Type“</p> <p>Standard Leadfree Codes</p> <p>201) add E = Sn100 (e3)</p> <p>202) add F = Sn95/Ag5, HSD (e2)</p> <p>203) add N = No Solder (all Termination Materials except Nickel barrier)</p> <p>Standard TIN/LEAD Codes</p> <p>204) add T = Sn90/Pb10</p> <p>205) add S = Sn62/Pb36/Ag2, HSD</p> <p>Non-Standard TIN/LEAD Codes</p> <p>206) add R = Sn60/Pb40</p>

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	<p>207) add „P = Sn63/Pb37, HSD“ Packaging Type</p> <p>208) add Standard Codes</p> <p>209) add Non-Standard Codes Standard Codes</p> <p>210) change „B = Bulk“ TO „B = Bulk pack“</p> <p>211) change „F = ESD Waffle“ TO „F = Reel pack, Embossed carrier tape, 7" reel, full reel quantity“</p> <p>212) add 1 = Reel pack (std taping except 1,000pcs/reel) 5 = Reel pack (std taping except 500pcs/reel)</p> <p>213) change „T = Tape“ TO „T = Reel pack (std taping except 250pc min/reel)“</p> <p>214) change „W = Waffle“ TO „W= Tray pack“</p> <p>Non-Standard Codes</p> <p>215) change „R = ESD Tape“ TO „R = Reel pack, ESD (std taping except 250pc min/reel)“</p> <p>216) add M = Reel pack (std taping except 250pcs/reel) 2 = Reel pack (std taping except 2,000pc/reel)</p> <p>Vishay Techno Film Resistors CDHV (Custom)</p> <p>217) change „VISHAY TECHNO FILM RESISTORS CDHV (CUSTOM)“ TO „VISHAY TECHNO FILM RESISTORS CDHV (CUSTOM)“</p> <p>218) combine Solder Termination Column and Packaging Column under 1 column (PACKAGING COLUMN) Custom Part Number Column</p> <p>219) change „TCX0917-0000“ TO „TCX2017-0000 = TCX2017“. Packaging Column (Solder Termination)</p> <p>220) add Standard Leadfree Codes</p> <p>221) add Standard TIN/LEAD Codes</p> <p>222) add Non-Standard TIN/LEAD Codes</p> <p>223) change „*NOTE – Package code includes this column and the next“ TO „*NOTE – Package code includes both Solder Termination and Packaging Type“ Standard Leadfree Codes</p> <p>224) change „E = Sn100 =e3“ TO „E = Sn100 (e3)“</p> <p>225) change „F = Sn95/Ag5 =e2“ TO „F = Sn95/Ag5, HSD (e2)“</p> <p>226) change „N = No Solder“ TO „N = No Solder (all Termination Materials except Nickel barrier)“ Standard TIN/LEAD Codes</p> <p>227) placed T = Sn90/Pb10 under this category</p> <p>228) change „S = Sn62/Pb36/Ag2“ TO „S = Sn62/Pb36/Ag2, HSD“ Non-Standard TIN/LEAD Codes</p> <p>229) placed R = Sn60/Pb40 under this category</p> <p>230) change „P = Sn63/Pb37“ TO „P = Sn63/Pb37, HSD“ Packaging Column under (Packaging Type)</p> <p>231) add Standard Codes</p> <p>232) add Non-Standard Codes Standard Codes</p> <p>233) change „B = Bulk“ TO „B = Bulk pack“</p> <p>234) change „F = ESD Waffle“ TO „F = Reel pack, Embossed carrier tape, 7" reel, full reel“</p> <p>235) add 1 = Reel pack (std taping except 1,000pcs/reel)</p>

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236) add 5 = Reel pack (std taping except 500pcs/reel)
237) change „T = Tape“ TO „T = Reel pack (std taping except 250pc min/reel)“
238) change „W = Waffle“ TO „W = Tray pack“
Non-Standard Codes
239) change „R = ESD Tape“ TO „R = Reel pack, ESD (std taping except 250pc min/reel)“
240) add M = Reel pack (std taping except 250pcs/reel)
2 = Reel pack (std taping except 2,000pc/reel)
Vishay Techno Film Resistors CRHV
241) change „Tol“ column TO „TOLERANCE“ column
242) change „TCR“ column TO „TC“ column
243) combine Solder Termination Column and Pkg Type under 1 column (PACKAGING COLUMN)
244) change „Pkg Type“ TO „PACKAGING TYPE“
Termination Column
245) change „A = 3-Sided“ TO „A = 3-sided, Wraparound“
change „B = Top Only“ TO „B = Flip chip (top side only)“
change „C = 5-Sided“ TO „C = 5-sided, Wraparound“
Resistance Column
246) removed Examples
4M70 = 4.7M
10M0 = 10M
10G0 = 10G
247) change „M = Million“ TO „M = Megohms“
change „G = Billion“ TO „G = Gigohms“
TC Column
248) change „K = 100ppm“ TO „K = ±100ppm/°C“
change „L = 150ppm“ TO „L = ±150ppm/°C“
change „N = 200ppm“ TO „N = ±200ppm/°C“
change „R = 250ppm“ TO „R = ±250ppm/°C“
change „M = 300ppm“ TO „M = ±300ppm/°C“
change „W = 350ppm“ TO „W = ±350ppm/°C“
change „P = 500ppm“ TO „P = ±500ppm/°C“
Packaging Column under (Solder Termination)
249) add Standard Leadfree Codes
250) add Standard TIN/LEAD Codes
251) add Non-Standard Codes
Standard Leadfree Codes
252) change „E = Sn100 =e3“ TO „E = Sn100 (e3)“
change „F = Sn95/Ag5=e2“ TO „F = Sn95/Ag5, HSD (e2)“
change „N = No Solder“ TO „N = No Solder (for all Termination Materials except Nickel barrier)“
Standard TIN/LEAD Codes
253) placed T = Sn90/Pb10 under this category
254) change „S = Sn62/Pb36/Ag2“ TO „S = Sn62/Pb36/Ag2, HSD“

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	<p>Non-Standard TIN/LEAD Codes 256) placed R = Sn60/Pb40 under this category 257) change „P = Sn63/Pb37“ TO „P = Sn63/Pb37, HSD“ 258) change „*NOTE – Package code includes this column and the next“ TO „*NOTE – Package code includes both Solder Termination and Packaging Type“ Packaging Column under (Packaging Type) 259) add Standard Codes 260) add Non-Standard Codes Standard Codes 261) change „B = Bulk“ TO „B = Bulk pack“ 262) change „F = Full Reel“ TO „F = Reel pack, Embossed carrier tape, 7" reel, full reel“ 263) change „1 = Tape (1K/1K)“ TO „1 = Reel pack (std taping except 1,000pcs/reel)“ change „5 = Tape (500/500)“ TO „5 = Reel pack (std taping except 500pcs/reel)“ 264) change „T = Tape“ TO „T = Reel pack (std taping except 250pc min/reel)“ change „W = Waffle“ TO „W = Tray pack“ Non-Standard Codes 265) change „R = ESD Tape“ TO „R = Reel pack, ESD (std taping except 250pc min/reel)“ 266) change „M = Tape (250/250)“ TO „M = Reel pack (std taping except 250pcs/reel)“ change „2 = Tape (2K/2K)“ TO „2 = Reel pack (std taping except 2,000pc/reel)“ Vishay Techno Film Resistors CRHV (custom) 267) change „Packaging“ TO „Pack Type“ 268) combine Solder Termination Column and Pack Type under 1 column (PACKAGING COLUMN) Packaging Column under (Solder Termination) 269) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Non-Standard TIN/LEAD Codes 270) change „*NOTE – Package code includes this column and the next“ TO „*NOTE – Package code includes both Solder Termination and Packaging Type“ Standard Leadfree Codes 271) change „E = Sn100 =e3“ TO „E = Sn100 (e3)“ change „F = Sn95/Ag5 =e2“ TO „F = HSD, Sn95/Ag5 (e2)“ 272) place N = No Solder under this category Standard TIN/LEAD Codes 273) change „S = Sn62/Pb36/Ag2“ TO „S = HSD, Sn62/Pb36/Ag2“ 274) place T = Sn90/Pb10 under this category Non-Standard TIN/LEAD Codes 275) place R = Sn60/Pb40 under this category 276) change „P = Sn63/Pb37“ TO „P = HSD, Sn63/Pb37“ Packaging Column under (Pack Type) 277) add Standard Codes add Non-Standard Codes Standard Codes 278) change „B = Bulk“ TO „B = Bulk pack“</p>

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	<p>279) change „F = ESD Waffle“ TO „F = Reel pack, full reel quantity“ change „T = Tape“ TO „T = Reel pack, 250pc min/reel“ change „W = Waffle“ TO „W = Tray pack“</p> <p>280) add 1 = Reel pack, 1000pcs/reel add 5 = Reel pack, 500pcs/reel</p> <p>Non-Standard Codes</p> <p>281) change „R = ESD Tape“ TO „R = Reel pack, ESD, 250pc min/reel“</p> <p>282) add 2 = Reel pack, 2000pc/reel</p> <p>Vishay Techno Film Resistors CRMV</p> <p>283) change „Pkg Type“ TO „Pack Type“</p> <p>284) combine Solder Termination Column and Pack Type under 1 column (PACKAGING COLUMN) Termination Style Column</p> <p>285) change „A = 3-Sided“ TO „A = 3-sided, Wraparound“ change „B = Top Only“ TO „B = Flip chip (top side only)“</p> <p>Resistance Column</p> <p>286) change „R = Decimal“ TO „R = ohms“ change „K = Thousand“ TO „K = kilohms“ change „M = Million“ TO „M = Megohms“</p> <p>287) remove 100R = 110, 49K9 = 49.9K, 10M0 = 10M</p> <p>288) add Examples 4M70 = 4.7M 10M0 = 10M 10G0 = 10G</p> <p>Tol Column</p> <p>289) add „±“ symbol to all the values</p> <p>TCR Column</p> <p>290) change „L = 150ppm“ TO „L = ±150ppm“</p> <p>291) add K = ±100ppm add N = ±200ppm add R = ±250ppm add M = ±300ppm add W = ±350ppm add P = ±500ppm</p> <p>Packaging Column under (Solder Termination)</p> <p>292) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Non-Standard Codes</p> <p>293) add *NOTE – Package code includes both Solder Termination and Packaging Type Standard Leadfree Codes</p> <p>294) placed E = Sn100 (e3) under this category</p> <p>295) change „F = Sn95/Ag5 (e2)“ TO „F = HSD, Sn95/Ag5 (e2)“ change „N = No Solder“ TO „N = No Solder (for all Termination Materials except Nickel barrier)“</p>

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	<p>Standard TIN/LEAD Codes 296) placed T = Sn90/Pb10 under this category 297) change „S = Sn62/Pb36/Ag2" TO „S = HSD, Sn62/Pb36/Ag2" Non-Standard TIN/LEAD Codes 298) add R = Sn60/Pb40 add P = HSD, Sn63/Pb37 Packaging Column under (Pack Type) 299) add Standard Codes add Non-Standard Codes Standard Codes 300) change „B = Bulk" TO „B = Bulk pack" change „T = Tape" TO „T = Reel pack, 250pc min/reel" change „W = Waffle" TO „W= Tray pack" 301) add F = Reel pack, full reel quantity 1 = Reel pack, 1000pcs/reel 5 = Reel pack, 500pcs/reel Non-Standard Codes 302) add R = Reel pack, ESD, 250pc min/reel add M = Reel pack, 250pcs/reel add 2 = Reel pack, 2000pc/reel Vishay Techno Film Resistors FHV Resistance Column 303) change „R = Decimal" TO „R = ohms" change „K = Thousand" TO „K = kilohms" change „M = Million" TO „M = Megohms" change „G = Billion" TO „G = Gigohms" Tol Column 304) add „±" to all the values under this column Temperature Coefficient 305) add „±" to all the values under this column Terminal Finish/Packaging Column 306) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Non-Standard Leadfree Codes Standard Leadfree Codes 307) change „EB = Sn100 = e3, Bulk" TO „EB = Bulk pack, Sn100 terminal finish (e3)" change „ES = Sn100 = e3, Strip" TO „ES = Strip pack, Sn100 terminal finish (e3)" Standard TIN/LEAD Codes 308) change „RB = Sn60/Pb40, Bulk" TO „RB = Bulk pack, Sn60/Pb40 terminal finish" change „RS = Sn60/Pb40, Strip" TO „RS = Strip pack, Sn60/Pb40 terminal finish"</p>

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	<p>Non-Standard Leadfree Codes 309) add FB = Bulk pack, Sn95/Ag5 terminal finish (e2) FS = Strip pack, Sn95/Ag5 terminal finish (e2) Vishay Techno Film Resistors FHV (CUSTOM) Terminal Finish/Packaging 310) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Non-Standard Leadfree Codes Standard Leadfree Codes 311) change „EB = Sn100 = e3, Bulk“ TO „EB = Bulk pack, Sn100 terminal finish (e3)“ change „ES = Sn100 = e3, Strip“ TO „ES = Strip pack, Sn100 terminal finish (e3)“ Standard TIN/LEAD Codes 312) change „RB = Sn60/Pb40, Bulk“ TO „RB = Bulk pack, Sn60/Pb40 terminal finish“ change „RS = Sn60/Pb40, Strip“ TO „RS = Strip pack, Sn60/Pb40 terminal finish“ Non-Standard Leadfree Codes 313) change „FB = Sn95/Ag5 =e2, Bulk“ TO „FB = Bulk pack, Sn95/Ag5 terminal finish (e2)“ change „FS = Sn95/Ag5 =e2, Strip“ TO „FS = Strip pack, Sn95/Ag5 terminal finish (e2)“ change „NB = No solder, Bulk“ TO „NB = Bulk pack, No solder“ change „NS = No solder, Strip“ TO „NS = Strip pack, No solder“ Vishay Techno Film Resistors RC (former CR) 314) change „Pkg Type“ TO „Pack Type“ 315) combine „Soldering Termination“ and „Pack Type“ under one column (PACKAGING) Termination Style Column 316) change „A = 3 Sided“ TO „A = 3-sided, Wraparound“ change „B = Top Only“ TO „B = Flip chip (top side only)“ change „C = 5 Sided“ TO „C = 5-sided, Wraparound“ Termination Material Column 317) change „B = Platinum Palladium Gold“ TO „B = Platinum Gold“ change „E = Palladium Gold“ TO „E = Platinum Palladium Gold“ Tolerance Column 318) add „±“ to all values under this column TCR Column 319) add „±“ to all values under this column Packaging Column under (Solder Termination) 320) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Non-Standard Leadfree Codes 321) change „*NOTE – Package Code includes this column and the next“ TO „*NOTE – Package code includes both Solder Termination and Packaging Type“ Standard Leadfree Codes 322) placed E = Sn100 =e3 under this category placed N = No Solder 323) change „F = Sn95/Ag5=e2“ TO „F = HSD, Sn95/Ag5 1(e2)“</p>

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	<p>Standard TIN/LEAD Codes 324) place T = Sn90/Pb10 under this category 325) change „S = Sn63/Pb36/Ag2“ TO „S = HSD, Sn62/Pb36/Ag2“</p> <p>Non-Standard Leadfree Codes 326) placed „R = Sn60/Pb40“ into this category 327) change „P = Sn63/Pb37“ TO „P = HSD, Sn63/Pb37“</p> <p>Packaging Column under (Pack Type) 328) add Standard Leadfree Codes add Non-Standard Codes</p> <p>Standard Leadfree Codes 329) change „B = Bulk“ TO „B = Bulk pack“ change „F = ESD Waffle“ TO „F = Reel pack, full reel quantity“ change „T = Tape“ TO „T = Reel pack, 250pc min/reel“ change „W = Waffle“ TO „W = Tray pack“</p> <p>330) add 1 = Reel pack, 1000pcs/reel add 5 = Reel pack, 500pcs/ree</p> <p>Non-Standard Codes 331) change „R = ESD“ TO „R = Reel pack, ESD, 250pc min/reel“ 332) add M = Reel pack, 250pcs/reel add 2 = Reel pack, 2000pc/reel</p> <p>Vishay Techno Film Resistors RCHR 333) change „Pkg Type“ TO „Pack Type“ 334) combine „Soldering Termination“ and „Pack Type“ under one column (PACKAGING)</p> <p>Termination Style Column 335) change „A = 3-Sided“ TO „A = 3-sided, Wraparound“ change „B = Top Only“ TO „B = Flip chip (top side only)“</p> <p>Resistance Columns 336) change „K = Thousand“ TO „K = kilohm“ change „M = Million“ TO „M = Megohms“ change „G = Billion“ TO „G = Gigohms“</p> <p>Tol Column 337) add „±“ to all values under this column</p> <p>TCR 338) change „P = 500ppm“ TO „P = ±500ppm“</p> <p>Packaging Column under (Solder Termination) 339) add Standard Leadfree Codes add Standard TIN/LEAD Codes add „*NOTE – Package code includes this column and the next“</p> <p>Standard Leadfree Codes 340) place E = Sn100 (e3) under this category 341) change „F = Sn95/Ag5 (e2)“ TO „F = HSD, Sn95/Ag5(e2)“ change „N = No Solder“ TO „N = No Solder (for Gold terminations)“</p>

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Standard TIN/Lead Codes
342) place T = Sn90/Pb10 under this category
343) change „S = Sn62/Pb36/Ag2" TO „S = HSD, Sn62/Pb36/Ag2"
Packaging Column under (Pack Type)
345) add Standard Codes
 add Non-Standard Codes
Standard Codes
346) change „B = Bulk" TO „B = Bulk pack"
 change „W = Waffle" TO „W = Tray pack"
 change „T = Tape" TO „T = Reel pack, 250pc min/reel"
347) add F = Reel pack, full reel quantity
 add 1 = Reel pack, 1000pcs/reel
 add 5 = Reel pack, 500pcs/reel
Non-Standard Codes
348) add R = Reel pack, ESD, 250pc min/reel
 add M = Reel pack, 250pcs/reel
 add 2 = Reel pack, 2000pc/reel
Vishay Techno Film Resistors TD (CUSTOM)
Terminal Finish/Packaging
349) add Standard Leadfree Codes
 add Standard TIN/LEAD Codes
 add Non-Standard Leadfree Codes
 add Non-Standard TIN/LEAD Codes
Standard Leadfree Codes
350) change „EB = Sn100 =e3, Bulk" TO „EB = Bulk pack, Sn100 terminal finish (e3)"
 change „ES = Sn100 =e3, Strip" TO „ES = Strip pack, Sn100 terminal finish (e3)"
Standard TIN/LEAD Codes
351) change „RB = Sn60/Pb40, Bulk" TO „RB = Bulk pack, Sn60/Pb40 terminal finish"
 change „RS = Sn60/Pb40, Strip" TO „RS = Strip pack, Sn60/Pb40 terminal finish"
Non-Standard Leadfree Codes
352) change „EW = Sn100 =e3, Tray" TO „EW = Tray pack, Sn100 terminal finish (e3)"
 change „FB = Sn95/Ag5 =e2, Bulk" TO „FB = Bulk pack, Sn95/Ag5 terminal finish (e2)"
 change „FS = Sn95/Ag5 =e2, Strip" TO „FS = Strip pack, Sn95/Ag5 terminal finish (e2)"
 change „FW = Sn95/Ag5 =e2, " TO „FW = Tray pack, Sn95/Ag5 terminal finish (e2)"
Non-Standard TIN/LEAD Codes
353) change „RW = Sn60/Pb40, Tray" TO „RW = Tray pack, Sn60/Pb40 terminal finish"
354) remove NB = No solder, Bulk, NS = No solder, Strip, NW = No solder, Tray
355) add PB = Bulk pack, Sn63/Pb37 terminal finish
 add PS = Strip pack, Sn63/Pb37 terminal finish
 add PW = Tray pack, Sn63/Pb37 terminal finish
Vishay Techno Film Resistors TR
Resistance Column
356) change „R = Decimal" TO „R = ohms"

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357) change „K = Thousand“ TO „K = kilohms“
change „M = Million“ TO „M = Megohms“
change „G = Billion“ TO „G = Gigohms“
change „T = Trillion“ TO „T = Teraohms“
Tol. Column
358) add „±“ to all the values under this column
TCR Column
369) add „±“ to all the values under this column
370) add S = Special (TC undefined)
Terminal Finish/Packaging Column
371) add Standard Leadfree Codes
add Standard TIN/LEAD Codes
Standard Leadfree Codes
372) change „EB = Sn100 =e3, Bulk“ TO „EB = Bulk pack, Sn100 terminal finish (e3)“
change „ES = Sn100 =e3, Strip“ TO „ES = Strip pack, Sn100 terminal finish (e3)“
Standard TIN/LEAD Codes
373) change „RB = Sn60/Pb40, Bulk“ TO „RB = Bulk pack, Sn60/Pb40 terminal finish“
change „RS = Sn60/Pb40, Strip“ TO „RS = Strip pack, Sn60/Pb40 terminal finish“
Vishay Techno Film Resistors TR (CUSTOM)
374) add Standard Leadfree Codes
add Standard TIN/LEAD Codes
add Non-Standard Leadfree Codes
add Non-Standard TIN/LEAD Codes
Standard Leadfree Codes
375) change „EB = Sn100 =e3, Bulk“ TO „EB = Bulk pack, Sn100 terminal finish (e3)“
change „ES = Sn100 =e3, Strip“ TO „ES = Strip pack, Sn100 terminal finish (e3)“
Standard TIN/LEAD Codes
376) change „RB = Sn60/Pb40, Bulk“ TO „RB = Bulk pack, Sn60/Pb40 terminal finish“
change „RS = Sn60/Pb40, Strip“ TO „RS = Strip pack, Sn60/Pb40 terminal finish“
Non-Standard Leadfree Codes
377) change „EW = Sn100 = e3, Tray“ TO „EW = Tray pack, Sn100 terminal finish (e3)“
change „NB = No solder, Bulk“ TO „NB = Bulk pack, No Solder“
change „NS = No solder, Strip“ TO „NS = Strip pack, No Solder“
change „NW = No solder, Tray“ TO „NW = Tray pack, No Solder“
378) add EC = Custom pack, per TPI, Sn100 terminal finish (e3)
add NC = Custom pack, per TPI, No Solder
Non-Standard TIN/LEAD Codes
379) change „RW = Sn60/Pb40, Tray“ TO „RW = Tray pack, Sn60/Pb40 terminal finish“
380) add RC = Custom pack, per TPI, Sn60/Pb40 terminal finish
Vishay Techno Networks MCN
381) SAP Part Number change „MCN1009X103MTB“ TO „MCN1009X103MCB“
382) SAP Description change „MCN10-09X-103M TB“ TO „MCN10-09X-103M CB e1“
383) change column header „Number of Pins 2 Digits“ TO „PIN COUNT 2 digits“

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384) change column header „Capacitor Type“ TO „Capacitor Dielectric“
change column header „Capacitance Value (pF)“ TO „CAPACITANCE VALUE“
change column header „Terminal Finish/Packaging“ TO „Packaging“
Capacitance Value
385) remove Examples
101 = 100pF
103 = 10000pF
386) change „First 2 Digits are significant figures and the last Digit specifies the number of zeros to follow“ TO „3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.“
Capacitance Tolerance Column
387) add „±“ to all values under this column
Packaging Column
388) add Standard Leadfree Codes
add Standard TIN/LEAD Codes
Standard Leadfree Codes
389) change „CB = Sn95.5/Ag3.9/Cu0.6, Bulk“ TO „CB = Bulk pack“
Standard TIN/LEAD Codes
390) change „TB = Sn90/Pb10, Bulk“ TO „TB = Bulk pack“
Vishay Techno Networks MRCN
391) SAP Part Number change „MRCN103X102J470MTB“ TO „MRCN103X102J470MCB“
392) SAP Description change „MRCN10-30X-102J/470M TB“ TO „MRCN10-30X-102J/470M CB e1“
393) change column header „Number of Pins 2 Digits“ TO „PIN COUNT 2 digits“
394) change column header „Capacitor Type“ TO „Capacitor Dielectric“
change column header „Capacitance Value (pF)“ TO „CAPACITANCE VALUE“
change column header „Terminal Finish/Packaging“ TO „Packaging“
Resistance Value Column
395) remove Examples
500 = 50
102 = 1000
396) change „First 2 digts are significant figures and the last Digit specifies the number of zeros“ TO „3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier.“
Resistance Tolerance Column
397) add „±“ to all the values under this column
Capacitance Value Column
398) remove Examples
471 = 470pF
104 = .1uF
399) change „First 2 digits are significant figures and the last Digit specifies the number of zeros to follow.“ TO „3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.“
Capacitance Tolerance
400) add „±“ to all values under this column
Packaging Column
401) add Standard Leadfree Codes

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	<p>402) add Standard TIN/LEAD Codes Standard Leadfree Codes</p> <p>403) change „CB = Sn95.5/Ag3.9/Cu0.6, Bul“ TO „CB = Bulk pack“ change „CW = Sn95.5/Ag3.9/Cu0.6, Tray“ TO „CW = Tray pack“ Standard TIN/LEAD Codes</p> <p>404) change „TB = Sn90/Pb10, Bulk“ TO „TB = Bulk pack“ change „TW = Sn90/Pb10, Tray“ TO „TW = Tray pack“</p> <p>Vishay Techno Networks NETxTCX (CUSTOM SIPs, DIPs)</p> <p>405) remove Terminal Finish/Packaging column Add Terminal Finish column and Packaging Type column under PACKAGING COLUMN Custom Part Number</p> <p>406) change example „1002-0000 = TCX1002“ TO „TCX1002-0000 = TCX1002“ Change example „0843-0001 = TCX0843-1“ TO „TCX0843-0001 = TCX0843-1“ PACKAGING Column (Terminal Finish)</p> <p>407) add Standard Leadfree Codes Add Standard TIN/LEAD Codes add „* NOTE – Package code includes both Terminal Finish and Packaging Type“ Standard Leadfree Codes</p> <p>408) add F = Sn95/Ag5 (e2) Add C = Sn95.5/Ag3.9/Cu0.6 (e1) Add N = No Solder Standard TIN/LEAD Codes</p> <p>409) add T = Sn90/Pb10 add S = Sn62/Pb36/Ag2 add R = Sn60/Pb40 add P = Sn63/Pb37 PACKAGING column (Packaging Type)</p> <p>410) add Standard Codes Standard Codes</p> <p>411) add B = Bulk pack add T = Tube pack add W = Tray pack add C = Custom pack, per TPI</p> <p>Vishay Techno Networks QUADTCX (CUSTOM QUADs)</p> <p>412) change in SAP Description „QUAD TCX0368-1 SN60/40 B“ TO „QUAD TCX0368-1 RB“</p> <p>413) change heading name „Leading Termination/Packaging“ TO „Packaging“ Custom Part Number Column</p> <p>414) change example „0377-0000 = TCX0377, 0368-0001 = TCX0368-1“ TO „TCX0377-0000 = TCX0377, TCX0368-0001 = TCX0368-1“ Packaging Column</p> <p>415) change „RB = Sn60/Pb40, Bulk“ TO „RB = Bulk pack“ change „RT = Sn60/Pb40, Tape“ TO „RT = Reel pack“</p>

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	<p>Vishay Techno Networks TCN</p> <p>416) change SAP Part Number „TCN1209N102KTB“ TO „TCN1009N102KCB“ change SAP Description „TCN12-09N-102K TB“ TO „TCN10-09N-102K CB e1“</p> <p>417) change Heading name „No. of Pins“ TO „PIN COUNT“ change Heading name „Capacitor Type“ TO „CAPACITOR DIELECTRIC“ change Heading name „Capacitance Value (pF)“ TO „CAPACITANCE VALUE“ change Heading name „Terminal Finish/Packaging“ TO „PACKAGING“</p> <p>Capacitance Value</p> <p>418) remove Examples 101 = 100pF 103 = 10000pF</p> <p>419) change „First 2 Digits are significant figures and the last Digit specifies the number of zeros to follow.“ TO „3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.“</p> <p>420) change K = 10% TO K = ±10% M = 20% M = ±20%</p> <p>421) add Standard Leadfree Codes add Standard TIN/LEAD Codes Standard Leadfree Codes</p> <p>422) change „CB = Sn95.5/Ag3.9/Cu0.6, Bulk“ TO „CB = Bulk pack“ Standard TIN/LEAD Codes</p> <p>423) change „TB = Sn90/Pb10, Bulk“ TO „TB = Bulk pack“</p> <p>Vishay Techno Networks TCX*</p> <p>424) change „VISHAY TECHNO NETWORKS TCX“ TO „VISHAY TECHNO NETWORKS TCX**“</p> <p>425) rename „Pkg Type“ heading TO „PACKAGING TYPE“</p> <p>426) change „Terminal Finish *NOTE – Package code includes this column and the next“ TO „TERMINAL FINISH“</p> <p>427) group Terminal Finish column and Packaging column Under (PACKAGING column)</p> <p>Custom Part Number</p> <p>428) change Examples: TO Examples: 1002-0000 1002-0000 = TCX1002</p> <p>Packaging (Terminal Finish) column</p> <p>429) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Other Codes</p> <p>430) add „*NOTE – Package code includes this column and the next“ Standard Leadfree Codes</p> <p>431) change „E = SN=e3“ TO „E = Sn100 (e3)“ change „F = SN95/5=e2“ TO „F = Sn95/Ag5 (e2)“ change „C = Sn95.5/Ag3.9/Cu0.6“ TO „C = Sn95.5/Ag3.9/Cu0.6 (e1)“</p> <p>Standard TIN/LEAD Codes</p> <p>432) place T = Sn90/Pb10, S = Sn62/Pb36/Ag2, R = Sn60/Pb40, P = Sn63/Pb37 under this category Other Codes</p> <p>433) change „X = Special“ TO „X=Special, per TPI (termination material specified by customer)“</p>

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	<p>Packaging (Terminal Finish) column</p> <p>434) add Standard Codes Standard Codes</p> <p>435) arrange data as (B, S, T, W, C)</p> <p>436) change „B = Bulk“ TO „B = Bulk pack“ change „S = Strip“ TO „S = Strip pack“ change „T = Tube“ TO „T = Tube pack“ change „W = Tray“ TO „W = Tray pack“ change „C = Custom“ TO „C = Custom pack, per TPI“</p> <p>Vishay Techno Networks TRC</p> <p>437) change SAP Part Number „TRC0901X220G390KTB“ TO „TRC0901X220G390KCB“</p> <p>438) change SAP Description „TRC09-01X-220G/390K TB“ TO „TRC09-01X-220G/390K CB e1“</p> <p>439) change Heading name „No. of Pins“ TO „PIN COUNT“ change Heading name „Capacitor Type“ TO „CAPACITOR DIELECTRIC“ change Heading name „Capacitance Value (pF)“ TO „CAPACITANCE VALUE“ change Heading name „Terminal Finish/Packaging“ TO „PACKAGING“</p> <p>Resistance Value Column</p> <p>440) remove Examples 101 = 100 220 = 22</p> <p>441) change „First 2 Digits are significant figures and the last Digit specifies the number of zeros to follow.“ TO „3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier.“</p> <p>Resistance Tolerance Column</p> <p>442) change F = 1% TO F = ±1% G = 2% G = ±2% J = 5% J = ±5%</p> <p>Capacitance Value Column</p> <p>443) remove Examples 101 = 100pF 560 = 56pF</p> <p>444) change „First 2 Digits are significant figures and the last Digit specifies the number of zeros to follow.“ TO „3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.“</p> <p>Capacitance Tolerance Column</p> <p>445) change K = 10% TO K = ±10% M = 20% M = ±20%</p> <p>Packaging Column</p> <p>446) add Standard Leadfree Codes add Standard TIN/LEAD Codes Standard Leadfree Codes</p> <p>447) change „CB =Sn95.5/Ag3.9/Cu0.6,Bulk“ TO „CB = Bulk pack“ Standard TIN/LEAD Codes</p> <p>448) change „TB = Sn90/Pb10,Bulk“ TO „TB = Bulk pack“</p>

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	<p>Vishay Techno Networks TSR</p> <p>449) change in SAP Part Number „TSR100RFFFB“ TO „TSR100RFFCB“ 450) change in SAP Description „TSR100RFF FB e2“ TO „TSR100RFF CB e1“ 451) change in Heading „Terminal Finish/Packaging“ TO „Packaging“ Resistance Tolerance Column 452) change C = 0.25% TO C = ±0.25% D = 0.50% D = ±0.5% F = 1.0% F = ±1%</p> <p>Ratio Tolerance 453) change C = 0.25% TO C = ±0.25% D = 0.50% D = ±0.5% F = 1.0% F = ±1%</p> <p>Packaging Column 454) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Non-Standard Leadfree Codes Standard Leadfree Codes 455) change „CB = Sn95.5/Ag3.9/Cu0.6, Bulk“ TO „CB = Bulk pack (SnAgCu solder)“ change „CS = Sn95.5/Ag3.9/Cu0.6, Strip“ TO „CS = Strip pack (SnAgCu solder)“ Standard TIN/LEAD Codes 456) change „RB = Sn60/Pb40, Bulk“ TO „RB = Bulk pack“ change „RS = Sn60/Pb40, Strip“ TO „RS = Strip pack“ Non-Standard Leadfree Codes 457) change „FB = Sn95/Ag5 = e2, Bulk“ TO „FB = Bulk pack (SnAg solder)“ change „FS = Sn95/Ag5 = e2, Strip“ TO „FS = Strip pack (SnAg solder)“</p> <p>Vishay Techno Networks TSR (CUSTOM)</p> <p>458) change in SAP Part Number „TSR100RFFFB“ TO „TSR100RFFCB“ change in SAP Part Number „TSR100RFF FB e2“ TO „TSR100RFF CB e1“ 459) change in SAP Description „TSR100RFF FB e2“ TO „TSR100RFF CB e1“ change in SAP Description „TSR100RFF FB e2“ TO „TSR100RFF CB e1“ 460) rename Heading „Terminal Finish/Packaging“ TO „Packaging“ Custom Part Number 461) change Examples: TO Examples: 1002-0000 = TCX1002 TCX1002-0000= TCX1002 0843-0001 = TCX0843-1 TCX0843-0001= TCX0843-1</p> <p>Packaging Column 462) add Standard Leadfree Codes add Standard TIN/LEAD Codes add Non-Standard Leadfree Codes Standard Leadfree Codes 463) add CB = Bulk pack (SnAgCu solder) add CS = Strip pack (SnAgCu solder)</p>

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Standard TIN/LEAD Codes

464) change „RB = Sn60/Pb40, Bulk“ TO „RB = Bulk pack“

465) add RS = Strip pack

Non-Standard Leadfree Codes

467) change „FB = Sn95/Ag5=e2, Bulk“ TO „FB = Bulk pack (SnAg solder)“

468) add FS = Strip pack (SnAg solder)

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469) change in SAP Part Number „T16L08100KTT“ TO „T16L08100KCT“

470) change in SAP Description „T16L08 100K TT“ TO „T16L08 100K CT e1“

471) rename Heading „Terminal Finish/Packaging“ TO „Packaging“

rename Heading „Resistance Value of R“ TO „RESISTANCE VALUE (R)“

Model Column

472) change T14L TO T14L = 14 pin

T16L T16L = 16 pin

Packaging Column

473) add Standard Leadfree Codes

add Standard TIN/LEAD Codes

add Non-Standard Leadfree Codes

Resistance Value (R) Column

474) change „K = Thousand“ TO „K = kilohms“

475) remove Examples

25K0 = 25,000

50K0 = 50K0

100K = 100,000

Standard Leadfree Codes

476) change „CT = Sn95.5/Ag3.9/Cu0.6, Tube“ TO „CT = Tube pack“

Standard TIN/LEAD Codes

477) change „TT = Sn90/Pb10, Tube“ TO „TT = Tube pack“

Non-Standard Leadfree Codes

478) change „NT = No Solder, Tube“ TO „NT = Tube pack“

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479) rename Heading „Resistance Value of R“ TO „RESISTANCE VALUE (R)“

rename Heading „Terminal Finish/Packaging“ TO „Packaging“

Packaging Column

480) add Standard Leadfree Codes

add Standard TIN/LEAD Codes

add Non-Standard Leadfree Codes

Standard Leadfree Codes

481) change „CB = Sn95.5/Ag3.9/Cu0.6, Bulk“ TO „CB = Bulk pack, Sn95.5/Ag3.9/Cu0.6 terminal finish (e1)“

Standard TIN/LEAD Codes

482) change „RB = Sn60/Pb40, Bulk“ TO „RB = Bulk pack, Sn60/Pb40 terminal finish“

Non-Standard Leadfree Codes

483) change „FB = Sn95/Ag5=e2, Bulk“ TO „FB = Bulk pack, Sn95/Ag5 terminal finish (e2)“

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	<p>Vishay Techno Film Resistors Miscellaneous (cont 1 of 3) 484) change Title „VISHAY TECHNO NETWORKS MISCELLANEOUS (cont 1 of 2)“ TO „VISHAY TECHNO FILM RESISTORS / NETWORKS MISCELLANEOUS (cont 1 of 3)“ 485) arranged properly the alignment for SAP Part Number 486) arranged and changed SAP Description „(Part number for 810187-06 reel plug, packaged B29)“ TO „810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)“ Packaging Column 487) add „Click to go to Packaging Code definition page“</p> <p>Vishay Techno Film Resistors / Networks LOT Charges (cont 2 of 3) 488) arranged properly the alignment for SAP Part Number 489) arranged and changed SAP Description „(Part number for Techno Film surface mount charges, packaging S31)“ TO „LOTCHG-TECHNOSMD S31“ 490) add note „Standard packaging code S31 for all part numbers“ 491) change Title „VISHAY TECHNO FILM RESISTORS CHARGES (cont 2 of 3)“ TO „VISHAY TECHNO FILM RESISTORS / NETWORKS LOT CHARGES (cont 2 of 3)“ Resistor Style Column 492) change „TECHNOLEAD = (Techno Leaded Film)“ TO „TECHNOLEAD = Techno Leaded Film“ change „TECHNOSMD = (Techno SMD Film)“ TO „TECHNOSMD= Techno SMD Film“ 493) add TECHNONETS = Techno Networks</p> <p>Vishay Angstrom Film Resistors GSR T.C Column 493) change X = 15ppm TO X = ±15ppm/°C (T-10) E = 25ppm E = ±25ppm/°C (T-9) H = 50ppm H = ±50ppm/°C (T-2)</p> <p>Value Column 494) change R = Decimal TO R = ohms K = Thousand K = kilohms M = Million M = Megohms</p> <p>Tolerance Column 495) change F = ±1.0% TO F = ±1% Packaging Column 496) change „STD CODES“ TO „STANDARD CODES“ change „NON-STD CODES“ TO „NON-STANDARD CODES“</p> <p>Standard Codes 497) change „MR = Foil Bag (all except 75)“ TO „MR = Foil Bag pack, Antistatic bag, Heat-seal (M76, for all except 75-size)“ change „MS = Foil Bag (75-size)“ TO „MS = Foil Bag pack, Antistatic bag, Heat-seal (M77, for 75-size only)“ change „CS = Reel (100pcs, 55/57/60)“ TO „CS = Reel pack. 0.200" pitch, 2-1/16" tape spacing, with lead trim, small reel flange, black conductive bag (RJ7, for 55, 57 & 60-size)“ change „CT = Reel (100pcs, 65/70/75)“ TO „CT = Reel pack. 0.375" pitch, 2 7/8" tape spacing, with lead trim, small reel flange, black conductive bag (RJ8, for 65, 70 & 75-size)“</p> <p>Non-Standard Codes 498) remove „Contact Marketing“</p>

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499) change „KA = Ammo (100pcs, 55/57/60)“ TO „KA = Ammo pack, 0.200“ pitch, 2-1/16“ tape spacing, w/lead trim (K36, for 55, 57 & 60-size)“
change „KC = Ammo (100pcs, 65/70/75)“ TO „KC = Ammo pack, 0.375“ pitch, 2-7/8“ tape spacing, w/lead trim (K68, for 65, 70 & 75-size)“
Special Column
500) add „Blank = Standard“
Vishay Angstrom Film Resistors HDN (Military – RNR / RNN)
501) change Title „VISHAY ANGSTROHM FILM RESISTORS HDN (RNR / RNN)“ TO „VISHAY ANGSTROHM FILM RESISTORS HDN (Military - RNR / RNN)“
T.C Column
502) arrange values as (E, C, J)
503) change E = 25ppm TO E = ±25ppm/°C(T-9)
C = 50ppm TO C = ±50ppm/°C(T-2)
J = 25ppm (75"s only) J = 25ppm(75"s only)
Value Column
504) remove 2152 = 21.5K Ohm and 97R6 = 97.6 Ohm
505) change „First 3 significant digits. Last digit specifies # of 0's.“ TO „4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an “R” is used as a decimal placeholder.“
506) add „(NOTE: P/N FORMAT PER MIL-PRF-55182)“
Tolerance Column
507) change B = 0.1% TO B = ±0.1%
D = 0.5% D = ±0.5%
F = 1% F = ±1%
Failure Rate
508) arrange values as (M, P, R, S)
Packaging Column
509) change „STD CODES“ TO „STANDARD CODES“
change „STD SLDC CODES“ TO „STANDARD SLDC CODES“
change „NON-STD CODES“ TO „NON-STANDARD CODES“
STANDARD CODES“
510) change „M76 = Foil Bag (all except 75)“ TO „M76 = Foil Bag pack, Antistatic bag, Heatseal (for all sizes except 75)“
change „M77 = Foil Bag (75-size)“ TO „M77 = Foil Bag pack, Antistatic bag, Heatseal (for 75-size only)“
change „RJ7 = Reel (100pcs, 55/57/60)“ TO „RJ7 = Reel pack. 0.200“ pitch, 2-1/16“ tape spacing, w/lead trim, small reel flange, black conductive bag (for 55, 57 & 60-size)“
change „RJ8 = Reel (100pcs, 65/70/75)“ TO „RJ8 = Reel pack. 0.375“ pitch, 2 7/8“ tape spacing, w/lead trim, small reel flange, black conductive bag (for 65, 70 & 75-size)“
STANDARD SLDC CODES.
511) change „BSL = Foil Bag“ TO „BSL = Foil Bag pack, SLDC“
change „RSL = Reel“ TO „RSL = Reel pack, std taping, SLDC“
NON-STANDARD CODES
512) remove „Contact Marketing“
513) moved and changed „K36 = Ammo (100pcs, 55/57/60)“ K36 = Ammo pack, 0.200“ pitch, 2-1/16“ tape spacing, w/lead trim (for 55, 57 & 60-size)

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514) add „K68 = Ammo pack, 0.375" pitch, 2-7/8" tape spacing, w/lead trim (for 65, 70 & 75-size)"
Special Column
515) add Blank = Standard
516) change „1 = HSD 57's" TO „1 = HSD (57, 60 & 75-size)"
change „4 = HSD 70's" TO „4 = HSD (70-size)"
change „65 = HSD 65's and 65 = HSD 55's" TO „65 = HSD (55 & 65-size)"
Vishay Angstrom Film Resistors HDN (Specials) (Typically to Customer Source Control Drawings)
T.C Columns
517) change H = 50ppm TO E = $\pm 25\text{ppm}/^{\circ}\text{C}(T-9)$
E = 25ppm H = $\pm 50\text{ppm}/^{\circ}\text{C}(T-2)$
Value Column
518) change R = Decimal TO R = ohms
K = Thousand K = kilohms
M = Million M = Megohms
Tolerance Column
519) change „F = $\pm 1.0\%$ " TO „F = $\pm 1\%$ "
Packaging Column
520) change „STD CODES" TO „STANDARD CODES"
change „NON-STD CODES" TO „NON-STANDARD CODES"
STD CODES" TO „STANDARD CODES"
521) change „MR = Foil Bag (all except 75-size)" TO „MR = Foil Bag pack, Antistatic bag, Heat-seal (M76, for all except 75-size)"
change „MS = Foil Bag (75-size)" TO „MS = Foil Bag pack, Antistatic bag, Heat-seal (M77, for 75-size only)"
change „CS = Reel (100pcs, 55/57/60)" TO „CS = Reel pack. 0.200" pitch, 2-1/16" tape spacing, with lead trim, small reel flange, black conductive bag (RJ7, for 55, 57 & 60-size)"
change „CT = Reel (100pcs, 65/70/75)" TO „CT = Reel pack. 0.375" pitch, 2 7/8" tape spacing, with lead trim, small reel flange, black conductive bag (RJ8, for 65, 70 & 75-size)"
522) add Standard SLDC Codes
STANDARD SLDC CODES
523) add BS = Foil Bag pack, SLDC (BSL)
add UL = Reel pack, std taping, SLDC (RSL)
NON-STANDARD CODES
524) remove „Contact Marketing"
525) placed and changed „KA = Ammo (100pcs, 55/57/60)" TO „KA = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, w/lead trim (K36, for 55, 57 & 60-size)" under this category
Placed and changed „KC = Ammo (100pcs, 65/70/75)" TO „KC = Ammo pack, 0.375" pitch, 2-7/8" tape spacing, w/lead trim (K68, for 65, 70 & 75-size)" under this category.
Special Column
526) removed „Click to go to Permark codes section"
Vishay Angstrom Film Resistors HMS (Hermetic Matched Sets)
572) add note „Standard packaging code S51 for all part numbers"
Special Column
573) change „Sxxx (only if needed) xxx = 1 thru 999 as 074 = 74 needed" TO „Sxxx (only if needed, where xxx = 001 thru 999)"

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	<p>Vishay Angstrohm Film Resistors Miscellaneous (cont 1 of 3) 574) change in Title „VISHAY ANGSTROHM FILM RESISTORS MISCELLANEOUS / CHARGES (cont 1 of 3)“ TO „VISHAY ANGSTROHM FILM RESISTORS MISCELLANEOUS (cont 1 of 3)“ 575) arranged and changed SAP Description „(Part number for 810187-06 reel plug, packaged B29)“ TO „810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)“ Packaging Column 576) add „Click to go to Packaging Code definition page“</p> <p>Vishay Angstrohm Film Resistors LOT Charges (cont 2 of 3) 577) change in Title „VISHAY ANGSTROHM FILM RESISTORS CHARGES (cont 2 of 3)“ TO „Vishay Angstrohm Film Resistors LOT Charges (cont 2 of 3)“ 578) arranged and changed SAP Description „(Part number for Angstrohm Hermetic Film military leaded-film charges, packaging S31)“ TO „LOTCHG- ANGHERMMIL S31“ 579) add note „Standard packaging code S31 for all part numbers“ Resistor Style Column 580) change „ANGHERMMIL = (Hermetic Leaded-Film Military)“ TO „ANGHERMMIL = Angstrohm Hermetic Leaded-Film, Military“ change „ANGHERMCOM = (Hermetic Leaded Film Commercial)“ TO „ANGHERMCOM= Angstrohm Hermetic Leaded-Film, Commercial“ 581) add „ANGHERMCUS = Angstrohm Hermetic Leaded-Film, Custom“</p> <p>NEW</p> <p>Vishay Dale Networks Miscellaneous (cont 1 of 3) 581) add Sap Part Number 81018706B29 582) add Sap Description 583) add Part Number, Dash Type, Packaging Column Part Number Column 584) add 2xxxxx 8xxxxx Dash Type Column 585) add 00 thru 99 as applicable Packaging Column 586) add B29, P03, S27, S31, T03, etc. Click to go to Packaging Code definition page</p> <p>NEW</p> <p>Vishay Dale Networks LOT Charges (cont 2 of 3) 587) add Sap Part Number LOTCHG-DALENETWORK 588) add Sap Description LOTCHG-DALENETWORK S31 589) add note „Standard packaging code S31 for all part numbers“ 590) add Charge column and Resistor Style column Charge Column 591) add „LOTCHG-“ Resistor Style Column 592) add „DALENETWORK= Dale Networks (Material Group FN2)“</p>

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NEW

Vishay Dale Networks Fast Track Program (cont 3 of 3)

- 593) add Sap Part Number „FSTTRK10DALENETS“and „FSTTRK20DALENETS“
- 594) add Sap Description „FSTTRK10DALENETS S31“and „FSTTRK20DALENETS S31“
- 595) add note „Standard packaging code S31 for all part numbers“
- 596) add CHARGE column, LEAD TIME column, RESISTOR STYLE column
CHARGE column
- 597) add FSTTRK
LEAD TIME column
- 598) add 05 = 5 working days
10 = 10 working days
15 = 15 working days
20 = 20 working days
- RESISTOR STYLE column
- 599) add „DALENETS = Dale Networks (Material Group FN1)“

New

Vishay Techno Film Resistors HML

- 600) add Sap Part Number „HML0110K0FKE05“ and „HML012M00JME05“
- 601) add Sap Description „HML01 10K 1% K E05 e3“ and „HML01 2M 5% M E05 e3“
- 602) add MODEL column, SIZE column, VALUE column, TOLERANCE column, TC column, PACKAGING column, SPECIAL column
MODEL column
- 603) add „HML“
SIZE column
- 604) add „01“
VALUE column
- 605) add R = ohms
K = kilohms
M = Megohms
Check data sheet for available value range
- TC column
- 606) add K = ±100ppm
M = ±300ppm
- PACKAGING column
- 607) add STANDARD LEAD FREE CODES
E05 = Lacer pack
Click to go to Packaging Code definition page
- SPECIAL column
- 608) add Dash #'s 1 thru 999 as applicable
Click below to go to Permark codes section

NEW

Vishay Techno Film Resistors / Networks Fast Track Program (cont 3 of 3)

- 609) add SAP Part Number „FSTTRK10TECHNO“ and „FSTTRK20TECHNO“
- 610) add SAP Description „FSTTRK10TECHNO S31“ and „FSTTRK20TECHNO S31“

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612) add note „Standard packaging code S31 for all part numbers“
613) add CHARGE column, LEAD TIME column, RESISTOR STLE column
CHARGE column
614) add FSTTRK
LEAD TIME column
615) add 05 = 5 working days
10 = 10 working days
15 = 15 working days
20 = 20 working days
RESISTOR STYLE column
616) add „TECHNO = Techno Networks (Material Group FN2)“
NEW
Vishay Angstrom Film Resistors Fast Track Program (cont 3 of 3)
617) add SAP Part Number „FSTTRK10ANGHFML“ and „FSTTRK20ANGHFCOM“
618) add SAP Description „FSTTRK10ANGHFML S31“ and „FSTTRK20ANGHFCOM S31“
619) add note „Standard packaging code S31 for all part numbers“
620) add CHARGE column, LEAD TIME column, RESISTOR STLE column
CHARGE column
621) add „FSTTRK“
LEAD TIME column
622) add 05 = 5 working days
10 = 10 working days
15 = 15 working days
20 = 20 working days
RESISTOR STYLE column
623) add ANGHFMIL = Angstrom Hermetic Leaded-Film, Military
ANGHFCOM = Angstrom Hermetic Leaded-Film, Commercial
ANGHFCUS = Angstrom Hermetic Leaded-Film, Custom
Vishay Dale Film Resistors – B / H
Value Column
1)Change K = THOUSAND to K = kilohms.
2)Change M = MILLION to M = Megohms.
3)Change G = KMEG to G = Gigohms.
Tolerance Column
4)Change J = ±5.0% to J = ±5%.
5)Change K = ±10.0% to K = ±10%.
6)Change L = ±15.0% to L = ±15%
7)Add M = ±20%
Packaging Column
8)Change STD LEADFREE CODES* to STANDARD LEADFREE CODES
9)Change E08* = Foam to E08 = Foam pack, 5/ea rolled in Microfoam
10)Change STD TIN / LEAD CODES to STANDARD TIN/LEAD CODES
11)Change F08 = Foam to F08 = Foam pack, 5/ea rolled in Microfoam

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	<p>12) Remove * Leadfree version not currently released</p> <p>13) Add NON-STANDARD TIN/LEAD CODES</p> <p>14) Add F03 = Foam pack, 10/ea rolled in Microfoam</p> <p>15) Add F06 = Foam pack, 1/ea rolled in Microfoam</p> <p>16) Add J03 = Skin pack, 5 to 10 pcs on cardboard (vary with size)</p> <p>17) Add M27 = Heat Seal pack, components wrapped in pink foam, sealed in a level "C" – water-vapor proof bag in a supplemental container, marking per MIL-STD-129.</p> <p>18) Add S51 = Custom pack, per TPI Special Column</p> <p>19) Add Blank = Standard VISHAY DALE FILM RESISTORS C6 Value Column</p> <p>20) Change R = DECIMAL to R = ohms</p> <p>21) Change K = THOUSAND to K = kilohm</p> <p>22) Change M = MILLION to M = Megohm</p> <p>23) Remove Check datasheet for available value range Tolerance Column</p> <p>24) Change F = $\pm 1.0\%$ to F = $\pm 1\%$</p> <p>25) Change G = $\pm 2.0\%$ to G = $\pm 2\%$</p> <p>26) Change J = $\pm 5.0\%$ to J = $\pm 5\%$</p> <p>27) Change K = $\pm 10.0\%$ to K = $\pm 10\%$ Packaging Column</p> <p>28) Change STD LEAD FREE CODES* to STANDARD LEAD FREE CODES STANDARD LEAD FREE CODES</p> <p>29) Change EA = Reel (full) to EA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim</p> <p>30) Change EK = Bulk to EK = Bulk pack</p> <p>31) Change STD TIN/LEAD CODES to STANDARD TIN/LEAD CODES STANDARD TIN/LEAD CODES</p> <p>32) Change CJ = Reel (full) to Reel pack, 0.200" pitch, 2-7/8" tape spacing, 2-7/8" tape spacing, with leadtrim (RH3, 1,000pcs/reel)</p> <p>33) Change B8 = Bulk to B8 = Bulk pack</p> <p>34) Add NON-STANDARD LEAD FREE CODES NON-STANDARD LEAD FREE CODES</p> <p>35) Add EF = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>36) Change NON-STD TIN/LEAD CODES to NON-STANDARD TIN/LEAD CODES NON-STANDARD TIN/LEAD CODES</p> <p>37) Add A5 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>38) Add CH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (RH2, 750pcs/reel)</p> <p>39) Add CF = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (RH1, 500pcs/reel)</p> <p>40) Add LB = Lacer pack (L05)</p> <p>41) Add KR (K22) ammo pack available</p> <p>42) Add BF (B14) bulk pack available</p> <p>43) Add F5 (F05) foam pack available</p>

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	<p>44) Add CK (R19), RG (R20), RE (R36), RH (R64), R9 (R68), WG (RE4), WF (RE5), R6 (RE6), R7 (RE7), R8 (RE8), C2, C3, CB, M6, R4 reel pack Available</p> <p>45) Add Footnote- Note: C6 is an FP1 or FP32 with an Epoxy coating rather than the FP products normal Silicone coating.</p> <p>VISHAY DALE FILM RESISTORS – CCF</p> <p>Value Column</p> <p>46) Change R = DECIMAL to R = ohms47) Change K = THOUSAND to K = kilohms</p> <p>48) Change M = MILLION to M = Megohms</p> <p>49) Add Check data sheet for available value range</p> <p>50) Add Note: 1% parts only available in E96 decade values and 5% parts only available in E24 decade values</p> <p>Tolerance Column</p> <p>51) Change F = 1.0 to F = $\pm 1\%$</p> <p>52) Change J = 5.0 (not for size 60) to J = $\pm 5\%$ (not for 60-size)</p> <p>T.C Column</p> <p>53) Change K = T-1 to K = $\pm 100\text{ppm}/^\circ\text{C}$ (T-1)</p> <p>54) Change H = T-2 (size 50 only) to H = $\pm 50\text{ppm}/^\circ\text{C}$ (T-2, 50-size only)</p> <p>Packaging Column</p> <p>55) Change STD LEADFREE CODES to STANDARD LEADFREE CODES STANDARD LEADFREE CODES</p> <p>56) Change E36 = Reel to E36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim</p> <p>57) Change STD TIN / LEAD CODES to STANDARD TIN/LEAD CODES STANDARD TIN/LEAD CODES</p> <p>58) Change R36 = Reel to R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim</p> <p>59) Remove NON-STD TIN / LEAD CODES</p> <p>Special Column</p> <p>60) Add Blank = Standard</p> <p>VISHAY DALE FILM RESISTORS - CMF (Commercial)</p> <p>61) Change CMF0739R00JLEA to CMF0739R000JLEA</p> <p>62) Change R = DECIMAL to R = ohms</p> <p>63) Change K = THOUSAND to K = kilohms</p> <p>64) Change M = MILLION to M = Megohms</p> <p>65) Change E24 values only for CMF07 and CMF20 to Note: E24 decade values only for CMF07 and CMF20</p> <p>Tolerance Column</p> <p>66) Add A = $\pm 0.05\%$</p> <p>67) Add S = $\pm 0.075\%$</p> <p>68) Change B = 0.1 to B = $\pm 0.1\%$</p> <p>69) Change C = 0.25 to C = $\pm 0.25\%$</p> <p>70) Change D = 0.5 to D = $\pm 0.5\%$</p> <p>71) Change F = 1.0 to F = $\pm 1\%$</p> <p>72) Change G = 2.0 to G = $\pm 2\%$</p> <p>73) Change J = 5.0 to J = $\pm 5\%$</p> <p>74) Add K = $\pm 10\%$</p> <p>75) Add Note: 2% and 5% tolerances only for CMF07 and CMF20</p>

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	<p>T.C. Column</p> <p>76) Change E = T-9 to E = ± 25ppm/$^{\circ}$C (T-9)</p> <p>77) Change H = T-2 to H = ± 50ppm/$^{\circ}$C (T-2)</p> <p>78) Change K = T-1 to K = ± 100ppm/$^{\circ}$C (T-1)</p> <p>79) Change L = T-0 to L = ± 150ppm/$^{\circ}$C (T-0)</p> <p>80) Change N = T-00 to N = ± 200ppm/$^{\circ}$C (T-00)</p> <p>Packaging Column</p> <p>81) Change STD LEAD FREE CODES to STANDARD LEAD FREE CODES STANDARD LEAD FREE CODES</p> <p>82) Change EA = Reel (full) to EA = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>83) Change EB = Reel (1K pcs) to EB = Reel pack (std taping except 1,000pcs/reel)</p> <p>84) Change EK = Bulk to EK = Bulk pack</p> <p>85) Change STD TIN/LEAD CODES to STANDARD TIN/LEAD CODES STANDARD TIN/LEAD CODES</p> <p>86) Change RE = Reel (full) to RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36)</p> <p>87) Change R6 = Reel (1K pcs) R6 = Reel pack (RE6, std taping except 1,000pcs/reel)</p> <p>88) Change BF = Bulk to BF = Bulk pack (B14)</p> <p>89) Change NON-STD TIN/LEAD CODES to NON-STANDARD TIN/LEAD CODES</p> <p>90) Add</p> <p>KA = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (K36)</p> <p>RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05)</p> <p>RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08)</p> <p>RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19)</p> <p>RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20)</p> <p>RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64)</p> <p>WF = Reel pack (RE5, std taping except 500pcs/reel)</p> <p>R7 = Reel pack (RE7, std taping except 1,500pcs/reel)</p> <p>R8 = Reel pack (RE8, std taping except 2,000pcs/reel)</p> <p>KB (K55), KE (K81), KJ (K82) ammo pack available</p> <p>BL (B24), B1 (B25), B7 (B45), B9 (B70), MD (M22), MH (M74), MP (M75) bulk pack available</p> <p>LA (L03) lacer pack available</p> <p>M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available</p> <p>ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CP (R55), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), CL (RH5), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available</p> <p>SM (S50), SL (S51) special pack available</p> <p>Special Column</p> <p>91) Add</p> <p>Blank = Standard</p> <p>GENERAL USAGE DASH NUMBERS</p> <p>11 = 0.032" leadwire (65-size)</p> <p>39 = Fusible (55-size)</p> <p>64 = Fusible (60-size)</p> <p>70 = Color banded, 5 bands (for ≤ 1 %; 50, 55, 60, 65 & 70-sizes)</p>

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	<p>80 = Color banded, 4 bands (for $\geq 2\%$; 50, 55, 60, 65 & 70-sizes)</p> <p>88 = Hot Solder Dipped (for all sizes)</p> <p>95 = 0.032" leadwire (60-size)</p> <p>143 = Non-magnetic; (for all sizes)</p> <p>170 = Hot Solder Dipped and Color banded, 5 bands (for $\leq 1\%$; 50, 55, 60, 65 & 70-sizes)</p> <p>VISHAY DALE FILM RESISTORS</p> <p>CMF (Military - RL)</p> <p>Value Column</p> <p>92) change 2 SIGNIFICANT DIGITS PLUS MULTIPLIER to 3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier. For values below 10 ohms, an "R" is used as a decimal placeholder.</p> <p>93) change NOTE: P/N FORMAT PER MIL-R-22684 to (NOTE: P/N FORMAT PER MIL-PRF-22684)</p> <p>Packaging Column</p> <p>94) Change STD TIN/LEAD CODES to STANDARD TIN/LEAD CODES</p> <p>95) Change R36 = Reel (full) to R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>96) Change RE6 = Reel (1K pcs) to RE6 = Reel pack (std taping except 1,000pcs/reel)</p> <p>97) Change B14 = Bulk to B14 = Bulk pack</p> <p>98) Change STD TIN/LEAD SLDC CODES to STANDARD TIN/LEAD SLDC CODES</p> <p>99) Change RSL = Reel to RSL = Reel pack, std taping, SLDC</p> <p>100) Change BSL = Bulk to BSL = Bulk pack, SLDC</p> <p>101) Change NON-STD TIN/LEAD CODES to NON-STANDARD TIN/LEAD CODES</p> <p>102) Add</p> <p>K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim</p> <p>R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim</p> <p>R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim</p> <p>R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim</p> <p>R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim</p> <p>RE5 = Reel pack (std taping except 500pcs/reel)</p> <p>K55, K81, K82 ammo pack available</p> <p>B24, B25, B45, B70, M22, M74, M75 bulk pack available</p> <p>L03 lacer pack available</p> <p>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available</p> <p>M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available</p> <p>S50, S51 special pack available</p> <p>Special Column</p> <p>103) Add</p> <p>Dash #'s 1 thru 999 as applicable</p> <p>Blank = Standard</p> <p>GENERAL USAGE DASH NUMBERS</p> <p>88 = Hot Solder Dipped</p> <p>143 = Non-magnetic</p>

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	<p>VISHAY DALE FILM RESISTORS</p> <p>CMF (Military - RN)</p> <p>T.C column</p> <p>103) Add ± to values</p> <p>Value column</p> <p>104) Change 3 SIGNIFICANT DIGITS PLUS MULTIPLIER to 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an “R” is used as a decimal placeholder.</p> <p>Tolerance Column</p> <p>105) Add F = ±1%</p> <p>106) Add part number RN65E1002BR36143 and description CMF-65-143 10K .1% T-9 RN65E1002B R36</p> <p>Packaging Column</p> <p>107) Change STD TIN/LEAD CODES to STANDARD TIN/LEAD CODES</p> <p>108) Change R36 = Reel (full) to R36 = Reel pack, 0.200” pitch, 2-1/16” tape spacing, with leadtrim</p> <p>109) Change RE6 = Reel (1K pcs) to RE6 = Reel pack (std taping except 1,000pcs/reel)</p> <p>110) Change B14 = Bulk to B14 = Bulk pack</p> <p>111) Change STD TIN/LEAD SLDC CODES to STANDARD TIN/LEAD SLDC CODES</p> <p>112) Change RSL = Reel to RSL = Reel pack, std taping, SLDC</p> <p>113) Change BSL = Bulk to BSL = Bulk pack, SLDC</p> <p>114) Change NON-STD TIN/LEAD CODES to NON-STANDARD TIN/LEAD CODES</p> <p>115) Add</p> <p>K36 = Ammo pack, 0.200” pitch, 2-1/16” tape spacing, with leadtrim</p> <p>R05 = Reel pack, 0.200” pitch, 2-7/8” tape spacing, no leadtrim</p> <p>R08 = Reel pack, 0.200” pitch, 2-1/16” tape spacing, no leadtrim</p> <p>R19 = Reel pack, 0.200” pitch, 2-1/2” tape spacing, no leadtrim</p> <p>R20 = Reel pack, 0.200” pitch, 2-1/2” tape spacing, with leadtrim</p> <p>R64 = Reel pack, 0.200” pitch, 2-7/8” tape spacing, with leadtrim</p> <p>RE5 = Reel pack (std taping except 500pcs/reel)</p> <p>K55, K81, K82 ammo pack available</p> <p>B24, B25, B45, B70, M22, M74, M75 bulk pack available</p> <p>L03 lacer pack available</p> <p>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available</p> <p>M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available</p> <p>S50, S51 special pack available</p> <p>Special Column</p> <p>1116) Add</p> <p>Dash #'s 1 thru 999 as applicable</p> <p>Blank = Standard</p> <p>GENERAL USAGE DASH NUMBERS</p> <p>88 = Hot Solder Dipped</p> <p>143 = Non-magnetic</p>

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	<p>VISHAY DALE FILM RESISTORS</p> <p>CPF</p> <p>Value Column 116) Change R = DECIMAL K = THOUSAND M = MILLION to R = ohms K = kilohms M = Megohms</p> <p>Tolerance Column 117) Change F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$ to F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ 118) Change N = T-00 L = T-0 K = T-1 H = T-2 E = T-9 to E = $\pm 25\text{ppm}/^\circ\text{C}$ (T-9) H = $\pm 50\text{ppm}/^\circ\text{C}$ (T-2) K = $\pm 100\text{ppm}/^\circ\text{C}$ (T-1) L = $\pm 150\text{ppm}/^\circ\text{C}$ (T-0) N = $\pm 200\text{ppm}/^\circ\text{C}$ (T-00)</p> <p>Packaging Column 119) Change STD TIN/LEAD CODES to STANDARD TIN/LEAD CODES 120) Change E36* = Reel (full) to E36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim 121) Change EE6* = Reel (1K pcs) (1K pcs) to EE6 = Reel pack (std taping except 1,000pcs/reel) 122) Change E14* = Bulk to E14 = Bulk pack 123) Change STD TIN/LEAD SLDC CODES to STANDARD TIN/LEAD SLDC CODES 124) Change R36 = Reel (full) to R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim 125) Change RE6 = Reel (1K pcs) to RE6 = Reel pack (std taping except 1,000pcs/reel) 126) Change NON-STD TIN/LEAD CODES to NON-STANDARD TIN/LEAD CODES 127) Add K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim RE5 = Reel pack (std taping except 500pcs/reel) K55, K81, K82 ammo pack available B24, B25, B45, B70, M22, M74, M75 bulk pack available L03 lacer pack available M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available S50, S51 special pack available</p> <p>Special Column 128) Add Blank = Standard</p> <p>VISHAY DALE FILM RESISTORS</p> <p>CRCC</p> <p>Resistance Value Column 130) Change First two digits significant, last digit signifies multiplier. To 3-digit numeric code (in ohms) where the first two digits are the significant figures and the last digit is the multiplier. 131) change TOLERANCE to RESISTOR TOLERANCE 132) Change F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$ to F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$</p>

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	<p>Capacitance value Column</p> <p>133) Change In picofarad, first two digits significant, last digit is multiplier. To 3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.</p> <p>134) Change TOLERANCE to CAPACITOR TOLERANCE</p> <p>135) Change $K = \pm 10.0\%$ $M = \pm 20.0\%$ to $K = \pm 10\%$ $M = \pm 20\%$</p> <p>136) Change STD LEAD FREE CODES EA = Reel STD TIN/LEAD CODES TF = Reel $M = \pm 20.0\%$ significant, last digit is multiplier. $J = \pm 5.0\%$ NON-STD TIN/LEAD CODES Contact Marketing to STANDARD LEAD FREE CODES EA = Reel pack, embossed carrier tape, 7" reel STANDARD TIN/LEAD CODES TF = Reel pack, embossed carrier tape, 7" reel (R02)</p> <p>VISHAY DALE FILM RESISTORS</p> <p>D / G</p> <p>137) Add NOTE: SP07 will convert Vinyl and Mylar sleeve options as "Specials". For example: DVYV will show as DVY-V.</p> <p>138) Change DVYV-1 500M 5% B19 to DVY-V1 500M 5% B19</p> <p>Value Column</p> <p>139) Change $K = \text{THOUSAND}$ $M = \text{MILLION}$ $G = \text{KMEG}$ to $K = \text{kilohms}$ $M = \text{Megohms}$ $G = \text{Gigohms}$</p> <p>Tolerance Column</p> <p>140) Change $J = 5.0\%$ $K = 10.0\%$ $L = 15.0\%$ to $J = \pm 5\%$ $K = \pm 10\%$ $L = \pm 15\%$ $M = \pm 20\%$</p> <p>Special Column</p> <p>141) Add Blank = Standard</p> <p>142) Change SPECIAL TYPE to OPTIONAL CONSTRUCTION</p> <p>VISHAY DALE FILM RESISTORS</p> <p>DC</p> <p>Value Column</p> <p>143) Change $R = \text{DECIMAL}$ $K = \text{THOUSAND}$ $M = \text{MILLION}$ to $R = \text{ohms}$ $K = \text{kilohms}$ $M = \text{Megohms}$</p> <p>Tolerance Column</p> <p>144) Change $F = \pm 1.0\%$ $G = \pm 2.0\%$ $J = \pm 5.0\%$ to $F = \pm 1\%$ $G = \pm 2\%$ $J = \pm 5\%$</p> <p>Special Column</p> <p>145) Add</p> <p>Blank = Standard</p> <p>Packaging Column</p> <p>146) Change TIN/LEAD CODES R36 = Reel (full) RE4 = Reel RE5 = Reel (500 pcs) K36 = Ammo to TIN/LEAD CODES</p> <p>R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>RE4 = Reel pack (std taping except min of 300pcs/reel, multiple of 100pcs)</p> <p>RE5 = Reel pack (std taping except 500pcs/reel)</p> <p>RE6 = Reel pack (std taping except 1,000pcs/reel)</p> <p>RE7 = Reel pack (std taping except 1,500pcs/reel)</p> <p>RE8 = Reel pack (std taping except 2,000pcs/reel)</p> <p>K36 = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p>Special Column</p> <p>147) Add</p> <p>Blank = Standard</p>

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	<p>VISHAY DALE FILM RESISTORS</p> <p>DCS</p> <p>Value Column 148) change Change R = DECIMAL K = THOUSAND M = MILLION to R = ohms K = kilohms M = Megohms 149) Add 135R0 = 135 ohm Tolerance Column 150) Change F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$ to F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$</p> <p>Packaging Column 151) Change TIN/LEAD CODES R36 = Reel (full) RE4 = Reel RE5 = Reel (500 pcs) K36 = Ammo to TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim RE4 = Reel pack (std taping except min of 300pcs/reel, multiple of 100pcs) RE5 = Reel pack (std taping except 500pcs/reel) RE6 = Reel pack (std taping except 1,000pcs/reel) RE7 = Reel pack (std taping except 1,500pcs/reel) RE8 = Reel pack (std taping except 2,000pcs/reel)</p> <p>Special Column 152) Add Blank = Standard Change VISHAY DALE FILM RESISTORS ERC (RNC / RNR) to VISHAY DALE FILM RESISTORS ERC (Military - RNC / RNR)</p> <p>T.C Column 153) Change H = 50 PPM J = 25 PPM K = 100 PPM to J = $\pm 25\text{ppm}/^\circ\text{C}$ (T-9) H = $\pm 50\text{ppm}/^\circ\text{C}$ (T-2) K = $\pm 100\text{ppm}/^\circ\text{C}$ (T-1) 154) Change First 3 significant digits Last digit specifies # of 0's 2152 = 21.5K Ohm 97R6 = 97.6 Ohm to 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. Add (NOTE: P/N FORMAT PER MIL-PRF-55182)</p> <p>Packaging column 155) Change STD TIN/LEAD CODES R36 = Reel (full) RE6 = Reel (1K pcs) B14 = BulkSTD TIN/LEAD SLDC CODES RSL = Reel BSL = Bulk NON-STD TIN/LEAD CODES Contact Marketing to</p> <p>STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (std for 50, 55 & 60 sizes) R64 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (std for 65 & 70 sizes) RE6 = Reel pack (std taping except 1,000pcs/reel) B14 = Bulk pack</p> <p>STANDARD TIN/LEAD SLDC CODES RSL = Reel pack, std taping, SLDC BSL = Bulk pack, SLDC</p> <p>NON-STANDARD TIN/LEAD CODES R05 = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim R08 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim R19 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim R20 = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim</p>

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	<p>RE5 = Reel pack (std taping except 500pcs/reel) K36, K55, K81, K82, K83 ammo pack available B24, B25, B45, B70, M22, M74, M75 bulk pack available L03 lacer pack available M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available M23, M24, R16, R18, R33, R38, R48, R50, R55, R62, R68, R74, R93, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24 reel pack available S50, S51 special pack available 156) add Blank = Standard GENERAL USAGE DASH NUMBERS 4 = HSD (70-size) 31 = HSD (50-size) 65 = HSD (55 or 65-size) 201 = HSD (60-size) VISHAY DALE FILM RESISTORS ERC (Specials) Value Column 157) change Change R = DECIMAL K = THOUSAND M = MILLION to R = ohms K = kilohms M = Megohms Tolerance Column 158) Change F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$ to F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ T.C column 159) Change K = T-1 H = T-2 E = T-9 Z = T-16 Y = T-13 X = T-10 to Z = $\pm 5\text{ppm}/^\circ\text{C}$ (T-16) Y = $\pm 10\text{ppm}/^\circ\text{C}$ (T-13) X = $\pm 15\text{ppm}/^\circ\text{C}$ (T-10) E = $\pm 25\text{ppm}/^\circ\text{C}$ (T-9) H = $\pm 50\text{ppm}/^\circ\text{C}$ (T-2) K = $\pm 100\text{ppm}/^\circ\text{C}$ (T-1) Packaging Column 160) change STD LEAD FREE CODES* EA* = Reel (full) EB* = Reel (1K pcs) EK* = Bulk STD TIN/LEAD CODES J = $\pm 5.0\%$ L = T-0 RE = Reel (full) RH = Reel (full) R6 = Reel (1K pcs) BF = Bulk NON-STD TIN/LEAD CODES Contact Marketing * Leadfree version not currently released to STANDARD LEAD FREE CODES EA = Reel pack, 0.200" pitch, 2-1/16" (for 50, 55 & 60-sizes) or 2-7/8" (for 65 & 70-sizes) tape spacing, with leadtrim EB = Reel pack (std taping except 1,000pcs/reel) EK = Bulk pack STANDARD TIN/LEAD CODES RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36, std for 50, 55 & 60-sizes) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64, std for 65 & 70-sizes) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) BF = Bulk pack (B14) NON-STANDARD TIN/LEAD CODES RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) WF = Reel pack (RE5, std taping except 500pcs/reel) KA (K36), KB (K55), KE (K81), KJ (K82) ammo pack available BL (B24), B1 (B25), B7 (B45), B9 (B70), BS (BSL), MD (M22), MH (M74), MP (M75) bulk pack available LA (L03) lacer pack available M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CP (R55), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), R7 (RE7), R8 (RE8), CL (RH5), UL (RSL), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available SM (S50), SL (S51) special pack available</p>

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	<p>Change VISHAY DALE FILM RESISTORS ERL (RLR) to VISHAY DALE FILM RESISTORS ERL (Military RLR) Value Column 161) Change First 3 significant digits. Last digit specifies # of 0's. 2152 = 21.5K Ohm 97R6 = 97.6 Ohm to 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder. Add (NOTE: P/N FORMAT PER MIL-PRF-39017) 162) Add Blank = Standard GENERAL USAGE DASH NUMBERS 1 = HSD (32-size) 11 = HSD (20-size) 19 = HSD (05-size) 23 = HSD (07-size) VISHAY DALE FILM RESISTORS ERL (Specials) 163) Add (Typically to Customer Source Control Drawings) Value Column 164) Change R = DECIMAL K = THOUSAND M = MILLION to R = ohms K = kilohms M = Megohms 165) Change F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$ to F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ T.C column 166) Change K = T-1 H = T-2 L = T-0 to H = $\pm 50\text{ppm}/^\circ\text{C}$ (T-2) K = $\pm 100\text{ppm}/^\circ\text{C}$ (T-1) L = $\pm 150\text{ppm}/^\circ\text{C}$ (T-0) Packaging Column 167) change STD LEAD FREE CODES* EA* = Reel (full) EB* = Reel (1K pcs) EK* = Bulk STD TIN/LEAD CODES RE = Reel (full) RH = Reel (full) R6 = Reel (1K pcs) BF = Bulk NON-STD TIN/LEAD CODES Contact Marketing * Leadfree version not currently released to STANDARD LEAD FREE CODES EA = Reel pack, pitch and tape spacing vary based on size, with leadtrim EB = Reel pack (std taping except 1,000pcs/reel) EK = Bulk pack STANDARD TIN/LEAD CODES RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36, std for 05, 07 & 20-sizes) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64, std for 32-size) CP = Reel pack, 0.400" pitch, 2-7/8" tape spacing, with leadtrim, (R55, std for 62-size) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) BF = Bulk pack (B14) NON-STANDARD TIN/LEAD CODES RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) WF = Reel pack (RE5, std taping except 500pcs/reel) KA (K36), KB (K55), KE (K81), KJ (K82) ammo pack available BL (B24), B1 (B25), B7 (B45), B9 (B70), BS (BSL), MD (M22), MH (M74), MP (M75) bulk pack available LA (L03) lacer pack available M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), R7 (RE7), R8 (RE8), CL (RH5), UL (RSL), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available SM (S50), SL (S51) special pack available VISHAY DALE FILM RESISTORS FP 168) Change part number FP0001374KF6200EK to FP0001374KF6201EK 169) Change description FP1 :6200 374K 1% EK e3 to FP1 :6201 374K 1% EK e3</p>

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	<p>Size column 170) Add 42TX Value column 171) Change R = DECIMAL K = THOUSAND M = MILLION to R = ohms K = kilohms M = Megohms Tolerance Column 172) Change F = 1.0 G = 2.0 J = 5.0 K = 10.0 to F = ±1.0% G = ±2.0% J = ±5.0% K = ±10.0% Packaging Column 173) Change STD LEAD FREE CODES EA* = Reel (full) EK* = Bulk EL = Lacer STD TIN/LEAD CODES LB = Lacer CJ = Reel (full, 1K pcs) CH = Reel (full, 750 pcs) G1 = Reel (full, 600 pcs) B8 = Bulk NON-STD TIN/LEAD CODES Contact Marketing to STANDARD LEAD FREE CODES EA = Reel pack, pitch and tape spacing vary based on size, with leadtrim EK = Bulk pack EL = Lacer pack STANDARD TIN/LEAD CODES CJ = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH3, 1,000pcs/reel, for 1/2, 1, 32 & 69-sizes) CH = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH2, 750pcs/reel, for 1/2, 1, 2, 3, 32, 42, 67 & 69-sizes) G1 = Reel pack, 0.400" pitch, 4" tape spacing, with leadtrim, with leadtrim (600 pcs/reel, for 4-size only) B8 = Bulk pack LB = Lacer pack (L05) NON-STANDARD LEAD FREE CODES EF = Reel pack, pitch varies based on size, 2-1/16" tape spacing, with leadtrim NON-STANDARD TIN/LEAD CODES A5 = Reel pack, pitch varies based on size, 2-1/16" tape spacing, with leadtrim CF = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH1, 500 pcs/reel) K4 (K04), KR (K22), KB (K55) ammo pack available BF (B14) bulk pack available F5 (F05) foam pack available MK (M8), CM (R16), CK (R19 or RH4), RG (R20), RE (R36), RK (R50), RH (R64), CR (R66), R9 (R68), WG (RE4), WF (RE5), R6 (RE6), R7 (RE7), R8 (RE8), C2, C3, CB, M6, N2, N3, NB, NC, R4 (27) reel pack available VISHAY DALE FILM RESISTORS FRJ 174) Add NOTE: FRJ55 SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS Packaging column 175) Change STD LEAD FREE CODES* E36* = Reel STD TIN/LEAD CODES R36 = reel * Leadfree version not currently released to STANDARD LEADFREE CODES E36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim STANDARD TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim Special column 176) Add Blank = Standard VISHAY DALE FILM RESISTORS MVW / HWV / HVX Size Column 177) Change MVW available in 1/2, 3/4 HWV and HVX available in 1/2, 3/4, 001, 002 to 001 (HWV & HVX only) 002 (HWV & HVX only) Value Column 178) change K = THOUSAND M = MILLION to K = kilohms M = Megohms Tolerance Column 179) change J = ±5.0% K = ±10.0% M = ±20.0% to J = ±5% K = ±10% M = ±20% Packaging column 180) change STD LEAD FREE CODES (MVW)* BJ = Bulk LB = Lacer RC = Reel NON-STD LEAD FREE CODES (MVW)* Contact Marketing STD LEAD FREE CODES (HWV/HVX) EK = Bulk (1/2 & 3/4 only) EL = Lacer EE = Reel (1/2 & 3/4 only) STD TIN/LEAD CODES (HWV/HVX) BJ = Bulk (1/2 & 3/4 only) LB = Lacer RC = Reel (1/2 & 3/4 only) NON-STD TIN/LEAD CODES (HWV/HVX) Contact Marketing * MVW product does not contain lead</p>

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	<p>To STANDARD LEAD FREE CODES (HVW & HVX only) EK = Bulk pack, big box (1/2 & 3/4 sizes only) EL = Lacer pack EE = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (1/2 & 3/4 sizes only) STANDARD CODES * BJ = Bulk pack, big box (B21, 1/2 & 3/4 sizes only) LB = Lacer pack (L05) RC = Reel pack, 0.200" pitch, 2-1/2" tape</p> <p>NON-STANDARD CODES * BK = Bulk pack, small box (B22) RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05)</p> <p>RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) R6 = Reel pack (RE6, std taping except 1,000pcs/reel) SL = Custom pack, per TPI (S51)</p> <p>B8, BF (B14) bulk pack available RD (R35), RF (R48), CR (R66), RR (RD5), WF (RE5) reel pack available * MVW product is Pb-free, HVW & HVX product is Pb-bearing spacing, no leadtrim (R19, 1/2 & 3/4 sizes only)</p> <p>VISHAY DALE FILM RESISTORS</p> <p>PES</p> <p>Value Column</p> <p>181) change R = DECIMAL K = THOUSAND M = MILLION to R = ohms K = kilohms M = Megohms</p> <p>Tolerance Column</p> <p>182) Change F = ±1.0% G = ±2.0% J = ±5.0% to F = ±1% G = ±2% J = ±5%</p> <p>T.C column</p> <p>182) change K= T-1 H=T-2 to H = ±50ppm/°C (T-2) K = ±100ppm/°C (T-1)</p> <p>Packaging Column</p> <p>183) change LEAD FREE CODES K = THOUSAND M = MILLION Check datasheet for available value range PES ¼ EK = Bulk TIN/LEAD CODES BF = Bulk to STANDARD LEAD FREE CODES EK = Bulk pack STANDARD TIN/LEAD CODES BF = Bulk pack (B14)</p> <p>Vishay Dale Networks MSM (Military M83401/04, /05, /06, /07, /08, /09)</p> <p>199) change title „VISHAY DALE NETWORK/ARRAY RESISTORS MSM (Military M83401/04, /05, /06, /07, /08, /09)" TO „VISHAY DALE NETWORKS MSM (Military M83401/04, /05, /06, /07, /08, /09)"</p> <p>200) change Column Heading title „MODEL" TO „MILITARY STYLE"</p> <p>201) add column „MIL. SPEC. SHEET"</p> <p>MILITARY STYLE column</p> <p>202) remove M8340104</p> <p style="padding-left: 40px;">M8340105</p> <p style="padding-left: 40px;">M8340106</p> <p style="padding-left: 40px;">M8340107</p> <p style="padding-left: 40px;">M8340108</p> <p style="padding-left: 40px;">M8340109</p> <p>203) add M83401</p> <p>MIL. SPEC. SHEET column</p> <p>204) add 04 = MSM06C</p> <p style="padding-left: 40px;">05 = MSM08C</p> <p style="padding-left: 40px;">06 = MSM10C</p> <p style="padding-left: 40px;">07 = MSM06A</p> <p style="padding-left: 40px;">08 = MSM08A</p> <p style="padding-left: 40px;">09 = MSM10A</p>

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	<p>TC column 205) change K = ± 100ppm TO K = ± 100ppm/$^{\circ}$C M = ± 300ppm M = ± 300ppm/$^{\circ}$C</p> <p>VALUE column 206) remove „Per std. Mil. Spec Check datasheet for available value range“ 207) add „For C and G schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an “R” is used as a decimal placeholder.“ 208) add „For H schematic: Per std MIL spec resistance designator table (All are in format “Axxx”)“ 209) add „(NOTE: P/N FORMAT PER MILPRF-83401)“ 210) add „Check data sheet for available value range“</p> <p>TOLERANCE column 211) change F = $\pm 1.0\%$ TO F = $\pm 1\%$ G = $\pm 2.0\%$ G = $\pm 2\%$ J = $\pm 5.0\%$ J = $\pm 5\%$</p> <p>SCHEMATIC column 212) change „C” TO „C = Bussed, pin “1” common (01)“ change „G” TO „G = Isolated (03)“ change „H” TO „H = Dual Terminator (05)“</p> <p>PACKAGING column 213) change „STD TIN/LEAD CODES” TO „STANDARD TIN/LEAD CODES” change „STD TIN/LEAD SLDC CODES” TO „STANDARD TIN/LEAD SLDC CODES” change „NON-STD TIN/LEAD CODES” TO „NON-STANDARD TIN/LEAD CODES”</p> <p>STANDARD TIN/LEAD CODES 214) change „D03 = tube” TO „D03 = Tube pack”</p> <p>STANDARD TIN/LEAD SLDC CODES 215) change „DSL = Tube” TO „DSL = Tube pack, SLDC”</p> <p>NON-STANDARD TIN/LEAD CODES 216) remove „Contact Marketing” 217) add D29 = Tube pack, parts packaged side-by-side S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S30 special pack available</p> <p>Vishay Dale Networks MDRC 218) change SAP Description „MDRC-1641-500G E04 e3” TO „MDRC-1641-500G E04 e1”</p> <p>VALUE column 219) change „First two are significant digits, 3rd is multiplier.” TO „(value in ohms) 3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier.”</p> <p>TOLERANCE column 220) change „S = Special, none” TO „S = Special, per TPI”</p>

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	<p>PACKAGING column</p> <p>221) change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „STD TIN/LEAD SLDC CODES“ TO „STANDARD TIN/LEAD SLDC CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD TIN/LEAD CODES</p> <p>222) change „E04* = tube“ TO „E04 = Tube pack“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>223) remove „Contact Marketing“ and „Leadfree version not currently released“</p> <p>224) add D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available</p> <p>SPECIAL column</p> <p>225) change „S1 Dash #'s S1 thru S99 as applicable“ TO „Dash #'s 1 thru 999 as applicable“</p> <p>226) add Blank = Standard Example: 1 = S1 10 = S10</p> <p>Vishay Dale Networks MDP (45,46)</p> <p>227) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS MDP (45, 46)“ TO „VISHAY DALE NETWORKS MDP (45, 46)“</p> <p>228) change SAP Description „MDP16-45 E04 e3“ TO „MDP16-45 E04 e1“</p> <p>229) change Column Heading „PINS“ TO „PIN COUNT“</p> <p>SCHEMATIC column</p> <p>230) change „45“ TO „45 = TTL/ECL Translator“ change „46“ TO „46 = Signal Terminator“</p> <p>PACKAGING column</p> <p>231) change „STD LEADFREE CODES**“ TO „STANDARD LEAD FREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEAD FREE CODES</p> <p>232) change „E04* = Tube“ TO „E04 = Tube pack“</p> <p>STANDARD TIN/LEAD CODES</p> <p>233) change „D04 = Tube“ TO „D04 = Tube pack“</p> <p>235) add D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic</p>

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	<p>S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available</p> <p>236) remove „*Leadfree version not currently released“ SPECIAL column 237) add „Blank = Standard“ 238) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering“</p> <p>Vishay Dale Networks MDP (05)</p> <p>239) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS MDP (05)“ TO „Vishay Dale Networks MDP (05)“ 240) change SAP Description „MDP16-05-161/261G 2% E04 e3“ TO „MDP16-05-161/261G 2% E04 e1“ SCHEMATIC column 241) change „05“ TO „05 = Dual Terminator“ TOLERANCE column 242) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10% S = Special, none S = Special, per TPI</p> <p>PACKAGING column 243) change „STD LEADFREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“ STANDARD LEAD FREE CODES 244) change „E04* = Tube“ TO „E04 = Tube pack“ STANDARD TIN/LEAD CODES 245) change „D04 = Tube“ TO „D04 = Tube pack“ NON-STANDARD TIN/LEAD CODES 246) remove „Contact Marketing“ 247) add D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available</p> <p>248) remove „*Leadfree version not currently released“ SPECIAL column 249) add „Blank = Standard“ 250) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering“</p>

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	<p>Vishay Dale Networks MDP(01, 03, 00)</p> <p>251) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS MDP (01, 03, 00)“ TO „Vishay Dale Networks MDP(01, 03, 00)“</p> <p>252) change SAP Description „MDP14-05- 221/271G 2% E04 e3“ TO „MDP14-05- 221/271G 2% E04 e1“</p> <p>SCHEMATIC column</p> <p>253) add „STANDARD“ and „NON-STANDARD“</p> <p>STANDARD</p> <p>254) change "01" TO „01 = Bussed, pin "n" common" change „03" TO „03 = Isolated"</p> <p>NON-STANDARD</p> <p>255) change „00" TO „00 = Custom, per TPI" VALUE column</p> <p>256) change R = DECIMAL TO R = ohms K = THOUSAND K = kilohms M = MILLION M = Megohms</p> <p>257) add „0000 = 0 Ohm Jumper" add „XXXX = Special (value per TPI)"</p> <p>258) remove „If no value/value code is displayed, use X as filler. 0000 = 0 Ohm Jump" TOLERANCE column</p> <p>259) change F = $\pm 1.0\%$ TO F = $\pm 1\%$ G = $\pm 2.0\%$ G = $\pm 2\%$ J = $\pm 5.0\%$ J = $\pm 5\%$ K = $\pm 10.0\%$ K = $\pm 10\%$ S = Special, none S = Special, per TPI Z = 0 Ohm Jump Z = 0 Ohm Jumper</p> <p>PACKAGING column</p> <p>260) change „STD LEADFREE CODES*" TO „STANDARD LEAD FREE CODES" change „STD TIN / LEAD CODES" TO „STANDARD TIN/LEAD CODES" change „NON-STD TIN / LEAD CODES" TO „NON-STANDARD TIN/LEAD CODES"</p> <p>STANDARD LEAD FREE CODES</p> <p>261) change „E04* = Tube" TO „E04 = Tube pack" STANDARD TIN/LEAD CODES</p> <p>262) change „D04 = Tube" TO „D04 = Tube pack" NON-STANDARD TIN/LEAD CODES</p> <p>263) remove „Contact Marketing"</p> <p>264) add D02 = Tube pack, plugged S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available</p> <p>265) remove „*Leadfree version not currently released"</p>

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	<p>SPECIAL column</p> <p>266) add „Blank = Standard“</p> <p>267) add „GENERAL USAGE DASH NUMBERS 399 = Backside soldering“</p> <p>Vishay Dale Networks MDM (Military M83401/01, /02)</p> <p>268) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS MDM (Military M83401/01, /02)“ TO „Vishay Dale Networks MDM (Military M83401/01, /02)“</p> <p>269) remove MODEL column</p> <p>270) add MILITARY STYLE column and MIL. SPEC SHEET column</p> <p>MILITARY STYLE</p> <p>271) add „M83401“</p> <p>MIL.SPEC. SHEET column</p> <p>272) add 01 = MDM14 02 = MDM16</p> <p>TC column</p> <p>273) change M = $\pm 300\text{ppm}$ TO K = $\pm 100\text{ppm}/^\circ\text{C}$ K = $\pm 100\text{ppm}$ M = $\pm 300\text{ppm}/^\circ\text{C}$</p> <p>VALUE column</p> <p>274) remove „Per std Mil. Code“</p> <p>275) add „For A and B schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an “R” is used as a decimal placeholder.“</p> <p>276) add „For J schematic: Per std MIL spec resistance designator table (All are in format “Axxx”)“</p> <p>277) add „(NOTE: P/N FORMAT PER MILPRF-83401)“</p> <p>TOLERANCE column</p> <p>278) change F = $\pm 1.0\%$ TO F = $\pm 1\%$ G = $\pm 2.0\%$ G = $\pm 2\%$ J = $\pm 5.0\%$ J = $\pm 5\%$</p> <p>SCHEMATIC column</p> <p>279) arrange value as (ABJ)</p> <p>280) change „A“ TO „A = Isolated (03)“ change „B“ TO „B = Bussed, pin “n” common (01)“ change „J“ TO „J = Dual Terminator (05)“</p> <p>PACKAGING column</p> <p>281) change „STD LEADFREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEAD FREE CODES</p> <p>282) change „D04 = Tube“ TO „D04 = Tube pack“</p> <p>STANDARD TIN/LEAD CODES</p> <p>283) change „DSL = Tube“ TO „DSL = Tube pack SLDC“</p>

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	<p>NON-STANDARD TIN/LEAD CODES</p> <p>284) remove „Contact Marketing“</p> <p>285) add D02 = Tube pack, plugged</p> <p style="padding-left: 20px;">S13 = Tube pack, 5 tube/bundle, with antistatic overpack</p> <p style="padding-left: 20px;">S14 = Tube pack, 1 tube/bundle, with antistatic overpack</p> <p style="padding-left: 20px;">S15 = Tube pack, individual unit packaging, antistatic</p> <p style="padding-left: 20px;">M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available</p> <p style="padding-left: 20px;">S03, S10, S11, S30 special pack available</p> <p>Vishay Dale Networks MCMB / MCML / MCMU</p> <p>286) change Title „VISHAY DALE NETWORKS MCMB / MCML / MCMU“ TO „Vishay Dale Networks MCMB / MCML / MCMU“</p> <p>VERSION column</p> <p>287) change „1 thru 999 Also 01S8 thru 04S11“ TO „1 thru 999 (for all models) and 01S1 thru 04S11 (for MCMB only) as required“</p> <p>288) remove „(Example 01S9, 03S11, 04S9, etc.)“</p> <p>289) add 1 = S1</p> <p style="padding-left: 20px;">2 = S2</p> <p style="padding-left: 20px;">01S9</p> <p style="padding-left: 20px;">03S11</p> <p style="padding-left: 20px;">04S9</p> <p>Vishay Dale Networks DFRC</p> <p>290) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS DFRC“ TO „Vishay Dale Networks DFRC“</p> <p>291) change Column Heading „SPECIAL 1 digit“ TO „SPECIALS 1 TO 3 digit“</p> <p>SCHEMATIC column</p> <p>292) remove 01, 03, & 00</p> <p>293) change „10“ TO „10 = Custom, per TPI“</p> <p>PACKAGING column</p> <p>294) change „STD LEADFREE CODES“ TO „STANDARD LEAD FREE CODES“</p> <p style="padding-left: 20px;">change „STD TIN / LEAD CODES“ TO „STANDARD TIN/LEAD CODES“</p> <p style="padding-left: 20px;">change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEAD FREE CODES</p> <p>295) change „E05* = Tube“ TO „E05 = Tube pack“</p> <p>STANDARD TIN/LEAD CODES</p> <p>296) change „D05 = Tube“ TO „D05 = Tube pack“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>297) remove „Contact Marketing =“</p> <p>298) add S13 = Tube pack, 5 tube/bundle, with antistatic overpack</p> <p style="padding-left: 20px;">S14 = Tube pack, 1 tube/bundle, with antistatic overpack</p> <p style="padding-left: 20px;">S15 = Tube pack, individual unit packaging, antistatic</p> <p style="padding-left: 20px;">S51 = Custom pack, per TPI</p> <p style="padding-left: 20px;">M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available</p> <p style="padding-left: 20px;">S03, S10, S11, S30 special pack available</p>

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	<p>SPECIALS column 299) add „1 thru 999 as required“ 300) add „Blank = Standard“ 301) change S1 = 1 TO 1 = S1 S2 = 2 2 = S2</p> <p>Vishay Dale Networks DFP 302) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS DFP“ TO „Vishay Dale Networks DFP“ 303) change SAP Part Number „DFP140110K0GD05“ TO „DFP141210K0GD05“ 304) change SAP Description „DFP14-01 10K 2% D05“ TO „DFP14-12 10K 2% D05“</p> <p>SCHEMATIC column 305) add „STANDARD“ and „NON-STANDARD“ category</p> <p>STANDARD 306) change „11“ TO „11=Isolated“ change „12“ TO „12=Bussed, pin “n” common“</p> <p>NON-STANDARD 307) change „10“ TO “10 = Custom, per TPI”</p> <p>VALUE column 308) change R = DECIMAL TO R = ohms K = THOUSAND K = kilohms M = MILLION M = Megohms</p> <p>309) add „0000 = 0 ohm jumper“ 310) add „XXXX = Special (value per TPI)“ 311) remove „If no value/value code displayed, use X as filler.“</p> <p>TOLERANCE column 312) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% S = Special, none S = Special, per TPI</p> <p>313) add „Z = 0 ohm jumper“</p> <p>PACKAGING column 314) change „STD LEADFREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEAD FREE CODES 315) change „E05* = Tube“ TO „E05 = Tube pack“</p> <p>STANDARD TIN/LEAD CODES 316) change „D05 = Tube“ TO „D05 = Tube pack“</p>

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	<p>NON-STANDARD TIN/LEAD CODES</p> <p>317) add S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S10, S11, S30 special pack available</p> <p>318) remove „Contact Marketing“</p> <p>Vishay Dale Networks DFM (Military M83401/03)</p> <p>319) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS DFM (Military M83401/03)“ TO „Vishay Dale Networks DFM (Military M83401/03)“</p> <p>320) change SAP Description „DFM14-15-820/131G 2% M M8340103MA001G JD05“ TO „DFM14-15-820/131 G 2% M M8340103MA001GJ D05“</p> <p>MILITARY STYLE column</p> <p>321) change „DFM = M83401“ TO „M83401“</p> <p>MIL. SPEC. SHEET</p> <p>322) change „03“ TO „03 = DFM14“</p> <p>TC column</p> <p>323) change K = 100PPM TO K = $\pm 100\text{ppm}/^{\circ}\text{C}$ M = 300PPM M = $\pm 300\text{ppm}/^{\circ}\text{C}$</p> <p>VALUE column</p> <p>324) remove „Std. Mil. Code“</p> <p>325) add „For A and B schematics: 4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an “R” is used as a decimal placeholder.“</p> <p>356) add „For J schematic: Per std MIL spec resistance designator table (All are in format “Axxx”)“</p> <p>357) add „(NOTE: P/N FORMAT PER MILPRF-83401)“</p> <p>TOLERANCE column</p> <p>358) change F = $\pm 1.0\%$ TO F = $\pm 1\%$ G = $\pm 2.0\%$ G = $\pm 2\%$ J = $\pm 5.0\%$ J = $\pm 5\%$</p> <p>SCHEMATIC column</p> <p>359) change A TO A = Isolated, pin “n” common (11) B B = Bussed (12) J J = Dual Terminator (15)</p> <p>PACKAGING column</p> <p>360) change „STD LEADFREE CODES**“ TO „STANDARD TIN/LEAD FREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN/LEAD SLDC CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD TIN/LEAD FREE CODES</p> <p>361) change „D05 = Tube“ TO „d05 = Tube pack“</p> <p>STANDARD TIN/LEAD SLDC CODES</p> <p>362) change „DSL = Tube“ TO „DSL = Tube pack SLDC“</p>

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	<p>NON-STANDARD TIN/LEAD CODES</p> <p>363) add S13 = Tube pack, 5 tube/bundle, with antistatic overpack S14 = Tube pack, 1 tube/bundle, with antistatic overpack S15 = Tube pack, individual unit packaging, antistatic S51 = Custom pack, per TPI M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15 heat seal pack available S03, S07, S11, S30 special pack available</p> <p>364) remove „Contact Marketing“</p> <p>Vishay Dale Networks CZA</p> <p>365) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS CZA“ TO „Vishay Dale Networks CZA“</p> <p>TERMINAL column</p> <p>367) remove E, and P</p> <p>368) change „S“ TO „S = Convex, square corner“</p> <p>ATTENUATION column</p> <p>369) remove all values under this column</p> <p>370) add 005 = 0.5 dB 010 = 1 dB 015 = 1.5 dB 020 = 2 dB 030 = 3 dB 040 = 4 dB 050 = 5 dB 060 = 6 dB 070 = 7 dB 080 = 8 dB 090 = 9 dB 100 = 10 dB</p> <p>371) add 110 = 11 dB 120 = 12 dB 130 = 13 dB 140 = 14 dB 150 = 15 dB 160 = 16 dB 170 = 17 dB 180 = 18 dB 190 = 19 dB 200 = 20 dB</p> <p>372) add „000 = 0 dB or 0 ohm jumper“</p>

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	<p>IMPEDANCE column</p> <p>373) change „050“ TO „050 = 50 ohm“ change „100“ TO „100 = 100 ohm“ change „300“ TO „300 = 300 ohm“ change „600“ TO „600 = 600 ohm“ change „000 = 0 Omega jumper“ TO „000 = 0 ohm jumper“</p> <p>374) add „075 = 75 ohm“ add „NOTE: For 0 dB part, use impedance of 50 ohm to 600 ohm, not “000”“</p> <p>TOLERANCE column</p> <p>375) change „H = ±0.5 Db%“ TO „H = ±0.5 dB (for attenuations of 6 dB or greater)“ change „Z = ±0%“ TO „Z = 0 ohm jumper“ change „L = ±0.3 Db%“ TO „L = ±0.3 dB (for attenuations less than 6 dB)“</p> <p>PACKAGING column</p> <p>376) change „STD LEAD FREE CODES**“ TO „STANDARD LEADFREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN / LEAD CODES“</p> <p>STANDARD LEADFREE CODES</p> <p>377) change „EA* = Reel“ TO „EA = Reel pack, std taping, 7” reel“</p> <p>STANDARD TIN / LEAD CODES</p> <p>378) change „TD = Reel (04 only)“ TO „TD = Reel pack, 8mm paper tape, 2mm pocket pitch, 7” reel (RT7, 04- size only)“ change „RT = Reel (06 only)“ TO „RT = Reel pack, 8mm embossed tape, 4mm pocket pitch, 7” reel (RG5, 06-size only)“</p> <p>379) remove „* Leadfree version not currently released“</p> <p>SPECIALS column</p> <p>380) add „Blank = Standard“</p> <p>Vishay Dale Networks CSRC</p> <p>381) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS CSRC“ TO „Vishay Dale Networks“</p> <p>382) change Column Heading „PACKAGE“ TO „PACK. HEIGHT“ change Column Heading „RESISTANCE/TOLERANCE“ TO „RESITANCE TOLERANCE“</p> <p>PACK. HEIGHT</p> <p>383) change „B“ TO „B = Medium profile“ change „C“ TO „C = High profile“</p> <p>RESISTANCE VALUE</p> <p>384) remove „If Special, use 3 character dash #“</p> <p>PACKAGING column</p> <p>385) change „STD LEAD FREE CODES**“ TO „STANDARD LEADFREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN / LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEADFREE CODES</p> <p>386) change „E* = Bulk“ TO „E = Bulk pack“</p> <p>STANDARD TIN / LEAD CODES</p> <p>387) change „P = Bulk“ TO „P = Bulk pack (P03)“</p>

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NON-STANDARD TIN/LEAD CODES
388) add M = Heat seal pack (m11)|
389) remove „* Leadfree version not currently released = bulk”
Remove „Contact Marketing”
Vishay Dale Networks CSC (05)
390) change Title „VISHAY DALE NETWORK/ARRAY RESISTORS CSC (05)” TO „Vishay Dale Networks CSC (05)”
PIN COUNT column
391) add 13, 14, 15, 16, 17, 18
PACK. HEIGHT
392) add „STANDARD” and „NON-STANDARD”
STANDARD
393) change „A” TO „A = Low profile”
change „B” TO „B = Medium profile”
NON-STANDARD
394) change „C” TO „C = High profile”
SCHEMATIC
395) change „05” TO 05 = Dual Terminator
TOLERANCE
396) change F = ±1.0% TO F = ±1%
G = ±2.0% G = ±2%
J = ±5.0% J = ±5%
397) add „S = Special, per TPI”
PACKAGING column
398) change „STD LEAD FREE CODES” TO „STANDARD LEADFREE CODES”
change „STD TIN / LEAD CODES” TO „STANDARD TIN / LEAD CODES”
change „NON-STD TIN / LEAD CODES” TO „NON-STANDARD TIN/LEAD CODES”
STANDARD LEADFREE CODES
399) change „EK* = Bulk” TO „EK = Bulk pack”
STANDARD TIN / LEAD CODES
400) change „EJ* = Tube” TO „EJ = Tube pack”
NON-STANDARD TIN/LEAD CODES
401) change „PA = Bulk” TO „PA = Bulk pack (P03)”
402) add MA = Heat seal pack (M11)
DA = Tube pack (D03)
WE = Tray pack (T12)
403) remove „* Leadfree version not currently released”
remove „Contact Marketing” SPECIAL column
404) add „Blank = Standard”
Vishay Dale Networks CSC (01, 03, 00)
405) change title „VISHAY DALE NETWORK/ARRAY RESISTORS CSC (01, 03, 00)” TO „Vishay Dale Networks CSC (01, 03, 00)”
406) change Columg Heading „Height” TO „PACK. HEIGHT”
PACK. HEIGHT
407) add „STANDARD” and „NON-STANDARD”

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	<p>STANDARD</p> <p>408) change „A“ TO „A = Low profile“ change „B“ TO „B = Medium profile“</p> <p>NON-STANDARD</p> <p>409) change „C“ TO „C = High profile“</p> <p>PIN COUNT</p> <p>410) add 13, 14, 15, 16, 17, 18</p> <p>411) remove „Even count for 03 schematic“</p> <p>SCHEMATIC</p> <p>412) remove all values under this column</p> <p>413) add „STANDARD“ and „NON-STANDARD“</p> <p>STANDARD</p> <p>414) add 01 = Bussed, pin “1” common 03 = Isolated (even pin counts only)</p> <p>NON-STANDARD</p> <p>415) add 02 = Combined group resistors 04 = Bussed, pin “1” and “n” common 06 = Bussed, middle pin common (odd pin counts only) 07 = Bussed, pin “n” common 00 = Custom, per TPI</p> <p>VALUE column</p> <p>416) change „R = DECIMAL“ TO „R = ohms“ change „K = THOUSAND“ TO „K = kilohms“ change „M = MILLION“ TO „M = Megohms“</p> <p>417) add „0000 = 0 ohm jumper or special (value per TPI)“</p> <p>TOLERANCE column</p> <p>418) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5%</p> <p>PACKAGING column</p> <p>419) change „STD LEAD FREE CODES“ TO „STANDARD LEADFREE CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>420) add NON-STANDARD LEAD FREE CODES STANDARD LEAD FREE CODES</p> <p>421) change „EK“ = Bulk“</p> <p>NON-STANDARD LEAD FREE CODES</p> <p>422) change „EJ“ TO „EJ = Tube pack“</p> <p>NON-STANDARD TIN / LEAD CODES</p> <p>423) add PA = Bulk pack (P03) MA = Heat seal pack (M11) DA = Tube pack (D03) WE = Tray pack (T12) SL = Custom pack, per TPI (S51)</p>

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	<p>SPECIALS</p> <p>424) add „Blank=Standard.“</p> <p>Vishay Dale Network/Array Resistors CS206</p> <p>424) change in SAP Description „CS20608CTC102J101K E e3“ TO „CS20608CTC102J101K E e1“ change in SAP Description „CS20608CTC102J101K-S2 E e3“ TO „CS20608CTC102J101K-S2 E e1“</p> <p>425) change in Colum heading „MODEL 3 TO 5 DIGITS“ TO „MODEL 3 DIGITS“ change in Column Heading „CAP. VALUE“ TO „CAPACITANCE VALUE“ change in Column Heading „TOLERANCE“ TO „CAPACITANCE TOLERANCE“</p> <p>PACK & SCHEMATIC column</p> <p>426) change „S = Special (always C)“ TO „S = Special (package height always “C”)“</p> <p>CAP. DIELECTRIC column</p> <p>427) change C TO C = C0G X X = X7R S = Special always 00) S = Special, per TPI</p> <p>RESISTANCE VALUE column</p> <p>428) remove „First two are significant digits, 3rd is multiplier. 000 = Special (always null)“</p> <p>429) add „3-digit numeric code (in ohms) where the first two digits are the significant figures and the last digit is the multiplier.“ add „000 = Special (always null)“</p> <p>RESISTANCE TOL column</p> <p>430) add „F = ±1%“</p> <p>CAPACITANCE VALUE</p> <p>431) remove „First two are significant digits, 3rd is multiplier.“</p> <p>432) add „3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.“ add „Check data sheet for available value range“</p> <p>CAPACITANCE TOLERANCE column</p> <p>434) change „S = Special (always null)“ TO „S = Special, per TPI“</p> <p>PACKAGING column</p> <p>435) change „STD LEAD FREE CODES*“ TO „STANDARD LEADFREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN / LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEADFREE CODES</p> <p>436) change „E* = Bulk“ TO „E = Bulk pack“</p> <p>STANDARD TIN / LEAD CODES</p> <p>437) change „P = Bulk“ TO „P = Bulk pack (P03)“</p> <p>NON-STANDARD TIN / LEAD CODES</p> <p>438) add „M = Heat seal pack (M11)“</p> <p>439) remove „Contact Marketing“</p> <p>440) remove „* Leadfree version not 13 currently Released“</p> <p>SPECIAL column</p> <p>441) add „AA to ZZ as needed“ add „Blank = Standard“</p>

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	<p>Vishay Dale Networks CS201</p> <p>442) change in SAP Description „CS20110D3X103K5 E e3“ TO „CS20110D3X103K5 E e1“</p> <p>443) change in Column Heading „MODEL 3 to 4 Digits“ TO „MODEL 3 digits“ change in Column Heading „TOLERANCE“ TO „CAP. TOLERANCE“</p> <p>SCHEMATIC column</p> <p>444) change 1 = 01 TO 1 = Bussed, pin “1” common (01) 3 = 03 3 = Isolated (03; even pin counts only) 4 = 04 4 = Bussed, pin “1” and “n” common (04) 0 = 00 0 = Custom, per TPI (00)</p> <p>CAP. DIELECTRIC</p> <p>445) change C TO C = C0G X X = X7R</p> <p>CAP VALUE column</p> <p>446) remove „First two are significant digits, 3rd is multiplier. 000 = Special“</p> <p>447) add „3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.“ add „000 = Special“</p> <p>CAP. TOLERANCE</p> <p>448) change „S = Special“ TO „S = Special, per TPI“</p> <p>CAPACITOR VOLTAGE column</p> <p>449) change „S = Special“ TO „S = Special, per TPI“</p> <p>450) add „1 = 100V“</p> <p>PACKAGING column</p> <p>451) change „STD LEAD FREE CODES**“ TO „STANDARD LEADFREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN / LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEADFREE CODES</p> <p>452) change „E* = Bulk“ TO „E =Bulk pack“</p> <p>STANDARD TIN / LEAD CODES</p> <p>453) change „P = Bulk“ TO „P = Bulk pack (P03)“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>454) add „M = Heat seal pack (M11)“</p> <p>455) remove „Contact Marketing“</p> <p>SPECIAL column</p> <p>456) change „1 thru 999“ TO „1 thru 999 as required“</p> <p>457) add „Blank = Standard“</p> <p>Vishay Dale Networks CRCA</p> <p>458) change in Title „VISHAY DALE NETWORK/ARRAY RESISTORS CRCA“ TO „Vishay Dale Networks CRCA“</p> <p>459) change in Column Heading „PIN“ TO „PIN COUNT“ change in Column Heading „CIRCUIT“ TO „SCHEMATIC“ change in Column Heading „CAP. VALUE“ TO „CAPACITANCE VALUE“</p>

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	<p>TERMINAL column 460) remove P 461) change „S“ TO „S = Convex, square corner“ change „E“ TO „E = Convex, scalloped corner“</p> <p>PIN COUNT 462) remove „16“</p> <p>SCHEMATIC 463) change „0 = SPECIAL“ TO „0 = Custom, per TPI“</p> <p>RESISTANCE VALUE column 464) remove „First two digits significant, last digit signifies multiplier. Assume Tol $\pm 5\%$ = J“ 465) add „3-digit numeric code (in ohms) where the first two digits are the significant figures and the last digit is the multiplier.“ add „Tolerance is $\pm 5\%$ (J)“</p> <p>CAPACITANCE column 466) remove „In picofarad, first two digits significant, last digit is multiplier. Assume Tol $\pm 20\%$ = M“ 467) add „3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.“ add „Tolerance is $\pm 20\%$ (M)“ add „Check data sheet for available value“</p> <p>PACKAGING column 468) change „STD LEAD FREE CODES“ TO „STANDARD LEADFREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN / LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEADFREE CODES 469) change „E = Reel“ TO „E = Reel pack, 12mm Embossed tape, 8mm pocket pitch, 7” reel“</p> <p>STANDARD TIN / LEAD CODES 470) change „R = Reel“ TO „R = Reel pack, 12mm Embossed tape, 8mm pocket pitch, 7” reel (RB8)“</p> <p>NON-STANDARD TIN/LEAD CODES 471) remove „Contact Marketing“ 472) add „M = Heat seal pack (M11)“</p> <p>SPECIAL column 473) change „1 thru 9“ TO „Dash #'s 1 thru 9 as applicable“ 474) add „Blank = Standard“</p> <p>NEW Vishay Dale Film Resistors Fast Track Program (cont 3 of 3) 475) add new SAP Part Number „FSTTRK10DALEFFCOM“ and „FSTTRK20R-CHIPMIL“ 476) add new SAP Description „FSTTRK10DALEFFCOM S31“ and „FSTTRK20R-CHIPMIL S31“ 477) add note „Standard packaging code S31 for all part numbers“ 478) add CHARGE column, LEAD TIME column, RESISTOR STYLE column</p> <p>CHARGE column 479) add „FSTTRK“</p>

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	<p>LEAD TIME column 480) add 05 = 5 working days 10 = 10 working days 15 = 15 working days 20 = 20 working days</p> <p>RESISTOR STYLE column 481) add DALEFFMIL = Dale Leaded-Film Military (Material Group FF1) DALEFFCOM = Dale Film Leaded Commercial (Material Group FF2) R-CHIPMIL = Dale R-Chips (SMD) Military (Material Group FF3)</p> <p>Vishay Dale Film Resistors LOT Charges (cont 2 of 3) 482) change in Title „VISHAY DALE FILM RESISTORS MISCELLANEOUS (cont 2 of 3)“ TO „Vishay Dale Film Resistors LOT Charges (cont 2 of 3)“ 483) change in SAP Description „Part number for Dale Film military surface mount charges, packaging S31“ TO „LOTCHG-R-CHIPMIL S31“ 484) add SAP Part Number „LOTCHG-DALEFILMMIL“ add SAP Description „LOTCHG-DALEFILMMIL S31“ add Note „Standard packaging code S31 for all part numbers“</p> <p>RESISTOR STYLE column 485) remove all data under this column 486) add DALEFILMMIL = Dale Leaded-Film Military (Material Group FF1) DALEFILMCOM = Dale Leaded Film Commercial (Material Group FF2) R-CHIPMIL = Dale R-Chips (SMD) Military (Material Group FF3)</p> <p>Vishay Dale Networks Miscellaneous (cont 1 of 3) 487) change in Title „VISHAY ANGSTROHM FILM RESISTORS MISCELLANEOUS / CHARGES (cont 1 of 3)“ TO „Vishay Dale Networks Miscellaneous (cont 1 of 3)“ 488) change and arrange SAP Description „(Part number for 810187-06 reel plug, packaged B29)“ TO „810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)“</p> <p>PACKAGING column 489) add „Click to go to Packaging Code definition page“</p> <p>Vishay Dale Film Resistors T-Series VALUE column 490) change M = Million TO M = Megohms G = GIGA G = Gigohms</p> <p>TOLERANCE column 491) change J = $\pm 5.0\%$ TO J = $\pm 5\%$ K = $\pm 10.0\%$ K = $\pm 10\%$</p> <p>PACKAGING column 492) change „STD LEAD FREE CODES**“ TO „STANDARD LEADFREE CODES“ change „STD TIN / LEAD CODES“ TO „STANDARD TIN / LEAD CODES“ change „NON-STD TIN / LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>493) add „NON-STANDARD LEAD FREE CODES“ STANDARD LEADFREE CODES</p> <p>494) change „E21* = Bulk“ TO „E21 = Bulk pack, big box“</p>

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	<p>STANDARD TIN / LEAD CODES 495) change „B21 = Bulk“ TO „B21 = Bulk pack, big box“ NON-STANDARD LEADFREE CODES 496) add „E22 = Bulk pack, small box“ NON-STANDARD TIN / LEAD CODES 497) add B14 = Bulk pack B22 = Bulk pack, small box S51 = Custom pack, per TPI SPECIAL column 498) add „Blank = Standard“ Vishay Dale Film Resistors SPWC SIZE column 499)remove 104A 104B 104C 500) add 0104 0105 0204 0205 VALUE column 501) change „R = decimal“ TO „R = ohms“ TOLERANCE column 502) change „J = ±5.0%“ TO „J = ±5%“ PACKAGING column 503) change „STD CODES“ TO „STANDARD CODES“ STANDARD CODES 504) change „SL = per TPI“ TO „SL = Custom pack, per TPI (S51)“ SPECIAL column 505) add „Blank = Standard“ Vishay Dale Film Resistors SPW SIZE column 506) add „001 thru 999“ add „(Standard Catalog sizes)“ VALUE column 507) change „R = decimal“ TO „R = ohms“ TOLERANCE column 508) change G = ±2.0% TO G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10% PACKAGING column 509) change „STD CODES“ TO „STANDARD CODES“</p>

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	<p>STANDARD CODES 510) change „SL = per TPI“ TO „SL = Custom pack, per TPI (S51)“ SPECIAL column 511) add „Blank = Standard“</p> <p>NEW Vishay Dale Film Resistors SPF 514) add SAP Part Number „SPF-13“ and „SPF-172-2“ 515) add SAP Description „SPF-13 S51“ and „SPF-175-2 S51“ 516) add Note „Standard packaging code S51 for all part numbers“ 517) add MODEL column, TYPE column, SPECIAL column MODEL column 518) add „SPF“ TYPE column 519) add -1 thru -999 -2 -5 -34 -76 -101 -186</p> <p>SPECIAL column 517) add „-xxx (only if needed, where xxx = 1 thru 999)“</p> <p>Vishay Dale Film Resistors RZY 518) add SAP Part Number „RZY1F02“ 519) add SAP Description „RZY-1 F02“ PACKAGING column 520) change „STD CODES“ TO „STANDARD TIN / LEAD CODES“ change „NON-STD CODES“ TO „NON-STANDARD TIN / LEAD CODES“ STANDARD TIN / LEAD CODES 521) change „S51 = see TPI“ TO „S51 = Custom pack, per TPI“ NON-STANDARD TIN / LEAD CODES 522) remove „Contact Marketing“ 523) add F02 = Foam pack F05 = Foam pack, 5/ea rolled diagonally in Microfoam</p> <p>SPECIAL column 524) add „Blank = Standard“</p> <p>Vishay Dale Film Resistors ROX 525) change Column Heading „OPT. CONSTRUCTION“ TO „OPTIONAL CONSTRUCTION“ VALUE column 526) change R = DECIMAL TO R = ohms K = THOUSAND K = kilohms M = MILLION M = Megohms G = GIGA G = Gigohms</p>

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	<p>TOLERANCE column 527) change D = 0.5 TO D = ±0.5% F = 1.0 F = ±1% G = 2.0 G = ±2% J = 5.0 J = ±5% K = 10.0 K = ±10%</p> <p>T.C column 528) arrange values at (H, K, N) 529) change N = T-00 TO N = ±200ppm/°C (T-00) K = T-1 K = ±100ppm/°C (T-1) H = T-2 H = ±50ppm/°C (T-2)</p> <p>PACKAGING column 530) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN/LEAD CODES“ „STANDARD TIN/LEAD CODES“ change „NON-STD TIN/LEAD CODES“ „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEAD FREE CODES 531) change „EL = Lacer“ TO „EL = Lacer pack“ change „EE = Reel“ TO „EE = Reel pack, 0.400“ pitch, 2-1/2“ tape spacing, no leadtrim“ change „EM = Foam“ TO „EM = Foam pack, 5/ea rolled diagonally in Microfoam“</p> <p>STANDARD TIN/LEAD CODES 532) change „LB = Lacer“ TO „LB = Lacer pack (L05)“ change „RF = Reel“ TO „RF = Reel pack, 0.400“ pitch, 2-1/2“ tape spacing, no leadtrim (R48)“ change „F5 = Foam“ TO „F5 = Foam pack, 5/ea rolled diagonally in Microfoam (F05)“</p> <p>NON-STANDARD TIN/LEAD CODES 533) remove „Contact Marketing“ 534) add „SL = Custom pack, per TPI (S51)“ add „RD (R35), WF (RE5), R6 (RE6) reel pack available“</p> <p>OPTIONAL CONSTRUCTION 535) change „N“ TO „N = Non-inductive (200ppm TC only)“ change „P“ TO „P = 0.040“ DIA leads“ change „S“ TO „S = Solid body, axial“ change „T“ TO „T = Threaded terminals“ change „Y“ TO „Y = One end axial, one end threaded terminal“</p> <p>536) remove „null“ 537) add „Blank = Standard“</p> <p>SPECIAL column 538) add „Blank = Standard“</p>

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	<p>Vishay Dale Film Resistors RNX</p> <p>539) change Column Heading „OPT. CONSTRUCTION“ TO „OPTIONAL CONSTRUCTION“ VALUE column</p> <p>540) change R = DECIMAL TO R = ohms K = THOUSAND K = kilohms M = MILLION M = Megohms G = GIGA G = Gigohms</p> <p>TOLERANCE column</p> <p>541) change D = 0.5 TO D = ±0.5% F = 1.0 F = ±1% G = 2.0 G = ±2% J = 5.0 J = ±5% K = 10.0 K = ±10%</p> <p>T.C column</p> <p>541) arrange values at (H, K, N)</p> <p>542) change N = T-00 TO N = ±200ppm/°C (T-00) K = T-1 K = ±100ppm/°C (T-1) H = T-2 H = ±50ppm/°C (T-2)</p> <p>PACKAGING column</p> <p>543) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN/LEAD CODES“ „STANDARD TIN/LEAD CODES“ change „NON-STD TIN/LEAD CODES“ „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEAD FREE CODES</p> <p>542) change „EL = Lacer“ TO „EL = Lacer pack“ change „EB = Reel (1k pcs)“ TO „EB = Reel pack (std taping except 1,000pcs/reel)“ change „EE = Reel (full)“ TO „EE = Reel pack, 0.200“ or 0.400“ pitch, 2-1/2“ tape spacing, no leadtrim“</p> <p>STANDARD TIN/LEAD CODES</p> <p>543) change „LB = Lacer“ TO „LB = Lacer pack (L05)“ change „RF = Reel (full)“ TO „RF = Reel pack, 0.400“ pitch, 2-1/2“ tape spacing, no leadtrim (R48)“ change „R6 = Reel (full)“ TO „F5 = Foam pack, 5/ea rolled diagonally in Microfoam (F05)“ change „RC = Reel (full)“ TO „RC = Reel pack, 0.200“ pitch, 2-1/2“ tape spacing, no leadtrim (R19)“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>544) remove „Contact Marketing“ remove „* Leadfree version not currently released“</p> <p>545) add „SL = Custom pack, per TPI (S51)“ add „BF = Bulk pack (B14)“ add „A5, RA (R05), RB (R08), RG (R20), RE (R36), WG (RE4), WF (RE5), R7 (RE7), R8 (RE8) CK (RH4) reel pack available“</p> <p>OPTIONAL CONSTRUCTION</p> <p>546) add „Blank = Standard“</p> <p>547) change „N“ TO „N = Non-inductive (200ppm TC only)“ change „P“ TO „P = 0.032“ DIA leads“</p> <p>548) remove „null“</p>

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	<p>SPECIAL column 549) add „Blank = Standard“ Vishay Dale Film Resistors RJU SIZE column 550) arrange value as (140, 150, 275, 400) VALUE column 551) change K = THOUSAND TO K = kilohms M = MILLION M = Megohms G = GIGA G = Gigohms TOLERANCE column 552) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10% T.C column 553) change N = T-00 TO K = ±100ppm/°C (T-1) K = T-1 N = ±200ppm/°C (T-00) PACKAGING column 557) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ 558) add „NON-STANDARD TIN/LEAD CODES“ STANDARD LEAD FREE CODES 559) change „E07* = Foam“ TO „E07 = Foam pack“ STANDARD TIN/LEAD CODES 560) change „F07 = Foam“ TO „F07 = Foam pack“ NON-STANDARD TIN/LEAD CODES 561) add J03 = Skin pack L05 = Lacer pack S51 = Custom pack, per TPI 562) remove „* Leadfree version not currently released“ SPECIAL column 563) add „Blank = Standard“ 564) change „Click to go to Permark codes section“ TO „Double-click below to go to Permark codes section“ Vishay Dale Film Resistors RDX 565) change Column Heading „VALUE“ TO „VALUR (R1)“ CONFIGURATION column 566) change A TO A = Axial leads B B = Radial tabs C C = Radial ends, axial tap</p>

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	<p>VALUE (R1) column</p> <p>567) change K = THOUSAND TO K = kilohms M = MILLION M = Megohms G = GIGA G = Gigohms</p> <p>TOL. Column</p> <p>568) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10%</p> <p>T.C column</p> <p>569) arrange value as (K, N)</p> <p>570) change N = T-00 TO N = ±200ppm/°C (T-00) K = T-1 K = ±100ppm/°C (T-1)</p> <p>PACKAGING column</p> <p>571) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“</p> <p>572) add „NON-STANDARD TIN/LEAD CODES“ STANDARD LEAD FREE CODES*</p> <p>573) change „E03* = Skin“ TO „E03 = Skin pack“ STANDARD TIN/LEAD CODES</p> <p>574) change „J03 = skin“ TO „J03 = Skin pack“ NON-STANDARD TIN/LEAD CODES</p> <p>575) add „S51 = Custom pack, per TPI“</p> <p>RATION column</p> <p>576) change „AB thru ZY as needed“ TO „AA to ZZ as needed“</p> <p>577) add AA = 10,000:1 AB = 5,000:1 AC = 1,000:1 AD = 2,000:1 ZZ = null, see TPI</p> <p>SPECIAL column</p> <p>578) add „Blank = Standard“</p> <p>Vishay Dale Film Resistors RCWPM-99 (DSCC Drawing Military Jumper)</p> <p>579) change Title „VISHAY DALE FILM RESISTORS RCWPM-99 (Military Jumper)“ TO „Vishay Dale Film Resistors RCWPM-99 (DSCC Drawing Military Jumper)“</p> <p>580) change in SAP Description „RCWPM-1100-99 R01“ TO „RCWPM-1100-99 87011-B R01“</p> <p>581) add SAP Part Number „RCWPM0402TN99“ add SAP Description „RCWPM-0402-99 03014-B R78“</p>

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	<p>SIZE column</p> <p>582) change 0201 TO 0201 (DSCC P/N 03011-B)</p> <p>0302 0302 (DSCC P/N 03012-B)</p> <p>0402 0402 (DSCC P/N 03014-B)</p> <p>0502 0502 (DSCC P/N 88032-B)</p> <p>0550 0550 (DSCC P/N 03002-B)</p> <p>0575 0575 (DSCC P/N 90048-B)</p> <p>0603 0603 (DSCC P/N 03013-B)</p> <p>583) change 1100 TO 1100 (DSCC P/N 87011-B)</p> <p>1206 1206 (DSCC P/N 94011-B)</p> <p>2010 2010 (DSCC P/N 03015-B)</p> <p>2512 2512 (DSCC P/N 03016-B)</p> <p>5100 5100 (DSCC P/N 90049-B)</p> <p>5150 5150 (DSCC P/N 90092-B)</p> <p>7225 7225 (DSCC P/N 90047-B)</p> <p>PACKAGING column</p> <p>584) change „STD TIN/LEAD CODES“TO „STANDARD TIN/LEAD CODES“</p> <p>change „STD TIN/LEAD SLDC CODES“TO „STANDARD TIN/LEAD SLDC CODES“</p> <p>change „NON-STD TIN/LEAD CODES“TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD TIN/LEAD CODES</p> <p>585) change „TP = Reel (full)“ TO „TP = Reel pack, Embossed carrier tape, 7" reel (R01)“</p> <p>change „S3 = Reel (1K pcs)“ TO „S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel)“</p> <p>change „S2 = Reel (500 pcs)“ TO „S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel)“</p> <p>change „S6 = Reel (300 pcs)“ TO „S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel)“</p> <p>change „WB = Tray“ TO „WB = Tray pack (T03)“</p> <p>STANDARD TIN/LEAD SLDC CODES</p> <p>586) change „UL = Reel“ TO „UL = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC“</p> <p>change „WL = Tray“ TO „WL = Tray pack, SLDC“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>587) remove „Contact Marketing“</p> <p>588) add TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78)</p> <p>SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel)</p> <p>SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel)</p> <p>ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel)</p> <p>WA = Tray pack, w/ESD (M18)</p> <p>BC (P19), BB (P23) bulk pack available</p> <p>TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA, UB, UC, UD, UE reel pack available</p> <p>T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available</p> <p>SL (S51) special pack available</p> <p>SPECIAL column</p> <p>589) change "99 as applicable" TO „99 = 0 ohm jumper“</p> <p>590) remove „Click to go to Permark codes section“</p>

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	<p>Vishay Dale Film Resistors RCWPM-99 (Military M32159 Jumper Thick Film) 591) change Title „VISHAY DALE FILM RESISTORS RCWPM-99 (Military 32159 Jumper Thick Film)“ TO „Vishay Dale Film Resistors RCWPM-99 (Military M32159 Jumper Thick Film)“ PACKAGING column 592) change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „STD TIN/LEAD SLDC CODES“ TO „STANDARD TIN/LEAD SLDC CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“ STANDARD TIN/LEAD CODES 593) change „TP = Reel (full)“ TO „TP = Reel pack, Embossed carrier tape, 7" reel (R01)“ change „S3 = Reel (1K pcs)“ TO „S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel)“ change „S2 = Reel (500 pcs)“ TO „S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel)“ change „S6 = Reel (300 pcs)“ TO „S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel)“ change „WB = Tray“ TO „WB = Tray pack (T03)“ STANDARD TIN/LEAD SLDC CODES 594) change „UL = Reel“ TO „UL = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC“ change „WL = Tray“ TO „WL = Tray pack, SLDC“ NON-STANDARD TIN/LEAD CODES 595) remove „Contact Marketing“ 596) add TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA, UB, UC, UD, UE reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available SL (S51) special pack available SUFFIX column 597) change „None = Standard (-99)“ TO „Blank = Standard (-99)“ Vishay Dale Film Resistors RCWPM (Military M/D55342 Thick Film) 598) change Title „VISHAY DALE FILM RESISTORS RCWPM (Military 55342 Thick Film)“ TO „Vishay Dale Film Resistors RCWPM (Military M/D55342 Thick Film)“ CHAR. Column 599) change K = 100PPM TO K = $\pm 100\text{ppm}/^{\circ}\text{C}$ M = 300PPM M = $\pm 300\text{ppm}/^{\circ}\text{C}$</p>

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	<p>MIL. SPEC. SHEET</p> <p>600) change 01 TO 01 = 0502 02 02 = 0550 03 03 = 5100 04 04 = 5150 05 05 = 7225 06 06 = 0575 07 07 = 1206 08 08 = 2010 09 09 = 2512 10 10 = 1100 11 11 = 0402 12 12 = 0603 13 13 = 0302</p> <p>TERMINATION column 601) change „B“ TO „B = Pre-tinned Nickel Barrier, wraparound“</p> <p>FAILURE RATE column 602) change „C (= Non-ER)“ TO „C = Non-ER“ change „M“ TO „M = 1%“ change „P“ TO „P = 0.1%“ change „R“ TO „R = 0.01%“ change „S“ TO „S = 0.001%“ change „T (= Space level)“ TO „T = Space level“</p> <p>PACKAGING column 603) change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „STD TIN/LEAD SLDC CODES“ TO „STANDARD TIN/LEAD SLDC CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD TIN/LEAD CODES 604) change „TP = Reel (full)“ TO „TP = Reel pack, Embossed carrier tape, 7" reel (R01)“ change „S3 = Reel (1K pcs)“ TO „S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel)“ change „S2 = Reel (500 pcs)“ TO „S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel)“ change „S6 = Reel (300 pcs)“ TO „S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel)“ change „WB = Tray“ TO „WB = Tray pack (T03)“</p> <p>605) add „TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78)“ add „SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel)“ add „SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel)“ add „ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel)“ add „WA = Tray pack, w/ESD (M18)“</p> <p>STANDARD TIN/LEAD SLDC CODES 606) change „UL = Reel“ TO „UL = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC“ change „WL = Tray“ TO „WL = Tray pack, SLDC“</p>

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NON-STANDARD TIN/LEAD CODES

607) remove „Contact Marketing“

608) add BC (P19), BB (P23) bulk pack available

TU (R87), TT (RT4), UL (RSL), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA, UB, UC, UD, UE reel pack available

T1 (T09), T2 (T15), T3 (T16), T4 (T17), UL (TSL) tray pack available

SL (S51) special pack available

SUFFIX column

609) change „None = Standard“ TO „Blank = Standard“

610) add „GENERAL USAGE DASH NUMBERS“

611) change „S = “T” space level, Part Marked (-97)“ TO „S = “T” space level, Part marking to MIL spec Option 1 (-97)“

change „2 = Part Marking (-20)“ TO „2 = Part marking to MIL spec Option 1 (-20)“

change „3 = Part Marking (-30)“ TO „3 = Part marking to MIL spec Options 2 and 3 (-30)“

612) remove „5 = Part Marking (-65)“

613) add „0 thru 9 or A thru Z as applicable“

Vishay Dale Film Resistors RCWP

614) change SAP Part Number „RCWP120600000MTP99“ TO „RCWP12060000ZSTP99“

615) change in SAP Description „RCWP-1206-99 M R01“ TO „RCWP-1206-99 R01“

SIZE column

616) remove 0540, 0550, 0575, 5100, 5150, 1100, 7225, 2010, 2512, 1206, 0603, 0402, 0201, 0302, 0502

617) add 0201, 0302, 0402, 0502, 0540, 0550, 0575, 0603, 1100, 1206, 2010, 2512, 5100, 5150, 7225

VALUE column

618) change R = decimal TO R = ohms

K = thousand K = kilohms

M = million M = Megohms

619) remove 1K32 = 1,320 ohm

10R0 = 10 ohm

TOLERANCE column

620) change F = ±1.0% TO F = ±1%

G = ±2.0% G = ±2%

J = ±5.0% J = ±5%

K = ±10.0% K = ±10%

621) remove „H = ±3.0%“

622) add M = ±20%

Z = 0 ohm jumper

T.C column

623) change E = 25 PPM TO E = ±25ppm/°C

H = 50PPM H = ±50ppm/°C

K = 100PPM K = ±100ppm/°C

L = 150 PPM L = ±150ppm/°C

N = 200 PPM N = ±200ppm/°C

M = 300 PPM M = ±300ppm/°C

P = 500 PPM P = ±500ppm/°C

S = SPECIAL S = Special, 0 ohm jumper

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	<p>PACKAGING column</p> <p>624) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEAD FREE CODES</p> <p>625) change „EA = Reel (full)“ TO „EA = Reel pack, Embossed carrier tape, 7" reel“ change „EB = Reel (1K pcs)“ TO „EB = Reel pack, Embossed carrier tape, 7" reel (std taping except 1,000pcs/reel)“ change „EC = Reel (500 pcs)“ TO „EC = Reel pack, Embossed carrier tape, 7" reel (std taping except 500pcs/reel)“ change „ED = Reel (300 pcs)“ TO „ED = Reel pack, Embossed carrier tape, 7" reel (std taping except 300 pcs/reel)“ change „ET* = Tray“ TO „ET = Tray pack“</p> <p>STANDARD TIN/LEAD CODES</p> <p>626) change „TP = Reel (full)“ TO „TP = Reel pack, Embossed carrier tape, 7" reel (R01)“ change „S3 = Reel (1K pcs)“ TO „S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel)“ change „S2 = Reel (500 pcs)“ TO „S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel)“ change „S6 = Reel (300 pcs)“ TO „S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel)“ change „WB = Tray“ TO „WB = Tray pack (T03)“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>627) remove „Contact Marketing“</p> <p>628) add TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), UL (RSL), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UA, UB, UC, UD, UE reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17), UL (TSL) tray pack available SL (S51) special pack available</p> <p>SPECIAL column</p> <p>629) change „01 thru 99 None = Solder pre-tinned (standard) as applicable“ TO „Dash #'s 01 thru 99 as applicable“</p> <p>630) add „Blank = Solder pre-tinned (standard)“</p> <p>631) add GENERAL USAGE DASH NUMBERS 30 = Part marking (0603 and larger case sizes; 4 digits for ≤ 1 %, 3 digits for ≥ 2 %) 69 = Moisture resistant 99 = 0 ohm jumper</p> <p>Vishay Dale Film Resistor RCW</p> <p>SIZE column</p> <p>632) remove 0540, 0550, 0575, 5100, 5150, 1100, 7225, 2010, 2512, 1206</p> <p>633) add 0540, 0550, 0575, 1100, 1206, 2010, 2512, 5100, 5150, 7225</p> <p>VALUE column</p> <p>634) remove 1K32 = 1,320 ohm 10R0 = 10 ohm</p>

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	<p>635) change R = decimal TO R = ohms K = thousand K = kilohms M = million M = Megohms</p> <p>TOLERANCE column</p> <p>636) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10%</p> <p>637) remove „H = ±3.0%“</p> <p>638) add M = ±20% T.C column</p> <p>639) change E = 25 PPM TO E = ±25ppm/°C H = 50PPM H = ±50ppm/°C K = 100PPM K = ±100ppm/°C L = 150 PPM L = ±150ppm/°C N = 200 PPM N = ±200ppm/°C M = 300 PPM M = ±300ppm/°C P = 500 PPM P = ±500ppm/°C</p> <p>640) change S = SPECIAL TO S = Special PACKAGING column</p> <p>641) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“ STANDARD LEAD FREE CODES</p> <p>642) change „TP = Reel (full)“ TO „TP = Reel pack, Embossed carrier tape, 7" reel (R01)“ change „S3 = Reel (1K pcs)“ TO „S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel)“ change „S2 = Reel (500 pcs)“ TO „S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel)“ change „S6 = Reel (300 pcs)“ TO „S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel)“ change „WB = Tray“ TO „WB = Tray pack (T03)“ NON-STANDARD TIN/LEAD CODES</p> <p>643) remove „Contact Marketing“</p>

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	<p>644) add TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87) reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available SL (S51) special pack available</p> <p>SPECIAL column 645) add „GENERAL USAGE DASH NUMBERS“ 646) change „40 = platinum gold“ TO „40 = Platinum Gold termination“ change „42 = palladium silver“ TO „42 = Palladium Silver termination“ change „00 thru 99 as applicable“ TO „Dash #'s 01 thru 99 as applicable“</p> <p>Vishay Dale Film Resistors RC</p> <p>SIZE column 647) arranged the values in ascending order.</p> <p>VALUE column 648) remove 1K32 = 1,320 ohm 10R0 = 10 ohm</p> <p>649) change R = decimal TO R = ohms K = thousand K = kilohms M = million M = Megohms</p> <p>TOLERANCE column 650) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10%</p> <p>651) remove „H = ±3.0%“ 652) add M = ±20%</p> <p>T.C column 653) change E = 25 PPM TO E = ±25ppm/°C H = 50PPM H = ±50ppm/°C K = 100PPM K = ±100ppm/°C L = 150 PPM L = ±150ppm/°C N = 200 PPM N = ±200ppm/°C M = 300 PPM M = ±300ppm/°C P = 500 PPM P = ±500ppm/°C S = SPECIAL S = Special</p> <p>PACKAGING column 654) change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p>

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	<p>655) remove STD LEAD FREE CODES*</p> <p>EA* = Reel (full) EB* = Reel (1K pcs) EC* = Reel (500 pcs) ED* = Reel (300 pcs) ET* = Tray</p> <p>656) remove STD LEAD FREE CODES*</p> <p>TP = Reel (full) S3 = Reel (1K pcs) S2 = Reel (500 pcs) S6 = Reel (300 pcs) WB = Tray</p> <p>657) remove NON-STD LEAD FREE CODES*</p> <p>Contact Marketing</p> <p>658) remove „* Leadfree version not currently released“</p> <p>STANDARD TIN/LEAD CODES</p> <p>659) change „TP = Reel (full)“ TO „TP = Reel pack, Embossed carrier tape, 7" reel (R01)“ change „S3 = Reel (1K pcs)“ TO „S3 = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel)“ change „S2 = Reel (500 pcs)“ TO „S2 = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel)“ change „S6 = Reel (300 pcs)“ TO „S6 = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel)“ change „WB = Tray“ TO „WB = Tray pack (T03)“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>660) remove „Contact Marketing“</p> <p>661) add TN = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) SV = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) SU = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) ST = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) WA = Tray pack, w/ESD (M18) BC (P19), BB (P23) bulk pack available TU (R87), TT (RT4), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87) reel pack available T1 (T09), T2 (T15), T3 (T16), T4 (T17) tray pack available SL (S51) special pack available</p> <p>SPECIAL column</p> <p>662) change „None = Solder pre-tinned (standard)“ TO „Blank = Solder pretinned (standard)“</p> <p>663) add „Dash #'s 01 thru 99 as applicable“</p> <p>664) remove „20 = 27“</p> <p>Vishay Dale Film Resistors PTF</p> <p>VALUE column</p> <p>665) change R = DECIMAL TO R = ohms K = THOUSAND K = kilohms M = MILLION M = Megohms</p>

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	<p>TOLERANCE column 666) change „F = ±1.0%“ TO „F = ±1%“ T.C column 667) change Z = T-16 TO Z = ±5ppm/°C (T-16) Y = T-13 Y = ±10ppm/°C (T-13) X = T-10 X = ±15ppm/°C (T-10) 0 = special See TPI 0 = Special, see TPI</p> <p>PACKAGING column 668) change „STD LEAD FREE CODES“ TO „STANDARD LEAD FREE CODES“ change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“ STANDARD LEAD FREE CODES 669) change „EA* = Reel (full)“ TO „EA = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim" change „EB* = Reel (1K pcs)“ TO „EB = Reel pack (std taping except 1,000pcs/reel)“ change „EK* = Bulk“ TO „EK = Bulk pack“ STANDARD TIN/LEAD CODES 670) change „RE = Reel (full)“ TO „RE = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36)“ change „R6 = Reel (1K pcs)“ TO „R6 = Reel pack (RE6, std taping except 1,000pcs/reel)“ change „BF = Bulk“ TO „BF = Bulk pack (B14)“ NON-STANDARD TIN/LEAD CODES 671) remove „Contact Marketing“ 672) remove „* Leadfree version not currently released“ 673) add KA = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (K36) RA = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) RB = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) RC = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) RG = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) RH = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) WF = Reel pack (RE5, std taping except 500pcs/reel) 674) add KB (K55), KE (K81), KJ (K82) ammo pack available BL (B24), B1 (B25), B7 (B45), B9 (B70), BS (BSL), MD (M22), MH (M74), MP (M75) bulk pack available LA (L03) lacer pack available M2 (M02), M3 (M03), M6 (M06), M7 (M07), ML (M10), MA (M11), MN (M14), MB (M15) heat seal pack available ME (M23), MG (M24), CM (R16), R5 (R18), R3 (R33), RF (R48), RK (R50), CP (R55), CE (R62), R9 (R68), RL (R74), RQ (RC9), WG (RE4), R7 (RE7), R8 (RE8), CL (RH5), UL (RSL), SA (S09), SD (S18), SS (S20), SQ (S21), SE (S22), SY (S24) reel pack available SM (S50), SL (S51) special pack available</p> <p>SPECIAL column 675) add „Blank = Standard“</p>

REVISION DATE	REVISION DESCRIPTION
	<p>Vishay Dale Film Resistors PSF</p> <p>VALUE column</p> <p>676) remove 15R00 = 15 ohm 1K000 = 1K ohm 500K0 = 500K ohm</p> <p>677) change R = decimal TO R = ohms K = thousand K = kilohms</p> <p>T.C column</p> <p>678) change Z = 5 ppm/°C (T-16) TO Z = ±5ppm/°C (T-16) Y = 10 ppm/°C (T-13) Y = ±10ppm/°C (T-13) X = 15 ppm/°C (T-10) X = ±15ppm/°C (T10) E = 25 ppm/°C (T-9) E = ±25ppm/°C (T-9)</p> <p>PACKAGING column</p> <p>679) change „STD LEAD FREE CODES“ TO „STANDARD LEADFREE CODES“ change „STD TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEADFREE CODES</p> <p>680) change „EA = Tape/reel (full reel quantity)“ TO „EA = Reel pack, Embossed carrier tape, 13" reel“ change „EB = Tape/reel (1K pcs)“ TO „EB = Reel pack, Embossed carrier tape, 13" reel (std taping except 1,000pcs/reel)“ change „EK = Bulk pack“ TO „EK = Bulk pack, plastic bag“</p> <p>STANDARD TIN/LEAD CODES</p> <p>681) change „TA = Tape/reel (full reel quantity)“ TO „TA = Reel pack, Embossed carrier tape, 13" reel (R86)“ change „TB = Tape/reel (1K pcs) (R79)“ TO „TB = Reel pack, Embossed carrier tape, 13" reel (R79, std taping except 1,000pcs/reel)“ change „BA = Bulk pack (B43)“ TO „BA = Bulk pack, plastic bag (B43)“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>682) change „SB = Packaging defined on TPI (S51)“ TO „SB = Custom pack, per TPI (S51)“</p> <p>SPECIAL column</p> <p>683) add „Blank = Standard“</p> <p>Vishay Dale Film Resistors PMMO</p> <p>VALUE column</p> <p>684) change R = DECIMAL TO R = ohms K = THOUSAND K = kilohms M = MILLION M = Megohms G = GIGA OHM G = Gigohms</p> <p>TOLERANCE column</p> <p>685) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10% L = ±15.0% L = ±15%</p> <p>686) add „M = ±20%“</p>

REVISION DATE	REVISION DESCRIPTION
	<p>PACKAGING column</p> <p>687) change „LEAD FREE CODES“ TO „STANDARD LEADFREE CODES**“ change „TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „OTHER TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEADFREE CODES*</p> <p>688) change „E05* = Foam“ TO „EM = Foam pack, 5/ea rolled diagonally in Microfoam“</p> <p>STANDARD TIN/LEAD CODES</p> <p>689) change „F05 = Foam“ TO „BC = Foam pack, 5/ea rolled diagonally in Microfoam (F05)“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>690) remove „Contact Marketing =“</p> <p>691) add BB = Bulk pack (B23) ML = Heat Seal pack (M10)</p> <p>Vishay Dale Film Resistors PMCI</p> <p>VALUE column</p> <p>692) change R = DECIMAL TO R = ohms K = THOUSAND K = kilohms M = MILLION M = MILLION G = GIGA OHM G = Gigohms</p> <p>TOLERANCE column</p> <p>693) change F = ±1.0% TO F = ±1% G = ±2.0% G = ±2% J = ±5.0% J = ±5% K = ±10.0% K = ±10% L = ±15.0% L = ±15%</p> <p>694) add „M = ±20%“</p> <p>PACKAGING column</p> <p>695) change „LEAD FREE CODES“ TO „STANDARD LEADFREE CODES**“ change „TIN/LEAD CODES“ TO „STANDARD TIN/LEAD CODES“ change „NON-STD TIN/LEAD CODES“ TO „NON-STANDARD TIN/LEAD CODES“</p> <p>STANDARD LEADFREE CODES*</p> <p>696) change „E02 = Foam“ TO „E02 = Foam pack“</p> <p>STANDARD TIN/LEAD CODES</p> <p>697) change „F02 = Foam“ TO „F02 = Foam pack“</p> <p>698) remove „S51 = see TPI“</p> <p>NON-STANDARD TIN/LEAD CODES</p> <p>699) remove „Contact Marketing“</p> <p>700) add B23 = Bulk pack F05 = Foam pack, 5/ea rolled diagonally in Microfoam F06 = Foam pack, 1/ea rolled in Microfoam F08 = Foam pack, 5/ea rolled in Microfoam S51 = Custom pack, per TPI</p>

REVISION DATE	REVISION DESCRIPTION
Aug. 23, 2011	1) Add: 0000 = 0 ohm jumper or special 2) Add: Z = 0 ohm jumper 3) Add: S = Special
Sept. 16, 2011	IMPEDANCE CODE 1) Add 1000 to R1 (OHMS) 2) Add 5600 to R2 (OHMS) 3) Add 362 to IMPEDANCE CODE 4) Add A to CODE SUFFIX 5) Add 1002/5601 to LEGACY 1% 6) Add 103/562 to LEGACY 2%,5% FHV 1) Add FHV07549M9FKEB1 under Part Number and FHV075-1 49.9M 1% 100 EB e3 under Part Description 2) Add another Column named Special Up to 3 digits. Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 1 = Flameproof coating TR 1) Modified TR20X1T00JSRS under Part Number and TR20X 1T 5% RS under Part Description 2) Add another Column named Special Up to 3 digits Dash #'s 1 thru 999 as applicable Blank = Standard GENERAL USAGE DASH NUMBERS 1 = Flameproof coating

REVISION DATE	REVISION DESCRIPTION
December 5, 2011	<ol style="list-style-type: none"> 1) Added 02, 07, 11, 12, 13,15, 20, 30, B1 sizes to Huntington ALSR/ALVR page 2) Added WB to Huntington ALSR/ALVR page Mills-Central revision 3) Added G = ± 2 %, J = ±5 %, K = ± 10 % to Huntington – Mills MR100 page 4) Added H = ± 3.0 % to Huntington – Mills MR500 page 5) Added G = ± 2.0 % to Huntington – Mills MR530 page 6) Added 006 and 015 sizes to Huntington – Mills MRP page 7) Added P = ± 0.025%, G = ± 2.0 %, H = ± 3.0 % to Huntington Mills MRP page 8) Added NI = NON INDUCTIVE to Huntington – Mills MRP page 9) Added NI = NON INDUCTIVE to Huntington – Mills MRA page 10) Added NI = NON INDUCTIVE to Huntington – Mills MRB page 11) Added P = ± 0.025% to Huntington – Mills MRW page 12) Removed 04f size from Huntington – Central FA page 13) Added T = ± 0.01 %, M = ± 20 % to Huntington – Central FA page 14) Added NI = NON INDUCTIVE to Huntington – Central FA page 15) Removed MRP015 for packaging code E29 from Huntington – Mills MRP page 16) Removed NI = NON INDUCTIVE from Huntington – Mills MRA page 17) Added J = ±5 % to Huntington – Mills MRA page 18) Added J = ±5 % to Huntington – Mills MRB page
December 14, 2011	<ol style="list-style-type: none"> 1) Added P = ± 0.025% and M = ± 20 % to Huntington ALSR/ALVR page 2) Added W07 to Huntington ALSR/ALVR page Mills-Central revision 3) Added NI = NON INDUCTIVE to Huntington – Central FA page 4) Removed MRP015 for packaging code E29 from Huntington – Mills MRP page 5) Removed NI = NON INDUCTIVE from Huntington – Mills MRA page 6) Added J = ±5 % to Huntington – Mills MRA page 7) Added J = ±5 % to Huntington – Mills MRB page
December 16, 2011	<ol style="list-style-type: none"> 1) Removed WB to Huntington ALSR/ALVR page 2) Added W03 to Huntington ALSR/ALVR page Mills-Central revision 3) Added MRP006 for packaging code E07 to Huntington – Mills MRP page
February 3, 2012	<ol style="list-style-type: none"> 1) Huntington pages limited to ALSR, ALVR, FA, MRA, MRB, MRP and MRS

May 24, 2012	<p>1) Package code change to MSP, SOGC, and SOMC S13 pack code changed from "SA" to "SB". S15 pack code changed from "SB" to "SC". S28 pack code changed from "SD" to "SG". S30 pack code changed from "SF" to "SJ".</p>
	<p>2) Profile B added to the CS201 page.</p>
June 11, 2012	<p>1) A = $\pm 0.05\%$ added to ERC (Specials)</p>
June 21, 2012	<p>1) Added C = 0.25% and B = 0.1% to WSL, WSLP, WSLT, and WSLS</p>
July 18, 2012	<p>1) Added Suffix 114 to Value Codes For Specials on ERC-55-114. 2) Added Pack code EC = Tape/reel 13" reels (1206 & larger only) on WSL, WSLP, WSLT, and WSK.</p>
October 31, 2012	<p>Impedance code 271A added L TCR and U/V Failure rates added to RCWPM(Military M/D55342 Thick Film) E74 package code added to CPF Package B (non-std) Note added – Must have Special dash</p>
January 14, 2013	<p>WSC/WSN, WSF, WSL, WSK, WSLC, WSH, WSLM, WSLP, WSL...E, WSLS, WSLT, WSP, and WSR pages had package codes EB and TB moved to Non-Standard pack code options. FVR sizes 150 and 300 added. MTL Special NI removed. RE, RER, RH/NH, HG/NHG added C06 package code to Non-Standard Tin/Lead Packaging Codes OLED page added to Plasma Display</p>
March 20, 2013	<p>PPL updated for the M76 to M77 packaging on GSR and HDN Resistor Standard page added to Huntington</p>
June 13, 2013	<p>Changes made to Packaging column on RCWP and CMF RCWP 0201 added to PPL Changes to RNR/RNN Angstrohm on PPL CMF Commercial renamed to CMF Industrial Change to RCWPM-99 (Military 32159 Jumper Thick Film) Special column – added -96 Techno RC added 0 Ohm Jumper / Special</p>
July 10, 2013	<p>EP page added to Plasma Display RH/NH pack code E05 added CP Quick Connect changed to all lead-free pack codes WSBM page added to Wirewound</p>
September 10, 2013	<p>Added RCP page Added SP (RK1), ER (EK1), and EU (E74) package codes to CMF (Industrial)</p>

September 13, 2013	<p>Removed S27 packaging from WSR Added T & D package codes and 15% tolerance for WSBS Removed S27 packaging from WSP and WSL, and added E51 packaging Added S51 and E51 packaging for WSLT, WSLS, WSLP, WSLM, and WSLC Added sizes 6761, 7220, and 8536, tolerances 1%, 2%, 10%, and 15%, and T & D package codes to WSBS Added CZB product to CZA page</p>
November 14, 2013	<p>WSMS added 1% tolerance Added CRHVTCX CRMVTCX, and RCHRTCX pages Added Bracket Type 500 to Huntington Brackets Added Radial-leaded / Axial-leaded sizes to FHV HML and ERL (Specials) added N = 200ppm</p>
January 8, 2014	<p>Added E51 and S51 packaging to WSH Added Size 750 to FST/FVT Added S51 packaging on CS201, CS206, CSRC, and CRCA PPL update on SLDC and SDC for Angstrohm</p>
September 29, 2015	<p>Added T (Tray) packaging to WSBM page. 3% tolerance removed from CPCC. 1% tolerance added to CPCF.</p>
September 29, 2015	<p>Added Sizes 1020 and 0612 to RCWE Added tolerances 0.5% and 2.0% to RCWE Added U5 package code and Description for RCWP and RCWPM pages. Added E51 Package code to RCP Removed asterisks from sizes 0550 through 3000 and note FSE model only to FSE/FVE</p>

PERMARK CODES

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	1101161-1,AERONICS, INC.	A1	Film
	10108020	A2	Film
	19F7433	A3	Film
	26F4754	A4	Film
	42G3307	A5	Film
	26F4753	A6	Film
	34G2894	A7	Film
	20H0756	A8	Film
	49G3480	A9	Film
	24H4793	A10	Film
	40G7571	A11	Film
	74G1123	A12	Film
	26F4755	A13	Film
	19F7491	A14	Film
	78G9286	A15	Film
	68X1667	A16	Film
	13240-003	A17	Film
	30683754-202	A18	Film
	30731437-101	A19	Film
	30731437-104	A20	Film
	30731437-103	A21	Film
	30731437-123	A22	Film
	30731437-102	A23	Film
	30731437-220	A24	Film
	30731437-330	A25	Film
	1810-0728	A26	Film
	1810-1061	A27	Film
	1810-0363	A28	Film
	1810-0985	A29	Film
	1810-0370	A30	Film
	1810-0339	A31	Film
	1810-1047	A32	Film
	1810-1046	A33	Film
	1810-0232	A34	Film
	1810-0223	A35	Film
	1810-0269	A36	Film
	1810-0596	A37	Film
	1810-0252	A38	Film
	1810-0460	A39	Film
	1810-0305	A40	Film
	1810-0980	A41	Film
	1810-0982	A42	Film
	1810-0983	A43	Film
	1810-0906	A44	Film
	1810-0472	A45	Film
	1810-0950	A46	Film

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	1810-0126	A47	Film
	1810-0083	A48	Film
	1810-0190	A49	Film
	1810-0639	A50	Film
	1810-0122	A51	Film
	1810-0162	A52	Film
	1810-0760	A53	Film
	1810-0388	A54	Film
	1810-0591	A55	Film
	1810-0761	A56	Film
	1810-0630	A57	Film
	1810-0283	A58	Film
	1810-0240	A59	Film
	1810-0286	A60	Film
	1810-0256	A61	Film
	1810-0235	A63	Film
	1810-0424	A64	Film
	1810-0516	A65	Film
	1810-0590	A66	Film
	1810-0338	A67	Film
	1810-0319	A68	Film
	1810-0316	A69	Film
	1810-0325	A70	Film
	1810-0346	A71	Film
	1810-0037	A72	Film
	1810-0557	A73	Film
	1810-0247	A74	Film
	1810-0533	A75	Film
	1810-0402	A76	Film
	1810-0560	A77	Film
	1810-0301	A78	Film
	1810-0481	A79	Film
	1810-0369	A80	Film
	1810-0368	A81	Film
	1810-0318	A82	Film
	1810-0365	A83	Film
	1810-0367	A84	Film
	1810-0364	A85	Film
	1810-0552	A86	Film
	1810-0636	A87	Film
	1810-0448	A88	Film
	1810-0541	A89	Film
	1810-0681	A90	Film
	1810-0668	A91	Film
	1810-0491	A92	Film
	1810-0371	A93	Film
	1810-0206	A94	Film
	1810-0204	A95	Film

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	1810-0231	A96	Film
	1810-0207	A97	Film
	1810-0321	A98	Film
	1810-0507	A99	Film
	1810-0205	B1	Film
	1810-0203	B2	Film
	1810-0688	B3	Film
	1810-1091	B4	Film
	1810-0350	B5	Film
	1810-0444	B6	Film
	1810-0406	B7	Film
	1810-0722	B8	Film
	1810-0374	B9	Film
	1W,WHITE BAND	B01	WW
	91637,R511F	B02	WW
	91637,1R00F	B03	WW
	91637,20R0F	B04	WW
	91637	B05	WW
	100PPM	B06	WW
	1810-0347	B10	Film
	1810-0480	B11	Film
	1810-0510	B12	Film
	1810-0219	B13	Film
	1810-0478	B14	Film
	1810-1229	B15	Film
	1810-0167	B16	Film
	1810-0224	B17	Film
	1810-0488	B18	Film
	1810-0488	B19	Film
	1810-0405	B20	Film
	1810-0476	B21	Film
	1810-1324	B22	Film
	1810-0619	B23	Film
	1810-0276	B24	Film
	1810-0281	B25	Film
	1810-0280	B26	Film
	1810-0935	B27	Film
	1810-0341	B28	Film
	1810-0769	B29	Film
	1810-0275	B30	Film
	1810-0277	B31	Film
	1810-0271	B32	Film
	1810-0372	B33	Film
	1810-0298	B34	Film
	1810-0278	B35	Film
	1810-1201	B36	Film
	1810-0272	B37	Film
	1810-0279	B38	Film

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	1810-0273	B39	Film
	1810-0344	B40	Film
	1810-0270	B41	Film
	1810-0704	B42	Film
	1810-0483	B43	Film
	1810-0355	B44	Film
	1810-0407	B45	Film
	57F7698	B46	Film
	47H0847	B47	Film
	FR STD MKG TP PIN#1 59N21	B69	Film
	FR STD MKG TP PIN#1 59N26	B70	Film
	FR STD MKG TP PIN#1 59N18	B71	Film
	FR STD MKG TP PIN#1 59N17	B72	Film
	FR STD MKG TP PIN#1 59N10	B73	Film
	FR STD MKG TP PIN#1 59N14	B74	Film
	FR STD MKG TP PIN#1 59N06	B75	Film
	FR STD MKG TP PIN#1 59N05	B76	Film
	FR STC MKG TP PIN#1 59N22	B77	Film
	FR STC MKG TP PIN#1 59N23	B78	Film
	FR STD MKG TP PIN#1 59N19	B79	Film
	FR STD MKG TP PIN#1 59N07	B80	Film
	FR STD MKG TP PIN#1 59N27	B81	Film
	FR STD MKG TP PIN#1 59N29	B82	Film
	FR STD MKG TP PIN#1 59N16	B83	Film
	FR STD MKG TP PIN#1 59N09	B84	Film
	5180201E41	B85	Film
	FR STD MKG TP PIN#1 59N24	B86	Film
	FR STD MKG TP PIN#1 59N20	B87	Film
	FR STD MKG TP PIN#1 59N25	B88	Film
	FR STD MKG TP PIN#1 59N12	B89	Film
	FR STD MKG TP PIN#1 59N11	B90	Film
	51R83809N01	B91	Film
	51D82142K06	B94	Film
	51D82142K02	B95	Film
	601382	B97	Film
	10086068	B99	Film
	63481-45A	C	WW
	103P10130	C1	WW
	S10404-91	C2	WW
	S10404-92	C3	WW
	S10404-93	C4	WW
	S10404-94	C5	WW
	S10404-96	C6	WW
	S10404-79	C7	WW
	S10404-122	C8	WW
	S10404-121	C9	WW
	945312-225	C01	WW
	945312-12	C02	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	036S03	C03	WW
	17D05261K15,12 OHM,10%	C04	WW
	2129253	C05	WW
	17C82291B24	C06	WW
	17C82291B45	C07	WW
	538217-3373	C08	WW
	24039,122565-193	C09	WW
	91637,231-S42R2F,D/C	C10	WW
	91637,231-S2150F,D/C	C11	WW
	774709-3921	C12	WW
	24039,122554-164	C13	WW
	24039,122554-201	C14	WW
	105110-027,REV G	C15	WW
	77068-3322439	C16	WW
	00123-03	C17	WW
	301ACP12,3W	C18	WW
	301ACP1,3W	C19	WW
	301ACP10,3W	C20	WW
	HG51622F	C22	WW
	6823713	C23	WW
	413442-1C	C24	WW
	63481-33K	C25	WW
	63481-33AM	C26	WW
	63481-33BH	C27	WW
	2441901P46G	C28	WW
	2441901P45G	C29	WW
	63481-40AK	C30	WW
	63481-40AN	C31	WW
	63481-40AX	C32	WW
	3726,25R42,.1%,DALE	C33	WW
	3725,10R1,.1%,DALE	C34	WW
	3720,40R91,.1%,DALE	C35	WW
	BPD181484,6W	C36	WW
	10015563-308	C37	WW
	105110-011,REV G	C38	WW
	4429657	C39	WW
	10033583-1000	C40	WW
	10033583-1002	C41	WW
	99931SCEE106-3	C42	WW
	99931SCEE106-9	C43	WW
	99931SCEE106-11	C44	WW
	2397032	C45	WW
	KS-20344L4C,WE,25R0,DALE	C46	WW
	63481-39AX	C47	WW
	3853,R300,1%,DALE	C48	WW
	3749,R100,1%,DALE	C49	WW
	3456,R100,3%,DALE	C50	WW
	1002,R680,1%,DALE	C51	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	3553,57R87,.1%,DALE	C52	WW
	3609,297R7,.1%,DALE	C53	WW
	277A7780H25	C54	WW
	P/N561A831-ZF47	C55	WW
	30731554-001	C56	WW
	483406	C57	WW
	181390,2W	C58	WW
	181391,2W	C59	WW
	181392,2W	C60	WW
	BPD-180889,2W	C61	WW
	181394,2W	C62	WW
	BENDIX,182770,2W	C63	WW
	BENDIX,182771,2W	C64	WW
	BENDIX,182772,2W	C65	WW
	BENDIX,182651,2W	C66	WW
	BENDIX,182652,2W	C67	WW
	BENDIX,182653,2W	C68	WW
	BENDIX,182654,2W	C69	WW
	BENDIX,182656,2W	C70	WW
	3G9267,DALE,DATECODE	C71	WW
	4008,DATECODE	C72	WW
	53H1841,DALE,DATECODE	C73	WW
	53H1929,DALE,DATECODE	C74	WW
	072B18	C75	WW
	17D05261K01,11 OHM,5%	C76	WW
	17C82291B37	C77	WW
	36S26,DALE,DATECODE,F	C78	WW
	10W,41A296301AFP5	C79	WW
	93Y01	C80	WW
	17C82291B37	C81	WW
	BENDIX,182773,2W	C82	WW
	BENDIX,182773,2W	C83	WW
	BENDIX,182655,2W	C84	WW
	10177627-003	C85	WW
	91637, 261-S1470F	C86	WW
	10W,41A296301AFP1	C87	WW
	5W,41A296301ARP1	C88	WW
	5W,41A296301ARP3	C89	WW
	63481-43AR	C90	WW
	301ACP6,3W	C91	WW
	301ACP9,3W	C92	WW
	301ACP2,3W	C93	WW
	301ACP7,3W	C94	WW
	181388,2W	C95	WW
	181395,2W	C96	WW
	181393,2W	C97	WW
	BENDIX,182657,2W	C98	WW
	ADZ,1253A04H14,T12	C99	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	181389,2W	CA1	WW
	P/N561A833-ZF10	CA2	WW
	0811-3522	CA3	WW
	24H4619,DALE,DATECODE	CA4	WW
	SS425-1	CA5	WW
	0811-2188	CA6	WW
	0811-0229	CA7	WW
	77P5766	CA8	WW
	177664,2W	CA9	WW
	91637,44R2F	CB1	WW
	42G3139	CB2	WW
	MOTOROLA,17C82906H01	D1	WW
	T-12300-54,10W	D2	WW
	5615442,10W	D3	WW
	S-10404-6	D4	WW
	S-10404-57	D5	WW
	S10404-12	D6	WW
	S-10404-54	D7	WW
	S-10404-29	D8	WW
	S10404-114	D9	WW
	S10404-105	E1	WW
	S10404-97	E2	WW
	7X6416	E3	WW
	S-10404-16	E4	WW
	4001A2087P21	E5	WW
	4001A2087P27	E6	WW
	S-10404-83	E7	WW
	S10404-119	E8	WW
	S10404-95	E9	WW
	T-12300-59	F0	WW
	97942-138C454H01	F1	WW
	259A9037P12C	F2	WW
	S-10404-72	F3	WW
	S-8646-4	F4	WW
	4001A2086P37	F5	WW
	T-12300-5	F6	WW
	S-10404-15,10W	F7	WW
	T-12300-64	F8	WW
	S10404-118	F9	WW
	S10404-113	G1	WW
	97942-138C467H02	G2	WW
	S9023-1B350R0	G3	WW
	401551-4C,120W	G4	WW
	S10404-110	G5	WW
	S-8646-2	G6	WW
	S-10404-81	G7	WW
	S-10404-87	G8	WW
	S10404-106	G9	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	0811-3722	G01	WW
	0811-3729	G02	WW
	0811-3733	G03	WW
	0811-3760	G04	WW
	0811-3781	G05	WW
	0811-3785	G06	WW
	0811-3786	G07	WW
	0811-3787	G08	WW
	0811-3788	G09	WW
	0811-3806	G10	WW
	0811-3807	G11	WW
	0811-3808	G12	WW
	0811-3809	G13	WW
	0811-3810	G14	WW
	0811-3830	G15	WW
	0811-3872	G16	WW
	0811-3885	G17	WW
	0811-3899	G18	WW
	0811-3989	G19	WW
	0812-0047	G20	WW
	0812-0070	G21	WW
	0812-0111	G22	WW
	0812-0074	G23	WW
	0812-0010	G24	WW
	0812-0083	G25	WW
	0812-0018	G26	WW
	0812-0098	G27	WW
	0812-0100	G28	WW
	0812-0050	G29	WW
	0813-0050	G30	WW
	0813-0001	G31	WW
	0813-0040	G32	WW
	0818-0054	G33	WW
	0811-1081	G34	WW
	0811-3854	G35	WW
	0811-3778	G36	WW
	0811-2549	G37	WW
	0811-0939	G38	WW
	401551-4A,120W	H1	WW
	97942-138C467H01	H2	WW
	78022S0CN790B9008-1	H3	WW
	S10404-99	H4	WW
	S10404-139	H5	WW
	S10404-138	H6	WW
	S10404-137	H7	WW
	S10404-136	H8	WW
	S10404-134	H9	WW
	0811-0007	H01	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	0811-0610	H02	WW
	0811-0941	H03	WW
	0811-0944	H04	WW
	0811-0986	H05	WW
	0811-0988	H06	WW
	0811-1000	H07	WW
	0811-1032	H08	WW
	0811-1037	H09	WW
	0811-1065	H10	WW
	0811-1068	H11	WW
	0811-1084	H12	WW
	0811-1085	H13	WW
	0811-1086	H14	WW
	0811-1086	H15	WW
	0811-1087	H16	WW
	0811-1088	H17	WW
	0811-1096	H18	WW
	0811-1204	H19	WW
	0811-1217	H20	WW
	0811-1336	H21	WW
	0811-1337	H22	WW
	0811-1340	H23	WW
	0811-1513	H24	WW
	0811-1557	H25	WW
	0811-1560	H26	WW
	0811-1586	H27	WW
	0811-1692	H28	WW
	0811-1708	H29	WW
	0811-1799	H30	WW
	0811-1801	H31	WW
	0811-1805	H32	WW
	0811-1806	H33	WW
	0811-1808	H34	WW
	0811-1810	H35	WW
	0811-1811	H36	WW
	0811-1816	H37	WW
	0811-1826	H38	WW
	0811-1832	H39	WW
	0811-1846	H40	WW
	0811-1848	H41	WW
	0811-1852	H42	WW
	0811-1854	H43	WW
	0811-1856	H44	WW
	0811-1857	H45	WW
	0811-1858	H46	WW
	0811-1860	H47	WW
	0811-1863	H48	WW
	0811-1865	H49	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	0811-1866	H50	WW
	0811-1867	H51	WW
	0811-1873	H52	WW
	0811-1887	H53	WW
	0811-1893	H54	WW
	0811-1898	H55	WW
	0811-1899	H56	WW
	0811-1903	H57	WW
	0811-1909	H58	WW
	0811-1913	H59	WW
	0811-1914	H60	WW
	0811-1918	H61	WW
	0811-1986	H62	WW
	0811-2096	H63	WW
	0811-2099	H64	WW
	0811-2113	H65	WW
	0811-2133	H66	WW
	0811-2187	H67	WW
	0811-2191	H68	WW
	0811-2455	H69	WW
	0811-2490	H70	WW
	0811-2568	H71	WW
	0811-2702	H72	WW
	0811-2988	H73	WW
	0811-2994	H74	WW
	0811-3117	H75	WW
	0811-3143	H76	WW
	0811-3174	H77	WW
	0811-3282	H78	WW
	0811-3284	H79	WW
	0811-3296	H80	WW
	0811-3333	H81	WW
	0811-3424	H82	WW
	0811-3460	H83	WW
	0811-3475	H84	WW
	0811-3478	H85	WW
	0811-3499	H86	WW
	0811-3544	H87	WW
	0811-3554	H88	WW
	0811-3557	H89	WW
	0811-3607	H90	WW
	0811-3623	H91	WW
	0811-3639	H92	WW
	0811-3640	H93	WW
	0811-3641	H94	WW
	0811-3642	H95	WW
	0811-3654	H96	WW
	0811-3655	H97	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	0811-3659	H98	WW
	0811-3706	H99	WW
	S10404-112	J1	WW
	S10404-132	J2	WW
	S10404-127	J3	WW
	S10404-135	J4	WW
	S10404-144	J5	WW
	26H7563	P1	Film
	42G3609	P2	Film
	71F7464	P3	Film
	61F3096	P4	Film
	19F7464	P5	Film
	32F9785	P6	Film
	61F3097	P7	Film
	69G2958	P8	Film
	71F7075	P9	Film
	31F2293	P10	Film
	45F8800	P11	Film
	19F7492	P12	Film
	87F5053	P13	Film
	19F7468	P14	Film
	71F7076	P15	Film
	78G9302	P16	Film
	1576AS723-4	P17	Film
	350-4501-050	P18	Film
	10108026	P19	Film
	82X5321	P20	Film
	1810-0385	P21	Film
	1810-0451	P22	Film
	30731437-272	P23	Film
	30731437-203	P24	Film
	10W	W1	WW
	16W	W2	WW
	20W	W3	WW
	25W	W4	WW
	53W	W5	WW
	75W	W6	WW
	14W	W7	WW
	11W	W8	WW
	90W	W9	WW
	210W	WA	WW
	2W	W01	WW
	3W	W02	WW
	3.25W	W03	WW
	3.75W	W04	WW
	5W	W05	WW
	5.5W	W06	WW
	6.5W	W07	WW

PMARK sorted by SUFFIX			
Spec(Vendor Suffix)	Permark	Suffix	Origin
	7W	W08	WW
	7.5W	W09	WW
	9W	W10	WW
	10W	W11	WW
	12.5W	W12	WW
	13W	W13	WW
	2.5W	W14	WW
	30W	W16	WW
	18W	W17	WW
	4W	W18	WW
	120W	W20	WW
	1W	W21	WW
	0.25W	W23	WW
	12W	W24	WW
	20W	W35	WW
	75W	W68	WW
	90W	W99	WW

PACKAGING CODE DEFINITIONS

"A" MISCELLANEOUS			
A5	DPS-3812	BRADFORD PKG., LEAD TAPE REEL, CLASS I,.200 & .400 PITCH. CLIPPED LEADS. CASE SIZE 3-6 & FP69, FP2, FP42	FILM
"B" BULK PACKAGING			
B8	DPS-3812	BRADFORD PKG. STAND-UP STRIP PACK, 1W THRU 10W SIZE. RESISTORS PLACE IN FLUTED STRIPS, INTO CARDBOARD BOXES	FILM
BA1	DPS-3881	BRADFORD BULK PACKAGING. PACKAGE IN BLISTER PACKS IN INCREMENTS OF 100 PCS. 500 PCS. TOTAL PER CARD	FILM
B02	DPS-3433 DPS-3898	BULK PACKAGING, CRC & CRCW CHIP RESISTOR 1000 PC PER PLASTIC BAG, 1% CHIP INDUCTORS TNPW/TNPWM STYLES	FILM
B03	DPS-712	BULK PACKAGING, HL RESISTORS	NETWORKS/JUAREZ
B05	-	INTERPLANT TOTE BOX (EXCLUDE MEXICO TO ISRAEL)	ALL
B12	DPS-3472	BOX PACKAGING, 100/BOX BULK BOX LOADER/COUNTER	WW
B14	DPS-2038 DPS-3881	BULK PACKAGING, STANDARD DPS-3881 FILM/2038 WW. INTERPLANT MEXICO TO ISRAEL	WW/FILM
B16	DPS-3596	BULK PACKAGING, 50 EACH PER COIN ENVELOPE 11.310015.	FILM
B17	DPS-3596	BULK PACKAGING USING WHITE FLUTED PACK CARDBOARD (STIFF)	FILM
B18	DPS-3596	1 EACH PER COIN ENVELOPE MARKED WITH VALUE.	FILM
B19	DPS-3596	1 EACH ROLLED IN BROWN CREPE PAPER, THEN IN WHITE FLEXIBLE FLUTE CARDBOARD	FILM
B20	DPS-3596	BULK PACKAGING, 400 EACH PER 16"X12" PLASTIC BAG, OPEN END	FILM
B21	DPS-3596	BULK PACKAGING, BIG BOX 810256-40	FILM
B22	DPS-3596	BULK PACKAGING, SMALL BOX 810256-38	FILM
B23	DPS-2038	FOR BULK SHIPMENTS OF LVR-3 FROM ISRAEL TO GERMANY ONLY. 500 PCS. IN KRAFT BOX #810256-47. ADD CUSHIONING, PACK IN SHIPPING CONTAINER 81025833. NO PARTIAL BOXES.	WW
B24	DPS-4561	BULK PACKAGE, STANDARD EXCEPT ESD OVERWRAP AND SPECIAL MARKING. LOCKHEED MARTIN FT. WAYNE	FILM
B25	DPS-3812	BULK PACK, ESD PROTECTIVE BAG 810354-00, ESD LABEL 810521-01	FILM
B26	DPS-2038	BULK PACK, SINGLE LAYER ARRANGED AND ORIENTED, CPC(X) STYLE	WW
B27	DPS-3433	BULK PACK, CASSETTE USING CASSETTE 600007-01	FILM
B28	DPS-2038	FOR BULK SHIPMENTS OF LVR-5 FROM ISRAEL TO GERMANY ONLY. 1000 PCS. IN CORRUGATED BOX #810258-35. USE ONE-HALF THE NECESSARY CUSHIONING MATERIAL IN MIDDLE OF BOX, OTHER HALF ON TOP (TWO LAYER BULK). NO PARTIAL BOXES.	WW
B29	DPS-712	BULK PACKAGING FOR HARDWARE ITEMS AND PIECE PARTS. PACKAGING IS OPTIONAL.	WW
B30	DPS-3433	BULK PKG., CRC & CRCW CHIP RESISTORS, 250 PC/PLASTIC BAG, 1% CHIP RES. ONLY	FILM
B31	DPS-2038	BULK PACKAGING, 4 LAYER CP, CPR, CPSL, CPC(X) & CPL STYLE RESISTORS	WW
B32	DPS-2038	BULK PACKAGING, 2 LAYER, CPCC, CPCF,CPCP & CPCL STYLE RESISTORS	WW
B34	DPS-3472	BULK PKG., 100 PER BOX, NOT MORE THAN 10 BOX PER INTERMEDIATE PACK. BULK BOX/LOADER/COUNTER.	WW
B35	DPS-3812	BULK PKG., DRALORIC CHIP RESISTORS FOR RESALE, 1000 PCS IN PLASTIC BOX	FILM
B36	DPS-3812	BULK PKG., DRALORIC CHIP RESISTORS, FOR RESALE, 5000 PCS IN PLASTIC BOX	FILM

B37	DPS-2038	BULK PKG., CP TYPE, 100 PCS PER BOX FOR CP-2M TYPE, 200 PER BOX	WW
B38	DPS-3433	BULK PKG., CRCW CHIP RESISTORS, 100 PCS. PER PLASTIC BAG.	FILM
B39	DPS-3472	BOX PKG., 100 PER BULK BOX, LOADER/COUNTER. PLACE PARTS IN CONDUCTIVE BAG, P/N 810354-00, FOLD OVER, PRIOR TO PLACING IN BOX.	WW
B43	DPS-712	BULK PACKAGE, WW SURFACE MOUNT RESISTORS, PLASTIC BAG	WW
B45	DPS-3812	BULK PKG., BAG 810366, LABEL 810521-01	FILM
B46	DPS-3433	BULK PKG., 50,000 PCS/CASE CHIP RESISTORS	FILM
B49	DPS-2038	ORIENTED FOUR LAYER BULK PACK	WW
B70	DPS-2038 DPS-3881	BULK PACKAGING, STANDARD EXCEPT 50 PIECES PER BOX	WW/FILM
B87	DPS-2038	RANDOM BULK PACKAGING, CLASS 6(LARGE QUANTITY)	WW
"C" CARD AND INSERT PACKAGING			
C3	DPS-3812	BRADFORD PKG. LEAD TAPE & REEL, CLASS 3(2.875" INSIDE TAPE SPACE) .200 PITCH, CLIPPED LEADS.	FILM
C02	DPS-3609	RH CARD PACK	WW
C05	DPS-3609	SAME AS C02 EXCEPT PACKAGE 100 TOTAL PARTS PER BOX.	WW
"D" MAGAZINE PACKAGING			
D02	DPS-20,129	MAGAZINE PACK, PLUGGED DUAL IN-LINE TUBE	NETWORKS
D03	DPS-2966	MAGAZINE PACK, SINGLE IN-LINE TUBE	NETWORKS
D04	DPS-20,129	MAGAZINE PKG., PINNED DUAL IN-LINE TUBE	NETWORKS
D05	DPS-2903	MAGAZINE PKG., DFP/DFM/DFRC.(WAS S08)	NETWORKS
D29	DPS-2550	MAGAZINE PACKAGING, MSP/MSRL PARTS, SIDE-BY-SIDE	NETWORKS
"D" EUROPEAN PACKAGING			
DBN	-	20K REEL BLISTER TAPE	EUROPEAN
DBO	-	10K REEL BLISTER TAPE	EUROPEAN
E PACKAGING CODES FOR LEAD FREE PRODUCTS			
E	DPS-1146	SKIN PACK SAME AS PACKAGING CODE J01 HL PRODUCTS	WW
	DPS-3362	FORAM PACK SAME AS PACKAGING CODE F01 HLW PRODUCTS	WW
	DPS-3353	LEADFREE POLYBAG PKG, ANTISTATIC NETWORKS P05 OR P03	NETWORKS
	DPS-3433	LEADFREE PROD 7 IN. REEL PKG, EMBOSSSED CARRIER TAPE, 2000 PCS PMX/CRA12E (CHIPS) SAME AS RB8	CHIPS
	DPS-3353	LEADFREE – PROD- SAME AS P03	NETWORKS
EA	DPS-712	LEADFREE, SAME AS R86 OR RT1 EXCEPT LEAD FREE PARTS	WW
	DPS-20,043	LEADFREE PRODUCT, SAME AS R97	NETWORKS
	DPS-3433	LEADFREE PRODUCT SAME AS RT7	NETWORKS
	DPS-3812	PACKAGE SAME AS R64 EXCEPT PRODUCT IS LEAD FREE	FILM
	DPS-3812	PACKAGE SAME AS R36 EXCEPT PRODUCT IS LEAD FREE	FILM
EB	DPS-712	LEADFREE, SAME AS R79 EXCEPT LEAD FREE PARTS	WW
	DPS-3812	PACKAGE SAME AS RE6 EXCEPT PRODUCT IS LEAD FREE	FILM
EC	DPS-712	LEADFREE, SAME AS RG3 EXCEPT LEAD FREE PARTS	WW
ED	DPS-712	LEADFREE, SAME AS RF1 EXCEPT LEAD FREE PARTS	WW
EE6	DPS-3812	PACKAGE SAME AS RE6 EXCEPT PRODUCT IS LEAD FREE	FILM
EF	DPS-3812	PACKAGE SAME AS A5 OR R36 TAPE SPACING 2-1/16", .200" PITCH, 3000 PIECES PER REEL	FILM
EG6	DPS-20,044	REEL PKG, THERMISTORS, 8MM EMBOSSSED PLASTIC PER EIA-481, 500 PCS/REEL. LEAD	-

		FREE PRODUCT B. BENAVIDEZ	
EG7	DPS-20,044	REEL PKG, THERMISTORS, 12MM EMBOSSED PLASTIC PER EIA- 481, 2000 PCS/REEL. LEAD FREE PRODUCT.BENAVIDEZ-	-
EJ	DPS-20,129	LEADFREE PRODUCT MAGAZINE PKG, PLUGGED DUAL IN-LINE TUBE SAME AS D02 DPS-20,129 OR D03 DPS-2966	NETWORKS
EK	DPS-712	LEADFREE PRODUCT, SAME AS B43 EXCEPT LEAD FREE PARTS	FILM
	DPS-3353	LEADFREE PRODUCT POLYBAG PKG, ANTISTATIC SAME AS P03	NETWORKS
	DPS-3881	PACKAGE SAME AS B14 EXCEPT PRODUCT IS LEAD FREE	FILM
E01	DPS-1146	SAME AS PACKAGING CODE J01 FOR RH-100 & -250 AND SIMILAR PRODUCTS	WW
E02	DPS-3609	RH CARD PACK, SAME AS CODE C02	WW
E03	DPS-712	STANDARD LACER PKG. (DPS-712 WW/DPS-3812, FILM)	WW FILM
E04	DPS-20,129	LEAD FREE MAGAZINE PKG, PINNED DUAL INLINE TUBE, ESD SAME AS D04	NETWORKS
E05	DPS-2903	MAGAZINE PKG, DFP/DFM/DFRC. (WAS S08) SAME AS D05	NETWORKS
	DPS-3609	SAME AS CODE CO5, EXCEPT PRODUCT MUST BE LEAD FREE	WW
	-	LEAD FREE VERSION OF B05 INTERNAL INTERPLANT TOTE BOX	ALL
	DPS-712	REEL PACK SAME AS R05 FOR CA PRODUCT UNDER 1.250 LONG	WW
E07	DPS-712	REEL PACK, SAME AS R07, LEAD FREE	WW
E08	DPS-712	REEL PACK, SAME AS R08, LEAD FREE	WW
E10	DPS-3882	FOAM PACK FOR CPR PRODUCT	WW
E12	DPS-3472	BOX, PACK, SAME AS B12	WW
E14	DPS-2038	BOX BULK PACK, SAME AS B14	WW
	DPS-3881	PACKAGE SAME AS B14 EXCEPT PRODUCT IS LEAD FREE	FILM
E15	DPS-712	REEL PACK, SAME AS R15, LEAD FREE	WW
E16	DPS-712	REEL PACK, SAME AS R16, LEAD FREE	WW
E19	DPS-712	REEL PACK, SAME AS R19, LEAD FREE	WW
E20	DPS-712	REEL PACK, SAME AS R20, LEAD FREE	WW
E29	DPS-712	REEL PACK, SAME AS R29, LEAD FREE	WW
	DPS-712	BULK PACKAGING FOR HARDWARE ITEMS AND PIECE PARTS PACKAGING IS OPTIONAL. FOR RoHS COMPLIANT PARTS.	WW
E31	DPS-2038	SAME AS B31, 4 LAYER BULK, BUT DO NOT USE FOR CPC(X) STYLES	WW
E32	DPS-2038	TWO LAYER BULK PACK SAME AS B32 FOR CPC(X) PRODUCT	WW
E36	DPS-712	REEL PACK, SAME AS R36	WW
	DPS-3812	PACKAGE SAME AS R36 EXCEPT PRODUCT IS LEAD FREE	FILM
E48	DPS-712	REEL PACK, SAME AS R48, LEAD FREE	WW
E50	DPS-712	REEL PACK, SAME AS R50	WW
E51	DPS-3487	SAME AS CODE S51 EXCEPT PRODUCT IS LEAD FREE	WW
E55	DPS-712	REEL PACK, SAME AS R55	WW
E64	DPS-712	REEL PACK, SAME AS R64, LEAD FREE	WW
E66	DPS-2038	SAME AS S66 BUT NO RESTRICTION ON PACKAGE QTY	WW
E69	DPS-712	REEL PACK, SAME AS R69	WW
E70	DPS-712	REEL PACK, SAME AS S70	WW
E73	DPS-712	REEL PACK, SAME AS S73	WW
E88	DPS-1438	LEAD FREE TAPE AND REEL PER DPS-1438 IBM 2412436 (REF R88 PKG CODE)	WW

E90	DPS-3129	ONE OR MULTIPLE Pb-FREE/RoHS-COMPLIANT UNITS PER CARDBOARD BOX WITH CUSHIONING, SUPPORTS AND/OR DIVIDERS	PLASMA
		"F" FOAM PACKAGING	
F01	DPS-3362	FOAM PACKAGING - HLW INDIVIDUAL PACKAGING	ELPASO/ JUAREZ
F02	DPS-712/ 3812	STANDARD FOAM PACKAGING	FILM/ WW
F03	DPS-3596	10 EACH ROLLED IN MICROFOAM	FILM
F04	DPS-3844	FOAM PACKAGING USING STYROFOAM BOX WITH LID.	PLASMA
F05	DPS-3596	5 EACH ROLLED DIAGONALLY TO FIT IN MICROFOAM	FILM
F06	DPS-3596	1 EACH ROLLED IN MICROFOAM	FILM
F07	DPS-3596	1 EACH ROLLED IN MICROFOAM, SANDWICHED BETWEEN BROWN CARDBOARD. NOTE: INDIVIDUAL DOUBLE WRAP RJU, RZY. SINGLE WRAP RDX, LAYER BETWEEN CARDBOARD	FILM
F08	DPS-3596	5 EACH ROLLED IN MICROFOAM	FILM
F10	DPS-3882	FOAM PACKAGING. PARTS PLACED INTO SLOTS CUT IN FOAM SEPARATOR.	WW
F11	DPS-3788	CPR PACKAGING USING STYROFOAM STRIPS	COLUMBUS/JUAREZ
F12	DPS-616	CONDUCTIVE FOAM PKG., X0 TYPE, 100/PKG	TEMPE
		"G" CARDBOARD CONTAINERS	
G01	DPS-3129	INDIVIDUAL CARDBOARD BOX PACKAGING WITH CUSHIONING.	PLASMA
G02	DPS-3129	2 OR MORE UNITS PER CARDBOARD BOX, USING CORNER SUPPORTS.	PLASMA
G03	DPS-3129	SIX OR MORE BOXES PALITIZED, AND PLASMA SHRINK WRAPPED.	PLASMA
		"G" BRADFORD SPECIAL PACKAGING	
G1	DPS-4779	REEL PKG, LEAD TAPED FOR BRADFORD ELECTRONICS, FP4,FP5,FP7, FP10	FILM
		"H" HEAT SEAL	
H01	-	HEAT SEAL, 100 UNITS IN 810007-10 BAG	-
		"J" SKIN PACKAGING	
J01	DPS-1146	SKIN PACKAGING PROCEDURE	WW
J03	DPS-2305	SKIN PACKAGING PROCEDURE	FILM
J04	DPS-2165	SKIN PACKAGING, FLAT PACK CARRIER	NETWORKS
		"K" AMMO PACKAGING	
K01	DPS-3916	AMMO PACKAGING, .400 PITCH, 3-3/8 TAPE SPACING, NO LEAD TRIM	WW
K02	DPS-3916	AMMO PACKAGING, .375 PITCH, 2-7/8 TAPE SPACING, NO LEAD TRIM	WW
K03	DPS-3916 DPS-1737	AMMO PACKAGING, .200 PITCH, 2-7/8 TAPE SPACING, NO LEAD TRIM	WW/FILM
K04	DPS-3916 DPS-1737	AMMO PACKAGING, .400 PITCH, 2-7/8 TAPE SPACING, NO LEAD TRIM	WW FILM
K06	DPS-3916	AMMO PACKAGING, .375 PITCH, 2-1/16 TAPE SPACING, NO LEAD TRIM	WW
K07	DPS-3916	AMMO PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM. NO MORE THAN TWO (2) DATE CODES/BOX (REF. K36)	WW
K08	DPS-1737 DPS-3916	AMMO PACKAGING .200 PITCH TAPE SPACING 2-1/16, DO NOT TRIM LEADS	WW FILM
K09	DPS-3916 DPS-1737	AMMO PACKAGING, .400 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM	WW FILM
K10	DPS-3916	AMMO PACKAGING, .400 PITCH, 2-1/2" TAPE SPACING, WITH LEAD TRIM. NO MORE THAN TWO (2) DATE CODES/BOX (REF. K36)	WW
K12	DPS-3916	AMMO PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM FLUSH WITH	WW

		OUTSIDE TAPE $\pm 1/16$ TRIM PART CENTERED BETWEEN TAPES WITHIN .040". TADIRAN/NUMAX.407258002000A. (USE BOX 810512-01 WITH 3000-4000 PER BOX DEPENDING ON PART SIZE).	FILM
K13	DPS-3916	AMMO PACKAGING, .400 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM FLUSH WITH OUTSIDE TAPE $\pm 1/16$ TRIM PART CENTERED BETWEEN TAPES WITHIN .040". TADIRAN/NUMAX .407258002000A. (USE BOX 810512-27 WITH 1000-3000 PER BOX DEPENDING ON PART SIZE).	WW
K14	DPS-3916	AMMO PACKAGING, .400 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM. (YANKTON BOX 810258-24).	WW
K15	DPS-3916	AMMO PKG., .200 PITCH, 2-1/2 TAPE SPACE, TRIM FLUSH $\pm 1/16$, PART CENTERED W/IN. .04, TADIRAN 407258002000A. (USE BOX 810256-27 WITH 3000-4000 PER BOX DEPENDING ON PART SIZE).	WW FILM
K18	DPS-1737 DPS-3916	AMMO PACKAGING, .375 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM	WW FILM
K19	DPS-3740	AMMO PACK, 26MM (1-1/64) TAPE SPACING, .200 PITCH WITH LEAD TRIM & SPECIAL AMMO BOX	FILM
K20	DPS-3740	AMMO PACK, 52MM (2-1/16) TAPE SPACING, .200 PITCH WITH LEAD TRIM & SPECIAL AMMO BOX	FILM
K21	DPS-712	AMMO PKG., .400 PITCH, 3-15/16 INSIDE TAPE SPACING, WITH LEAD TRIM	WW
K22	DPS-3916 DPS-1737	AMMO PACK, 2-1/2" TAPE SPACING, .200 PITCH, WITH LEAD TRIM.	WW FILM
K23	DPS-712	AMMO PACKAGED, EMBOSSED TAPE PLACED INTO BOX. NO LEADER OR TRAILER REQ'D.	WW
K25	DPS-3916	AMMO PKG. .60 PITCH, 2-7/8 TAPE SPACING, W/LEAD TRIM.	WW
K26	DPS-3812 DPS-1737 DPS-3916	AMMO PKG. .200 PITCH, 2-7/8 TAPE SPACE W/LEAD TRIM.	WW FILM
K27	DPS-616	AMMO PKG., T-TYPE, 250/PKG.	TEMPE
K30	-	ORDER USI TPA PACKAGING	NETWORKS
K36	DPS-1737 DPS-3916	AMMO PACKAGING WITH 2-1/16 TAPE SPACING, .200 PITCH, WITH LEAD TRIM	FILM WW
K37	-	EUROPEAN TYPE SK3, US TYPE D41. AMMO PACK, 1000 PIECES PER BOX.	FILM
K38	-	EUROPEAN TYPE NMV0207SI, US TYPE DU4. AMMO PACK, 4000 PIECES PER BOX.	FILM
K39	-	EUROPEAN TYPE LCA0617SI, US TYPE D71. AMMO PACK, 1000 PIECES PER BOX.	FILM
K46	DPS-712	AMMO PACKAGING .375 PITCH, 2-1/2 TAPE SPACING, WITH LEAD TRIM.	WW
K48	DPS-3916	AMMO PACKAGING .400 PITCH, 2-1/2 TAPE SPACING, NO LEAD TRIM.	WW
K50	DPS-3916	AMMO PACKAGING .400 PITCH, 2-1/2 TAPE SPACING, WITH LEAD TRIM.	-
K55	DPS-3812	AMMO PACK, WITH .400 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM.	FILM
K68	DPS-3916	AMMO PACK, .375 PITCH, 2-7/8 TAPE SPACING WITH LEAD TRIM	WW
K69	DPS-3916	AMMO PKG., .400 PITCH, 3-3/8 TAPE SPACE, WITH LEAD TRIM	WW
K81	DPS-3740	AMMO PACK, 26 MM TAPE SPACING PITCH 5MM	FILM
K82	DPS-3740	AMMO PACK, 52 MM TAPE SPACING PITCH 5MM	FILM
K83	DPS-4939	AMMO PACK, 52MM (2-1/16") TAPE SPACING	FILM
		"L" LACER PACKAGING	
L1	DPS-3812	BRADFORD PKG. LEAD TAPE, GENERAL USE, STORED FOR FUTURE HOT TIN DIPPING &/OR FINAL PKG. (SIMILAR TO SPEC 00)	FILM

L01	-	PLACE LACER PACKAGED UNITS IN INTERMEDIATE CONTAINER IN MULTIPLES OF TEN (10) AND MARK.	WW
L02	DPS-3346	LACER PKG., AUTONETICS MIXTURE OF RESISTORS WITH ANTISTATIC BAG	-
L03	DPS-712 DPS-3812	STANDARD LACER PACKAGING	WW FILM
L04	ICP-335	LACER PACKAGING – SPERRY GOOD SAM PROGRAM	FILM
L05	DPS-3596	LACER PACKAGING, STANDARD	FILM
L06	DPS-3812	LACER PACKAGING WITH TRACEABILITY TO DATA PER APPLICABLE TPI	FILM
		"M" MILITARY PACKAGING	
MF9	DPS-3797	BRADFORD MIL PACKAGING PER MIL-R-39032 LEVEL "C" 100 PER BAG. SENSITIVE ELECTRONIC DEVICE CAUTION LABELS ON SHIPPING BOXES (DPS-358)	FILM
M02	DPS-1201	HEAT SEAL – PACKAGING LEVEL "C" MARK PER MIL-STD-129	-
M03	DPS-1201	HEAT SEAL – PACKAGING LEVEL "C" MARK PER MIL-STD-129. ANTISTATIC BAG.	-
M04	-	HEAT SEAL – PACKAGING LEVEL "C" MARK PER MIL-STD-129. 5 EA. PER BAG.	-
M05	-	HEAT SEAL – PACKAGING LEVEL "C" MARK PER MIL-STD-129. 5 EA. PER BAG. ANTISTATIC BAG.	-
M06	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. PLACE IN SUPPLEMENTAL CONTAINER	-
M07	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. PLACE IN SUPPLEMENTAL CONTAINER. PLACE IN ANTISTATIC BAG.	-
M08	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129 PLUS SPECIAL BeO WARNING MARKING REQUIRED PER DPS-1460	-
M09	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129 PLUS SPECIAL BeO WARNING MARKING REQUIRED PER DPS-1460. PLACE IN ANTISTATIC BAG.	-
M10	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. BAR CODE ADDED.	-
M11	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. BAR CODE ADDED. PLACE IN ANTISTATIC BAG	-
M12	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. 5 EA. PER BAG. BAR CODE ADDED.	-
M13	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. 5 EA. PER BAG. BAR CODE ADDED. PLACE IN ANTISTATIC BAG.	-
M14	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. PLACE IN SUPPLEMENTAL CONTAINER. BAR CODE ADDED.	-
M15	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129. PLACE IN SUPPLEMENTAL CONTAINER. BAR CODE ADDED. PLACE IN ANTISTATIC BAG.	-
M16	-	HEAT SEAL - PACKAGING LEVEL "C" MARK PER MIL-STD-129 PLUS SPECIAL BeO WARNING MARKING REQUIRED PER DPS-1460. BAR CODE ADDED.	-
M17	-	HEAT SEAL – PACKAGING LEVEL "C" MARK PER MIL-STD-129 PLUS SPECIAL BeO WARNING MARKING REQUIRED PER DPS-1460. BAR CODE ADDED. PLACE IN ANTISTATIC BAG.	-
M18	DPS-2280	TRAYED; T03 WITH ESD OVERPACK & LABELING; MAY BE STACKS OF 1, 5, OR 10 TRAYS – WHICHEVER IS MOST ECONOMICAL	FILM
M19	DPS-20,023	ANTI STATIC PKG. IN PINK POLYBAG PER MIL B-81705B, TYPE 2.	NETWORKS
M20	DPS-1201	MIL PKG., HEAT SEAL BAG, LEVEL "C", 1 RES/BAG, 1 PKG/BOX, MARK PER MIL-STD-129, LABEL "RESISTOR KIT, DO NOT SEPARATE".	WW
M21	DPS-1201	HEAT-SEAL, WATER-VAPOR PROOF BAG PER MIL-P-23199C, LEVEL B WITH SPECIAL	WW

		PRECAUTIONARY LABELS.	
M22	DPS-3797	MIL-R-39032 ESD PACK, BULK PACKAGE FOR OEM SHIPMENT MIL-B-81705 TYPE I OVERWRAP. SENSITIVE ELECTRONIC DEVICE CAUTION LABELS ON SHIPPING BOXES (DPS-388)	FILM
M23	DPS-3797	MIL-R-39032 ESD PACK, REEL PACKAGE FOR OEM SHIPMENT WITH .200 PITCH AND 2-1/16 TAPE SPACING, WITH LEAD TRIM. MIL-B-81705 TYPE I OVERWRAP. SENSITIVE ELECTRONIC DEVICE CAUTION LABELS ON SHIPPING BOXES (DPS-388)	FILM
M24	DPS-3797	MIL-R-39032 ESD PACK, REEL PACKAGE FOR OEM SHIPMENT WITH .200 PITCH AND 2-7/8 TAPE SPACING, WITH LEAD TRIM. MIL-B-81705 TYPE I OVERWRAP. SENSITIVE ELECTRONIC DEVICE CAUTION LABELS ON SHIPPING BOXES (DPS-388)	FILM
M26	DPS-1201	MIL PKG. PER MIL-P-116, LEVEL "A" METHOD IC-1 GREASE/WATER/VAPOR PROOF BAG	WW
M27	DPS-1201 DPS-1460	WRAP COMPONENTS WITH 1 REVOLUTION PINK FOAM WRAP. HEAT SEAL PACKAGING, LEVEL "C" – WATER-VAPOR PROOF BAG. MARK PER MIL-STD-129. PLACE IN SUPPLEMENTAL CONTAINER. BAR CODE ADDED.	FILM
M28	-	INDIVIDUAL CARDBOARD BOX PACKAGING. PLACE IN PLASTIC BAG WITH ETHA FOAM PER MIL-STD-129. BAR CODE ADDED	PLASMA
M29	DPS-1201	HEAT SEAL IN WATER PROOF BAG PER MIL-P-23199C, LEVEL B, USE SPECIAL PRECAUTION AND BAR CODE LABEL. PLACE IN SUPPLEMENTAL CONTAINER, LABEL SAME AS UNIT PACKAGE.	FILM/WW
M30	-	WRAP IN KIMPACK OR SMALL BUBBLE PACK. HEAT SEAL IN 810007-19 BAG. LABEL PER MIL-STD-129 AND BAR CODE. PLACE IN BOX 810258-16 BOX. LABEL PER MIL-STD-129 AND BAR CODE. PLACE IN 810258-XX BOX FOR SHIPPING.	WW
M74	DPS-3797	MIL-B-81705 TYPE I ESD PROTECTION, 100 PER BAG (SIMILAR TO MIL-R-39032 LEVEL "C") SENSITIVE ELECTRONIC DEVICE CAUTION LABELS ON SHIPPING BOXES (DPS-388)	FILM
M75	DPS-3797	MIL-B-81705 TYPE I ESD PROTECTION, 1 PER BAG (SIMILAR TO MIL-R-39032 LEVEL "C") SENSITIVE ELECTRONIC DEVICE CAUTION LABELS ON SHIPPING BOXES (DPS-388)	FILM
M76	DPS-3812	HEAT-SEAL MIL-B-81705 TYPE 1 BLACK ANTISTATIC FOIL BAGS.	FILM
M77	DPS-3812	HEAT-SEAL MIL-B-81705 TYPE 1 BLACK ANTISTATIC FOIL BAGS. 1 PCS. PER BAG.	FILM
		"P" PLASTIC PACK, RIGID & NON-RIGID	
P02	DPS-981	MARK WITH HIGH REL LABELS AND LOT NO.(P-200)	WW
P03	DPS-3353	POLYBAG CHIPS, ANTISTATIC	NETWORKS
P04	DPS-3353	POLYBAG, TKR UNCOATED	NETWORKS
P05	DPS-3353	POLYBAG, CSP – CSC	NETWORKS
P06	DPS-3389	THERMISTORS, STANDARD PKG. OF	JUAREZ
P07	DPS-712	TUBE PKG., 26 PARTS/TUBE, USES 810551 TUBE AND 810550 PLUG (OPTIONAL PACK FOR CP-2M)	WW
P08	DPS-2433	PLASTIC BAG PACKAGING PROCEDURE	WW
P13	DPS-3596 DPS-3993	10 EACH MAX. PER ANTISTATIC PLASTIC TUBE	FILM
P14	DPS-3596	50 EACH PER SQUARE PLASTIC VIAL WITH CAP	FILM
P15	DPS-3596	2 EACH PER SQUARE PLASTIC VIAL WITH CAP	FILM
P17		OBSOLETE	
P18	DPS-616	BAG PKG. FOR TRIMMERS, 2"x4" BAG	TRIMMERS
P19	DPS-4050	PLASTIC PACK, ANTI-STATIC POLYBAG, ONE (1) CHIP PER BAG.	FILM
P20	DPS-20,111	THERMISTOR DISCS, STD. PKG. OF, PINK PLASTIC BAG.	THERMISTOR

P23	DPS-4626	BULK PACKAGED 10,000 PCS./BAG; FOR INTERNAL COMPANY USE; NOT SHIPPED TO THE CUSTOMER	FILM
P25	DPS-2041	PLASTIC PACK SINGLE CAVITY, TOPICALLY COATED, WITH TRACEABILITY TO DATA PER APPLICABLE TPI	FILM
P28	DPS-949	OVERPACK, VIAL PACK AFTER BASIC UNIT PACKAGE	WW
P29	DPS-949	OVERPACK, VIAL PACK AFTER BASIC UNIT PKG., WITH LABEL	WW
P65	DPS-2041	PLASTIC PACK TYPE II (P-74) MULTI-CAVITY TOPICALLY COATED	WW/FILM
P66	DPS-2041	PLASTIC PACK TYPE I (P-74) SINGLE CAVITY TOPICALLY COATED	WW/FILM
P67	DPS-2041	PLASTIC PACK MULTI-CAVITY NO TOPICAL COATING (LOCKHEED P-132)	WW/FILM
P68	DPS-2041	PLASTIC PACK SINGLE CAVITY NO TOPICAL COATING (LOCKHEED R-132)	WW/FILM
P72	DPS-3730	PLASTIC PACK, PINK POLY (LOCKHEED P116)	FILM
P83	DPS-3177	DIP CARRIER PACK, ANTISTATIC, MEETS HUGHES 821150, ANTISTATIC	NETWORKS
P93	DPS-2865	DIP CARRIER PACK, MEETS HUGHES 821150	NETWORKS
P99	DPS-4779	BULK PKG., PARTS IN CLEAR PLASTIC BAGS.	FILM
"R" REEL PACKAGING			
RA1	DPS-4120 DPS-712	REEL PKG. EMBOSSED CARRIER TAPE, FOR AT&T, WSC, WSN, WSL, WSR RESISTORS, 19.685" MIN. TRAILER.	WW
RA5	DPS-3812	BRADFORD REEL PACKAGING WITH .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM.(SAME AS R36)	FILM
RB2	DPS-327	REEL PKG. 500 PC. PER REEL, RESALE TRIMMER POTENTIOMETER SFERNICE. ST63 SERIES	TEMPE
RB8	DPS-3433	REEL PKG., EMBOSSED CARRIER TAPE, 7" REEL CRA12E/S, CRCA12E/S08 AND CRA12E/S10	NETWORKS
RB9	DPS-3898	REEL PKG., EXTERNALLY ANTISTATIC REELS, UP TO 5000 PCS. PER REEL, EMBOSSED CARRIER TAPE	FILM
RC1	DPS-3812	REEL PKG., .197 (5MM) PITCH, 2.047 ±.040 (52 ±1MM) INSIDE TAPE SPACING (XEROX, UK)	FILM
RC9	DPS-3812	REEL PKG. WITH .200 PITCH, 2-1/16 TAPE SPACE AND LEAD TRIM: R36 EXCEPT USE BAG 810366 AND ESD LABEL 810521-01	FILM
RD1	DPS-3812	REEL PKG., .200 PITCH, 2-1/16 TAPE SPACING WITH LEAD TRIM, WITH BAG 810354-00, PINK BAG AND 810506 CAUTION LABELS	FILM
RD2	DPS-712	REEL PKG. .394" (10MM) PITCH (BLACK COLOR CODED WHEELS), 2-7/8" TAPE SPACE, WITH LEAD TRIM. USE SPECIAL REEL, P.N. 810098-16 WHICH IS MADE FROM REEL FLANGE 810186-03, CORE 810188-20 AND PLUG 810187-06.	WW
RD3	DPS-712	.400 PITCH, 3.6 TAPE SPACE, WITH LEAD TRIM	WW
RD4	DPS-4548	REEL PKG., LEAD TAPE, 3.000" INSIDE TAPE SPACING, .200 PITCH, LEAD CLIP	FILM
RD5	DPS-4549	REEL PKG., LEAD TAPE, 3.075" INSIDE TAPE SPACING, .200 PITCH, LEAD CLIP	FILM
RD6	DPS-3433	REEL PKG., PUNCHED PAPER TAPE, 7" REEL, CRA06E	FILM
RD7	DPS-3433	REEL PKG., EMBOSSED CARRIER TAPE, 13" REEL CRA12E	FILM
RD8	DPS-3433	REEL PKG., PUNCHED PAPER TAPE, 13" REEL, CRA06E	FILM
RD9	DPS-0000	REEL PKG., DRALORIC CHIP RESISTORS, FOR RESALE, 1500 PCS ON 7" REEL	FILM
RE3	DPS-712	REEL PKG., .400 PITCH, 2.8" TAPE SPACE, NO LEAD TRIM, NO MORE THAN 2 REELS PER CONTAINER	WW
RE4	DPS-3812	SAME AS STANDARD R36 REEL PACKAGING EXCEPT THAT THERE CAN BE ANY QUANTITY UP TO A FULL REEL IN MULTIPLES OF 100 PIECES. MINIMUM ON ANY ITEM ORDERED IN 300 PIECES.	FILM

RE5	DPS-3812	STANDARD REEL PACKAGING PLUS SPECIAL INSTRUCTIONS PER DPS-3812. THESE INCLUDE 500 PIECES/REEL & USE OF SMALLEST REEL ALLOWED. LEADS TRIMMED, TAPE SPACING & PITCH VARY WITH MODEL.	FILM
RE6	DPS-3812	STANDARD REEL PACKAGING PLUS SPECIAL INSTRUCTIONS PER DPS-3812. THESE INCLUDE 1000 PIECES/REEL & USE OF SMALLEST REEL ALLOWED. LEADS TRIMMED, TAPE SPACING & PITCH VARY WITH MODEL.	FILM
RE7	DPS-3812	STANDARD REEL PACKAGING PLUS SPECIAL INSTRUCTIONS PER DPS-3812. THESE INCLUDE 1500 PIECES/REEL & USE OF SMALLEST REEL ALLOWED. LEADS TRIMMED, TAPE SPACING & PITCH VARY WITH MODEL.	FILM
RE8	DPS-3812	STANDARD REEL PACKAGING PLUS SPECIAL INSTRUCTIONS PER DPS-3812. THESE INCLUDE 2000 PIECES/REEL & USE OF SMALLEST REEL ALLOWED. LEADS TRIMMED, TAPE SPACING & PITCH VARY WITH MODEL.	FILM
RE9	DPS-3433	REEL PKG., 16MM EMBOSSED CARRIER, 13 INCH REEL, CRA12E16	FILM
RF1	DPS-712 DPS-4611	REEL PACKAGE, EMBOSSED CARRIER TAPE WSL-2512 ON 4 MM PITCH 810542-09	WW
RF3	DPS-712	REEL PKG. PER EIA-481, EXCEPT 1400 PCS./REEL, AND 24" LEADER +3"/-0" (51 PCS. +6/-0 PCS.)	WW
RF4	DPS-3433	50,000 PCS IN PUNCHED PAPER 2mm POCKET PITCH 8mm CARRIER TAPE ON 13" REEL	FILM ISRAEL
RF8	DPS-3812	REEL PKG., .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM, 500 PCS. PER REEL.	FILM
RG1	DPS-3898	5000 PCS. ON 7" REEL EMBOSSED 8MM TAPE, 4MM PITCH	FILM
RG2	DPS-3812	REEL PKG., .200 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM, 500 PCS. PER REEL.	FILM
RG3	DPS-712	REEL PKG. PER EIA-481 EXCEPT 13" REELS, EMBOSSED CARRIER TAPE, WSL-2010 16,000 PCS ONLY AND WSL-2512 8,000 PCS ONLY.	WW
RG4	DPS-3812	REEL PKG., .200 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM, 1000 PCS. PER REEL.	FILM
RG5	DPS-3433	REEL PACKAGING CZA (ATTENUATORS) EMBOSSED TAPE 8mm WIDE 4mm PITCH 4000 PIECES 7 INCH REEL	FILM
RG6	DPS-20044	REEL PKG, THERMISTORS, 8MM EMBOSSED PLASTIC PER EIA-481, 5000 PCS/13" REEL, OPTIONAL	JUAREZ
RG7	DPS-20044	REEL PKG, THERMISTORS, 12MM EMBOSSED PLASTIC PER EIA-481, 2000 PCS/7" REEL, NTHS-1012, OPTIONAL	JUAREZ
RG8	DPS-3812	REEL PKG., .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM, USE 810521-03 CAUTION LABEL.	FILM
RG9	DPS-3433	REEL PACKAGING PTFT TAPE 8mm WIDE 4mm PITCH 5000 PIECES 7 INCH REEL PLACED IN ANTISTATIC BAG	FILM
RH1	DPS-3812	REEL PKG, .400 PITCH , 2.875 TAPE SPACING, LEAD TRIM, 13 IN. REELS, 500 PIECES PER REEL	FILM
RH2	DPS-3812	REEL PKG, .400 PITCH , 2.875 TAPE SPACING, LEAD TRIM, 13 IN. REELS, 750 PIECES PER REEL	FILM
RH3	DPS-3812	REEL PKG, .400 PITCH , 2.875 TAPE SPACING, LEAD TRIM, 13 IN. REELS, 1000 PIECES PER REEL	FILM
RH4	DPS-3812	SAME AS R19 EXCEPT 1000 PIECES PER REEL	FILM
RH5	DPS-3812	REEL PACKAGING, .200 PITCH, 2-7/8 TAPE SPACING WITH LEAD TRIM, WITH ESD PROTECTIVE BAG 810354-00 AND 810521-01 ESD LABEL	FILM
RH6	DPS-3812	REEL PKG, .200 PITCH , 2.875 TAPE SPACING, LEAD TRIM, 13 IN. REELS, 500 PIECES PER REEL	FILM

RH7	DPS-3812	REEL PKG, .200 PITCH , 2.875 TAPE SPACING, LEAD TRIM, 13 IN. REELS, 750 PIECES PER REEL	FILM
RH8	DPS-3812	REEL PKG, .200 PITCH , 2.875 TAPE SPACING, LEAD TRIM, 13 IN. REELS, 1000 PIECES PER REEL	FILM
RH9	DPS-712	REEL PKG, .200 PITCH , 2-1/16 TAPE SPACING, LEAD TRIM, NO MORE THAN TWO REELS PER CONTAINER	WW
RJ6	DPS-3812	REEL PACKAGING, 2-1/16 INSIDE TAPE SPACING WITH LEAD TRIM, PITCH VARIES, USE ONLY ON NON JAN BRANDED ERC-65/70 OR ERL-32/62 PRODUCT. ASSIGN CODE ONLY WITH SIGNED & APPROVED REVIEW SHEET.	FILM
RJ7	DPS-3812	REEL PKG. .200 PITCH, 2 1/16" TAPE SPACING WITH LEAD TRIM. AND SMALL FLANGE (810318-02)	FILM
RJ8	DPS-3812	REEL PKG. .375 PITCH, 2 1/16" TAPE SPACING WITH LEAD TRIM AND SMALL FLANGE (810318-02)	FILM
RJ9	DPS-4767	REEL PACKAGING; 12MM CARRIER TAPE; 2,000 PIECES PER 7" REEL; WSL2816	WIREWOUND
RT0	DPS-3433	REEL PKG., 4" MINI-REEL, SPECIAL REPACKAGED PRODUCT	WW, FILM, TEMPE NETWORKS,
RT1	DPS-3433 DPS-3898 DPS-712	REEL PKG., CRCW/CRA, TNPW STYLE CHIP RESISTORS; WSL0805 POWER METAL STRIP RESISTORS; 5000 PCS ON 7" REEL, PUNCHED PAPER. (REPLACES R71) IFC0603 AND IFC0805	FILM WW
RT2		OBSOLETE	-
RT3		OBSOLETE	-
RT4	DPS-3487	"13" DIAMETER REEL – 10,000 PIECE MAXIMUM/REEL; -2512 = 5000 PCS. MAXIMUM/REEL	FILM
RT5	DPS-3433	REEL PKG., CHIP RESISTORS, PUNCHED PAPER CARRIER TAPE 10,000 PCS./11.5" REEL. IFC0603 AND IFC0805	FILM
RT6	DPS-3433	REEL PKG., 20,000 PCS, 13" REEL, PUNCHED PAPER TAPE, NORFOLK, CRCW CHIP RESISTORS	FILM
RT7	DPS-3433	REEL PKG., 8MM PUNCHED PAPER CARRIER TAPE, 2MM POCKET PITCH, 10,000 PCS, 7" REEL CHIP RESISTORS CRA04S08	FILM
RT8	DPS-3433	REEL PKG., 12mm EMBOSSED PLASTIC CARRIER TAPE, 13 INCH REEL, 7500 PCS MAX, CRCW-2512	FILM
RT9	DPS-3433	REEL PKG. CRCW1218, 12mm WIDE EMBOSSED CARRIER TAPE, 4mm PITCH, 4000 PCS./7" REEL	FILM
R01	DPS-3487	STANDARD REELED; ONE LOT PER REEL; MAY BE MIXED QUANTITIES/MULTIPLE REELS TO FILL A SINGLE ORDER; 4000 PCS MAXIMUM/REEL EXCEPT –2512 = 2000 PCS. MAXIMUM/REEL	FILM
R02	DPS-3433	REEL PKG., CRCW CHIP RESISTORS, EMBOSSED CARRIER TAPE, 4000 PC REEL 7" (FILM, CONTACT FACTORY) CRCC1206 AND CRCC0805	FILM
R03	DPS-2430	BODY TAPE & REEL, CP PACKAGING(SPECIAL PACKAGING CONTACT FACTORY FOR PRICING)	COLUMBUS/JUAREZ
R04	DPS-1942	REEL PACKAGING, ADD REEL TAPE UNIT QUANTITY MARKING EACH 50 UNITS (HEWLETT-PACKARD)	FILM
R05	DPS-712 DPS-3812 DPS-3596	REEL PACKAGING WITH .200 PITCH AND TAPE SPACING 2-7/8, NO LEAD TRIM	WW/FILM
R06	DPS-712	REEL PACKAGING WITH .375 PITCH AND TAPE SPACING 2-7/8, NO LEAD TRIM	WW
R07	DPS-712	REEL PACKAGING WITH .400 PITCH AND TAPE SPACING 2-7/8, NO LEAD TRIM	WW

	DPS-3812		FILM
R08	DPS-712 DPS-3812	REEL PACKAGING WITH .200 PITCH AND TAPE SPACING 2-1/16, NO LEAD TRIM	WW/FILM
R10	DPS-712	REEL PACKAGING WITH .200 PITCH, 2-7/16 TAPE SPACING, NO LEAD TRIM	WW
R11	DPS-712	REEL PACKAGING WITH .200 PITCH, 2-13/16 TAPE SPACING, NO LEAD TRIM	WW
R12	DPS-712	REEL PACKAGING WITH .375 PITCH, 3-3/8 TAPE SPACING, NO LEAD TRIM	WW
R14	DPS-712	REEL PACKAGING, 2-1/16 TAPE SPACE, .200 PITCH, WITH LEADS TRIMMED FLUSH WITH OUTSIDE TAPE EDGE +0-1/8".	WW
R15	DPS-712 DPS-3812	REEL PACKAGING WITH .400 PITCH, 2-1/16 TAPE SPACING, NO LEAD TRIM	WW FILM
R16	DPS-712 DPS-3812	REEL PACKAGING WITH .400 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM	WW FILM
R17	DPS-712	REEL PACKAGING, .200 PITCH, 3-7/8 TAPE SPACING, NO LEAD TRIM.	WW
R18	DPS-712 DPS-3812	REEL PACKAGING WITH .375 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM	WW FILM
R19	DPS-712 DPS-3812	REEL PACKAGING WITH .200 PITCH, 2-1/2 TAPE SPACING, NO LEAD TRIM	WW/FILM
R20	DPS-712 DPS-3812	REEL PACKAGING WITH .200 PITCH, 2-1/2 TAPE SPACING, WITH LEAD TRIM	WW/FILM
R21	DPS-2050 DPS-712	REEL PACKAGING WITH .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM. NO MORE THAN TWO (2) DATE CODES/REEL (REF. R36).	WW/FILM
R22	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-7/16 TAPE SPACING, NO LEAD TRIM	WW
R23	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-7/16 TAPE SPACING, WITH LEAD TRIM	WW
R24	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-9/16 TAPE SPACING, NO LEAD TRIM	WW
R25	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-11/16 TAPE SPACING, NO LEAD TRIM	WW
R26	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-13/16 TAPE SPACING, NO LEAD TRIM	WW
R27	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-11/16 TAPE SPACING, WITH LEAD TRIM	WW
R28	DPS-712 DPS-3812	REEL PACKAGING WITH .200 PITCH AND 3-3/8 TAPE SPACING. NO LEAD TRIM.	WW/FILM
R29	DPS-712	REEL PACKAGING WITH .400 PITCH, 3-3/8 TAPE SPACING, NO LEAD TRIM	WW
R30	DPS-712	REEL PACKAGING, .400 PITCH, 4-3/8 TAPE SPACING, NO TRIM	WW
R31	DPS-3596	REEL PACKAGING, .200 PITCH, 2.425 TAPE SPACING.	FILM
R32	DPS-3596	REEL PACKAGING, .200 PITCH, 2.15 TAPE SPACING.	FILM
R33	DPS-1438	REEL PACKAGING - IBM 873444	FILM
R34	DPS-712	REEL PACKAGING, .375 PITCH, 2-1/16 TAPE SPACING, NO LEAD TRIM	WW
R35	DPS-3596	REEL PACKAGING, .400 PITCH, 2.425 TAPE SPACING.	FILM
R36	DPS-2050 DPS-712 DPS-3812	REEL PACKAGING WITH .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM.	WW/FILM
R37	DPS-3512	REEL PACKAGING, .200 PITCH, 2-1/2 TAPE SPACING, .062 LEAD TRIM, WITH SPECIAL UNIT AND SHIPPING BOX MARKING AND ESD LABELS PER HUGHES P5503. BODY LENGTH OVER .5 INCH.	FILM
R38	DPS-3512	REEL PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, .062 LEAD TRIM, WITH SPECIAL UNIT AND SHIPPING BOX MARKING AND ESD LABELS PER HUGHES P5503. BODY LENGTH UP TO .5 INCH.	FILM

R39	DPS-712	REEL PACKAGING WITH .400 PITCH, 2-1/2 TAPE SPACING, WITH LEAD TRIM. NO MORE THAN TWO (2) DATE CODES/REEL.	WW
R40	DPS-712	REEL PACKAGING, .400 PITCH, 3.8 TAPE SPACING, NO LEAD TRIM, NO MORE THAN TWO (2) REELS/CONTAINER.	WW
R41	DPS-2158	REEL PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, .062 LEAD TRIM, WITH SPECIAL UNIT AND SHIPPING BOX MARKING PER HUGHES P5501. BODY LENGTH UP TO .5 INCH.	FILM
R42	DPS-2158	REEL PACKAGING, .200 PITCH, 2-1/2 TAPE SPACING, .062 LEAD TRIM, WITH SPECIAL UNIT AND SHIPPING BOX MARKING PER HUGHES P5501. BODY LENGTH OVER .5 INCH.	FILM
R43	DPS-712	REEL PACKAGING WITH .200 PITCH, 2-9/16 TAPE SPACING, NO LEAD TRIM	WW
R44	DPS-712	REEL PACKAGING, .400 PITCH, 2-7/8 TAPE SPACING, W/LEAD TRIM. NO MORE THAN TWO (2) REELS/CONTAINER. (REF. R07)	WW
R45	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-1/2 TAPE SPACING, NO LEAD TRIM	WW
R46	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-1/2 TAPE SPACING, WITH LEAD TRIM	WW
R47	DPS-712	REEL PACKAGING, .200 PITCH, 2-1/2 TAPE SPACING, W/LEAD TRIM. NO MORE THAN TWO (2) REELS/CONTAINER. (REF. R19)	WW
R48	DPS-712 DPS-3812	REEL PACKAGING WITH .400 PITCH, 2-1/2 TAPE SPACING, NO LEAD TRIM	WW/FILM
R49	DPS-712	REEL PACKAGING, .400 PITCH 2-1/16 TAPE SPACE, WITH LEADS TRIMMED FLUSH WITH OUTSIDE TAPE EDGE +0"-1/8". HUGHES P5501.	WW
R50	DPS-712 DPS-3812	REEL PACKAGING WITH .400 PITCH, 2-1/2 TAPE SPACING, WITH LEAD TRIM	WW/FILM
R51	DPS-712	REEL PACKAGING WITH .375 PITCH, 3-3/8 TAPE SPACING, WITH LEAD TRIM	WW
R52	DPS-3433	REEL PKG. PER EIA-481, TNPW-0402 & CRCW1210 AND SMALLER USE PAPER CARRIER TAPE. LARGER THAN CRCW1210 USE EMBOSSED CARRIER TAPE. CRA06E/S USE PAPER CARRIER TAPE AND CRA12E/S USE EMBOSSED TAPE. 1000 PCS./7" REEL	FILM
R53	DPS-3812	REEL PKG. WITH .200 PITCH, 2-1/2 TAPE SPACE AND LEAD TRIM: R20 EXCEPT USE BAG 810366 AND ESD LABEL 810521-01	FILM
R54	DPS-3812	REEL PKG WITH .200 PITCH, 2-7/8 TAPE SPACE AND LEAD TRIM: R64 EXCEPT USE BAG 810366 AND ESD LABEL 810521-01	FILM
R55	DPS-712 DPS-3812	REEL PACKAGING WITH .400 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM	WW FILM
R56	DPS-3433	CRCW1218 10,000 PCS ON 13" REEL, 12MM EMBOSSED CARRIER TAPE, 4MM PITCH	FILM
R57	DPS-712	REEL PKG., .600 PITCH, 3-3/8 TAPE SPACE, WITH LEAD TRIM.	WW
R58	DPS-20044	REEL PKG., THERMISTORS, 8 MM EMBOSSED PLASTIC PER EIA-481, 2000 PCS/7" REEL	JUAREZ
R59	DPS-2240	REEL PACKAGING WITH GOLD LEADS, LEAD TRIM TO OVERALL LENGTH OF 3-1/4, TAPE SPACING 2-9/16	WW
R60	DPS-20043	REEL PKG., SOMC TAPE AND REEL WITH IBM LABEL.	NETWORKS
R61	DPS-20043	REEL PKG., TAPE & REEL MIN. ORDER QTY: SOJC=1250 PCS; SOGC=1500 PCS; SOGRC=1500 PCS; SOMC=2000 PCS.	NETWORKS
R62	DPS-3812	REEL PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM, 2500 PIECES/REEL, REQUIRES LARGE REEL	FILM
R63	DPS-712	REEL PACKAGING WITH .200 PITCH, 2-7/16 TAPE SPACING, WITH LEAD TRIM WITHIN .062 OF TAPE	WW
R64	DPS-712 DPS-3812	REEL PACKAGING WITH .200 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM	WW FILM
R65	DPS-3433	REEL PACKAGING OF CRCW CHIP RESISTORS, IN EMBOSSED CARRIER TAPE, ON 13"	FILM

		10,000 PIECE REEL	
R66	DPS-5109	REEL PKG, LEAD TAPE, 3.075 INSIDE TAPE SPACING, .400 PITCH LEAD CLIP	FILM
R67	DPS-3433	REEL PACKAGING, CHIP RESISTORS, EMBOSSED CARRIER TAPE, 2000 PIECE REEL, 7".	FILM
R68	DPS-712	REEL PACKAGING WITH .375 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM	WW/FILM
R69	DPS-712	REEL PACKAGING WITH .400 PITCH, 3-3/8 TAPE SPACING, WITH LEAD TRIM	WW
R70	DPS-3433	REEL PACKAGING, CRCW CHIP RESISTORS, 5000 PIECES ON 7" REEL, PUNCHED PLASTIC CARRIER TAPE (SEE RT2)	FILM
R71	DPS-3433	REEL PACKAGING, CRCW CHIP RESISTORS 5000 PIECES ON 7" REEL, PUNCHED PAPER (SEE RT1).	FILM
R72	DPS-712	REEL PKG., .600 PITCH, 2-7/8 TAPE SPACING, WITH LEAD TRIM.	WW
R74	DPS-3955	REEL PKG., EUROFORM RADIAL PKG., VENDOR SUPPLIED FROM REELED STOCK PER DPS-3955.	FILM
R75	DPS-3898	REEL PKG., TNPW, CHIP RESISTORS, 1000 PC. 7" REEL, EMBOSSED PLASTIC CARRIER TAPE	THIN FILM
R76	DPS-712	REEL PKG., .200 PITCH, 2" TAPE SPACING, WITH LEAD TRIM.	WW
R77	DPS-712	REEL PKG., .375 PITCH, 2" TAPE SPACING, WITH LEAD TRIM.	WW
R78	DPS-3487	REELED; R01 WITH ESD OVERPACK & LABELING; MAY BE MIXED QUANTITIES/MULTIPLE REELS TO FILL A SINGLE ORDER	FILM
R79	DPS-712	REEL PKG. PER EIA-481, EMBOSSED CARRIER TAPE, (PUNCHED PAPER, WSL0805) WSL - 7" REEL; WSC/WFS/WSR - 13" REEL. 1000 PCS./ REEL. DISTRIBUTORS ONLY.	WW
R80	-	REEL PACKAGING 26MM (1.02") TAPE SPACING, 5MM (.196") LEAD SPACING (PITCH)	FILM
R81	DPS-712	REEL PKG., PITCH .400, TAPE SPACE 2-7/16 WITH LEAD TRIM, PLACE REEL IN ANTISTATIC BAG 810366-01.	WW
R82	DPS-3433	REEL PKG., 4MM PITCH, 12MM EMBOSSED TAPE, CRCW2512, CRA12E10 & CRA12S10, 4000 PCS. PER 7" REEL, P/N 810542-09	FILM
R83	DPS-712	REEL PKG., .400 PITCH, 3-15/16 INSIDE TAPE SPACING, WITH LEAD TRIM	WW
R84	DPS-20,120	REEL PKG. EMBOSSED CARRIER TAPE-COMPAQ	NETWORKS
R85	DPS-20,044	REEL PKG. THERMISTORS, 12MM EMBOSSED PLASTIC PER EIA-481, 5000 PCS./13' REEL, NTHS-1012 ONLY	JUAREZ
R86	DPS-712	REEL PKG. PER EIA-481, EMBOSSED CARRIER TAPE, WW SURFACE MOUNT RESISTORS	WW
R87	DPS-3487	REEL PKG., CHIP RESISTORS, ANTISTATIC BAG ESD LABEL, 7" REEL	FILM
R88	DPS-1438	TAPE & REEL, PER DPS-1438, IBM-2412436	WW
R89	DPS-712	REEL PACKAGING WITH .200 PITCH, 2-11/16 TAPE SPACING, NO LEAD TRIM	WW
R90	DPS-712	REEL PACKAGING WITH .200 PITCH, 2-11/16 TAPE SPACING, WITH LEAD TRIM	WW
R93	DPS-3812	REEL PKG., WITH .200 PITCH, 2-1/16 TAPE SPACING WITH LEAD TRIM. INCLUDE 810552-01 ANTI OXIDATION PAPER. ENCLOSE IN 810354-00 ESD PROTECTIVE BAG AND SEAL WITH TAPE. BAR CODE REQUIRED ON REEL, BAG, & SHIPPING BOX. TADIRAN 407258020000A REQUIRES SMALLEST REEL ALLOWED	FILM
R97	DPS-20,043	REEL PKG., 24MM, DRY PACK TAPE & REEL, MIN. ORDER QTY: SOJC=1250, SOGC=1500, SOGRC=1500, SOMC=2000 PCS.	NETWORKS

"S" SPECIAL PACKAGING, DALE & CUSTOMER INSTRUCTIONS:

1. ASSIGN AN "S" CATEGORY WHEN THE PACKAGING DOES NOT FALL INTO ANY EXISTING CATEGORY, OR, WHEN NO DPS EXISTS.
2. IF THE PACKAGING IS FOR ONE CUSTOMER, ASSIGN AN "S" CODE.

S01	DPS-1200	AUTONETICS SPECIAL PACKAGING PER AA0616-008	-
S02	DPS-731	AUTONETICS SPECIAL COMMERCIAL PACKAGING	-
S03	DPS-2864	PACKAGING PER HUGHES 821100, 821156SDP, MDP, DFP	NETWORKS
S04	-	SKIN PACK WITH MARKING VISIBLE, CUT INTO INDIVIDUAL CARDS, SEAL IN INDIVIDUAL PLASTIC BAGS PER LOCKHEED SPEC. P19D	WW
S05	DPS-1759	TEKTRONIX SPECIAL BODY TAPE CARD PACK	-
S06	DPS-1250	THIOKOL SPECIAL SPR-207 PACKAGING	-
S07	DPS-2866	MAGAZINE PACKAGING, DFP, HUGHES 821152	NETWORKS
S08	DPS-2903	CONVERTED TO D05	
S09	DPS-2050 DPS-712	REEL PACKAGING, .200 PITCH 2-1/16" TAPE SPACING, WITH LEAD TRIM. USE NO STAPLES OR CLIPS FOR SPLICING. SPLICES SHALL OVERLAP BETWEEN 4 AND 6". MIN. OF 12" OF LEADER TAPE AND ONE LAYER OF CORRUGATED PAPER TO BE WOUND AROUND COMPONENTS. LEAD TRIM WITHIN .031" OF TAPE EDGE. (KEITHLEY)	WW/FILM
S10	DPS-20,129	MAGAZINE PACK, DUAL IN-LINE TUBE. 19" LONG.	NETWORKS
S11	DPS-3190	FLAT PACK AND DUAL-IN-LINE PACKAGING, PER RAYTHEON PIV-2001	NETWORKS
S12	DPS-3512	SPECIAL REEL PACKAGING WITH ANTISTATIC LABEL, HUGHES AIRCRAFT	
S13	DPS-20,023	ANTISTATIC OVERPACK (NETWORKS) 5 TUBES PER MIL-B-81705B, TYPE 1, & MIL-R-39032, PARA. 3.1.4	NETWORKS
S14	DPS-20,023	ANTISTATIC OVERPACK (NETWORKS) 1 TUBE PER MIL-B-81705B, TYPE 1, & MIL-R-39032, PARA. 3.1.4	NETWORKS
S15	DPS-20,008	ANTISTATIC (NETWORKS) INDIVIDUAL UNIT PACKAGING, DUAL-IN-LINE 14 & 16 PIN	NETWORKS
S16		REEL PACKAGING, .200 PITCH, 2-13/16 TAPE SPACING, TRIM LEADS WITHIN .062" OF TAPE. USE NO STAPLES FOR SPLICING. BRASS METAL CLIPS ARE ACCEPTABLE WITH TABS BENT OVER FLAT AGAINST THE TAPE. ADVACOM FOR G.E.	-
S17	-	REEL PACKAGING, .200 PITCH, 2-1/2" TAPE SPACING, NO LEAD TRIM, NO STAPLES OR SPLICING CLIPS. HONEYWELL.	-
S18	-	REEL PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM, ONE DATE PER REEL. THE ENTIRE REEL MUST BE FILLED WITH COMPONENTS OR FILLER MATERIAL. GTE AUTO ELECTRIC	-
S19	-	REEL PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM, NO STAPLES OR SPLICING CLIPS. GENERAL DATACOMM.	-
S20	DPS-3812	REEL PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, WITH LEAD TRIM, BAG 810354 AND LABEL 810521-01. (FIRST USE HONEYWELL)	FILM
S21	-	REEL PACKAGING, .200 PITCH, 2-7/8 TAPE SPACING, .062 LEAD TRIM FOR QTY. 500 AND GREATER. AMMO PACKAGING .200 PITCH, 2-7/8 TAPE SPACING, .062 LEAD TRIM FOR QTY. BELOW 500. LENKURT	-

S22	-	REEL PACKAGING, .200 PITCH, 2-1/16 TAPE SPACING, .062 LEAD TRIM. NO MORE THAN (TWO) 2 DATE CODES/REEL. DIGITAL EQUIPMENT	-
S23	-	REEL PACKAGING, .400 PITCH, 2-1/2-TAPE SPACING, .062 LEAD TRIM. NO MORE THAN (TWO) 2 DATE CODES/REEL. DIGITAL EQUIPMENT	-
S24	-	REEL PACKAGING, .200 PITCH, 2-1/16-TAPE SPACING, WITH LEAD TRIM, CUSTOMER PART NUMBER AND PACKAGING DATE ON CONTAINER. COMDIAL	-
S25	DPS-20,023	SHIPPING CONTAINER LABELED WITH "STATIC SENSITIVE DEVICES" LABEL	NETWORKS
S26	DPS-20,023	SHIPPING CONTAINER LABELED WITH "STATIC SENSITIVE DEVICES" LABEL	NETWORKS
S27	-	SAMPLE PACKAGING - BEST METHOD	-
S28	DPS-2966	MAGAZINE TUBE PACKAGING FOR MOLDED SIP. APPLE COMPUTER INC.	NETWORKS
S29	DPS-3596	1 EACH PER SMALL SEALED PLASTIC BAG, 6" X 4" NORDSEN ELECTRONICS/BINKS	FILM
S30	DPS-20,011	ANTISTATIC SINGULAR PLASTIC BOX PKG.	NETWORKS
S31	-	CREDIT ORDER. ANY MISC. ORDER. NO PKG. APPLIES. DUMMY CODE FOR DATA PROCESSING	-
S32	DPS-2050 DPS-712	REEL PACKAGING, .200 PITCH, 2-1/16" TAPE SPACING, WITH LEAD TRIM. ENCLOSE REEL IN BLACK ANTISTATIC BAG 810366-00 (FOXBORO)	WW/FILM
S33	DPS-2050 DPS-712	REEL PACKAGING, .200 PITCH, 2-1/16" TAPE SPACING, WITH LEAD TRIM. ENCLOSE REEL IN 810354-00 PINK ANTISTATIC BAG AND USE 810521-01 CAUTION LABEL. NO MORE THAN TWO (2) DATE CODE/REEL. (HUGHES)	WW/FILM
S34	DPS-2050 DPS-712	REEL PACKAGING, .200 PITCH, 2-7/8" TAPE SPACING, NO LEAD TRIM. ENCLOSE REEL IN 810354-00 PINK ANTISTATIC BAG AND USE 810521-01 CAUTION LABEL. NO MORE THAN TWO (2) DATE CODE/REEL. (HUGHES)	WW/FILM
S35	DPS-2050 DPS-712	REEL PACKAGING, .200 PITCH, 2-1/16" TAPE SPACING, WITH LEAD TRIM. NO METAL CLIPS ARE ALLOWED. (HEATH)	WW/FILM
S36	-	END PLUG INSERT, TUBE PKG., ROCKWELL	NETWORKS
S37	DPS-2653	SPECIAL PACKAGING OF MDP/MDM PARTS PER HONEYWELL SPEC. S.O.D. 3319-4	NETWORKS
S38	DPS-712	REEL PKG., .400 PITCH, 2.6 TAPE SPACE, WITH LEAD TRIM PER, NORTHERN TELECOM MVCO-1985. USE REEL 810098-12, BOX 810258-58 (14 INCH REEL)	WW
S39	DPS-712	BULK PKG. PER TPI-9845, PARA. 4.1 THRU 4.1.9 FOR STORAGE TECHNOLOGY.	WW
S40	DPS-20,129	MAGAZINE TUBE PACKAGING FOR SOMC PRODUCT FOR "INTEL"	NETWORKS
S41	DPS-1825	ANTI-TARNISH WRAP PER DPS-1825 AND HEAT SEAL PER RAYTHEON PIV-1000	WW
S42	DPS-712	REEL PKG. WITH .400 PITCH, 3.7 TAPE SPACE, WITH LEAD TRIM PER NORTHERN TELECOM MVCO-1984. USE REEL 810098-13, BOX 810258-58 USE TWO FULL LAYERS CUSHIONING MATERIAL AROUND THESE 14" REELS.	WW
S43	DPS-20,135	PKG. TUBES, SPECIAL BUNDLING OF, NETWORKS	NETWORKS
S44	DPS-712	REEL PACK, .200" PITCH, 2-1/16", +1/16", -0" TAPE SPACING, WITH LEAD TRIM. (MOTOROLA)	WW
S45	DPS-712	REEL PACK, .400" PITCH, 2-1/16", +1/16", -0" TAPE SPACING, WITH LEAD TRIM (MOTOROLA)	WW
S46	DPS-20,149	RIGID TUBE PKG., CSC2 PKG. FOR IBM, END TO END TUBE CARRIER CIRCUITS	NETWORKS

S47	DPS-712	REEL PKG., .400 PITCH, 4" TAPE SPACE, W/LEAD TRIM, NORTHERN TELECOM #MVCO-1983, REEL 810098-13, BOX 810258-58, 2 FULL LAYERS CUSHIONING MAT'L AROUND 14" REELS.	WW
S48	DPS-20,155	REEL PKG., SOMC TYPE, SPECIAL MARKING AND INSPECTION, YANGTEC.	NETWORKS
S49	-	BAR CODE LABELING FOR HWELETT-PACKARD, (A-5951-1563-1) LABEL NO. 36.320828	NETWORKS
S50	-	SPECIAL HANDWRITTEN INSTRUCTIONS ON THE PRODUCTION ORDER CARD EXCEPT EXCLUDE SURFACE MOUNTED PRODUCT: CRCW, CRA, IFC, & ILS	ALL
S51	DPS-3487	INSTRUCTIONS IN THE TPI; MULTIPLE VARIATIONS	ALL
S52	DPS-3472	BULK PKG., PLACE PARTS IN PINK POLYBAG 810354-00, THEN PLACED IN BOX 810256-00. WIREWOUND CUSTOMER SPECIAL PKG.	WW
S53	DPS-3797	FOIL BAG PACKAGING FOR NON-ESD RESISTORS, FILM 100 PER BAG (SAME AS M74 WITH NO CAUTION LABELS). MEETS GE MORRISTOWN REQUIREMENTS FOR NON-SULFUR PACKAGING	-
S54	DPS-712	AT & T PKG. PER R05 EXCEPT ONLY ONE (1) SPLICE PER 200 PARTS ALLOWED.	WW
S55	DPS-712	AT & T PKG. PER R64 EXCEPT ONLY ONE (1) SPLICE PER 200 PARTS ALLOWED.	WW
S56	DPS-712	AT & T PKG. PER R55 EXCEPT ONLY ONE (1) SPLICE PER 200 PARTS ALLOWED.	WW
S57	DPS-712	AT & T PKG. PER R69 EXCEPT ONLY ONE (1) SPLICE PER 200 PARTS ALLOWED.	WW
S58	DPS-4284	REEL PKG., APPLE COMPUTER, PLACED IN MOISTURE-VAPOR BARRIER BAG.	NETWORKS
S59	DPS-327	STANDARD LACER PACKAGE (LO3). PLACE IN ESD BAG 810366-00.	WW
S60	DPS-327	PACKAGE PER TPI (S51). PLACE IN ESD BAG 810366-00.	WW
S62	DPS-712	REEL PACKAGE, .600 PITCH 3-3/8 TAPE SPACE, WITH LEAD TRIM, ONLY ONE SPLICE PER 200 COMPONENTS (AT&T)	WW
S63	DPS-712	REEL PACKAGE, 400 PITCH 2-1/16 TAPE SPACE WITH LEAD TRIM. ONLY ONE (1) TAPE SPLICE PER 200 COMPONENTS. FOR AT&T	WW
S64		REEL PKG., RAYTHEON RQAP620	FILM
S65	DPS-4647	REEL PKG., EMBOSSSED CARRIER TAPE, 810542-08, WSL TYPE, SONY	WW
S66	DPS-2038	SHIP IN SAME COUNT BOX SUPPLIED BY VENDOR. COVER BOX LABEL WITH LABEL FROM PRODUCTION CARD.	WW
S67	DPS-712	REEL PKG., STD. PKG. EXCEPT ADJUST TAPE SPACE TO COVER THE ENDS OF LEADS, DO NOT TRIM LEADS	WW
S68	DPS-4756	TRANSPORT PACKAGING OF RESISTORS FROM ISRAEL TO BRADFORD REEL/AMMO PACK CONFIGURATION, Y-TAPE SPACING	FILM

S70	DPS-712	STANDARD REEL PACKAGE EXCEPT 1000 PIECES PER REEL FOR PARTS SMALLER THAN RS-5 AND 500 PER REEL FOR RS-5 AND LARGER	WW
S71	DPS-2038	SIMILAR TO B31 (FOUR LAYER BULK) EXCEPT USE SMALL BUBBLE PACK (P/N 810599-02) CUSHIONING. PLACE 500 PIECES OF CPC(X)-3 OR -5, OR 150 PIECES OF CPC(X)-10, IN BOX (P/N 810258-34).	WW
S72	DPS-712	AT&T PACKAGING PER R36 EXCEPT ONLY 1 SPLICE PER 200 PARTS ALLOWED	WW
S73	DPS-712	STANDARD REEL PACKAGE EXCEPT 500 PIECES PER REEL	WW
S74	DPS-712	STANDARD REEL PACKAGE EXCEPT 2000 PIECES PER REEL FOR PARTS RS-1A AND SMALLER	WW
S75	DPS-712	REEL PACKAGE, .400 PITCH, 2-1/16 TAPE SPACE, WITH LEAD TRIM, ONLY ONE TAPE SPLICE PER 200 COMPONENTS. PLACE REEL IN PINK ANTI-STATIC BAG. 810354-03	WW
S76	DPS-3487	300 PIECES/REEL; R78 (REELED + ESD)	FILM
S77	DPS-3487	500 PIECES/REEL; R78 (REELED + ESD)	FILM
S78	DPS-3487	1000 PIECES/REEL; R78 (REELED + ESD)	FILM
S79	DPS-3487	2000 PIECES/REEL; R78 (REELED + ESD)	FILM
S80	DPS-3487	4000 PIECES/REEL; R78 (REELED + ESD)	FILM
S81	DPS-3487	R78 EXCEPT UP TO 3 LOTS OR DATE CODES PER REEL	FILM
S82	DPS-3487	300 PIECES/REEL; R01	FILM
S83	DPS-3487	500 PIECES/REEL; R01	FILM
S84	DPS-3487	1000 PIECES/REEL; R01	FILM
S85	DPS-3487	2000 PIECES/REEL; R01	FILM
S86	DPS-3487	4000 PIECES/REEL; R01	FILM
S87	DPS-3487	R01 EXCEPT 18 INCH LEADER & 48 INCH TRAILER	FILM
S89	DPS-3898	100 PIECES IN BAG	FILM
S90	DPS-20,023	ANTI STATIC OVERPACK (NETWORKS) 1 REEL PER MIL-B-81705 TYPE 1 & MIL-R39032	NETWORKS
		"T" TRAY PACKAGING	

T01	DPS-3129	PLASMA DISPLAY, BOX PACKAGING OF	PLASMA
T03	DPS-2280	STANDARD TRAYED; MAY BE IN STACKS OF 1, 5, OR 10 TRAYS AND PARTIALLY FULL TRAYS – WHICHEVER IS MOST ECONOMICAL	FILM
T05	DPS-3898	TRAY PKG. THIN FILM CHIP RESISTORS	FILM
T06	DPS-20,042	TRAY PKG. THERMISTORS/HYBRIDS	JUAREZ
T09	DPS-4073	TRAY PKG., HUGHES AIRCRAFT SPECIAL PACKAGING PER 821172. PART ORIENTATION, CAUTION LABEL, ESD LABEL	FILM
T12	DPS-4621	TRAY PKG., NETWORKS	JUAREZ
T15	DPS-2280	1 TRAY/STACK; M18 LABELING & OVERPACK (1 TRAY + ESD)	CHIPS
T16	DPS-2280	1 TRAY/STACK; T03 MATERIALS AND LABELING	CHIPS

FP/C6 SPEC CODES

STYLE	STD or NON-STD	SPEC	DESCRIPTION	TOL	A5 R36	B8 B8	BA B14	C2 N/A	C3 C3	CB N/A	E8	G1	M6 N/A	M8 N/A	27 N/A	N2	NB	N3	NC	R20	K04	LB L05
			PACKAGE CODES FROM DPS-327																			
FP01/2	STD	5605	1/2W, FP, 5 BAND CC / 4 BAND CC	1 / 2, 5, 10	YES	YES	YES		YES												YES	YES
	STD	5610	1/2W, FP, TYPE MARKED	1, 2, 5, 10	YES	YES			YES				YES		YES							
FP1/2P	STD	5555	1/2W, FP, PULSE, TYPE MARKED	1, 2, 5	YES	YES			YES				YES		YES							
	N-STD	5556	1W, FP, LUCENT PERMARK KS23040	1									YES		YES							
	N-STD	5557	1/2W, FP, PULSE, LOCKHEED	1, 2, 5	YES	YES																
FP0001	STD	6200	4 BAND CC, 032 LEAD	2, 5, 10	YES	YES			YES													
	STD	6201	1W, FP, 5BAND CC, 032 LEAD	1	YES	YES			YES												YES	
FP001P	N-STD	6204	1W, FP, PULSE, TYPE MARK, 032 LEAD, LUCENT	.5, 1, 2, 5		YES			YES													
	STD	6206	1W, FP, PULSE, TYPE MARK, 032 LEAD	1, 2, 5		YES			YES							YES						
FP001D	STD	6276	1W, FP, TYPE MARKED, 032 LEAD	1, 2				YES								YES	YES					
C00006	STD	6301	1W, EPOXY, 5 BAND CC, 040 LEAD	1		YES			YES													
	STD	6302	1W, EPOXY, 4 BAND CC, 040 LEAD	2, 5, 10					YES													
	STD	6330	1W, EPOXY, 5 BAND CC, 032 LEAD	1					YES													
	STD	6331	1W, EPOXY, 4 BAND CC, 032 LEAD	2, 5, 10					YES													
FP0032	STD	6601	1W, FP, 5 BAND CC, 040 LEAD	1		YES			YES													
	STD	6602	1W, FP, 4 BAND CC, 040 LEAD	2, 5, 10	YES	YES			YES							YES			YES			
	STD	6603	1W, FP, 4 BAND CC, 032 LEAD	2, 5		YES		YES	YES							YES						
	STD	6606	1W, FP, 5 BAND CC, 032 LEAD	1		YES										YES						
	N-STD	6608	1W, FP, TYPE MARKED, 040 LEAD	1, 2, 5	YES	YES			YES													
	N-STD	6609	1W, FP, 5BAND, BAND 5 WHITE, O40 LEAD	2, 5	YES				YES													
FP0069	STD	7500	2W, FP, TYPE MARKED	1, 2, 5, 10	YES	YES			YES	YES				YES	YES		YES					
	N-STD	7510	2W, FP, LUCENT PERMARK 20289	1, 2, 5, 10		YES							YES		YES							
	N-STD	7515	2W, FP, TYPE MARKED FOR IBM	1, 2, 5		YES								YES								
	STD	7536	2W, FP, 4BAND CC	2, 5, 10	YES	YES			YES													
	STD	7538	2W, FP, 5BAND CC	1	YES									YES								
	N-STD	7542	2W, FP, PERMARK WITH IBM PART NUMBER	1, 2, 5		YES								YES								
FP069P	STD	7532	2W, FP, PULSE, TYPE MARKED	1, 2, 5, 10	YES	YES			YES				YES		YES							
	N-STD	7533	2W, FP, PULSE, LUCENT PERMARK KS23037	1									YES		YES							
	N-STD	9911	2W, FP, PULSE, TYPE MARKED, 24 HR B/I	1		YES																
FP0042	STD	9201	2W, FP, 5BAND CC, 045 LEAD	1	YES	YES			YES								YES					
	STD	9202	2W, FP, 4BAND CC, 045 LEAD	2, 5, 10	YES	YES			YES								YES					
	STD	9203	2W, FP, 4BAND CC, 032 LEAD	2, 5, 10	YES	YES	YES	YES	YES								YES		YES			
	STD	9207	2W, FP, 5BAND CC, 032 LEAD	1													YES					
	N-STD	9209	2W, FP, HOT SOLDER DIPPED LEAD SPECIAL	1, 2, 5, 10					YES													
FP42TX	STD	9913	2W, FP, TYPE MARKED, 24 HOUR BI, NOT MIL	2, 5		YES			YES													
FP0002	N-STD	9250	2W, FP, LUCENT PERMARK KS20289L3	1, 2, 5, 10		YES			YES						YES							

IMPEDANCE CODES

R1	R2	IMPEDANCE	CODE	LEGACY	LEGACY
(OHMS)	(OHMS)	CODE	SUFFIX	1%	2%,5%
15	33	100	A	15R0/33R0	150/330
22	33	130	A	22R0/33R0	220/330
33	47	190	A	33R0/47R0	330/470
47	68	280	A	47R0/68R0	470/680
50	200	400	A	50R0/2000	500/201
68	200	510	A	68R0/2000	680/201
80	210	580	A	80R0/2100	800/211
81	130	500	A	81R0/1300	810/131
82	120	490	A	82R0/1200	820/121
82	130	500	B	82R0/1300	820/131
82	220	600	B	82R0/2200	820/221
85	260	640	A	85R0/2600	850/261
90	660	790	A	90R0/6600	900/661
100	150	600	A	1000/1500	101/151
100	200	670	B	1000/2000	101/201
100	2000	950	B	1000/2001	101/202
103	182	660	A	1030/1820	N/A
110	220	730	A	1100/2200	111/221
120	180	720	A	1200/1800	121/181
120	200	750	B	1200/2000	121/201
120	280	840	A	1200/2800	121/281
121	195	750	A	1210/1950	N/A
130	82	500	C	1300/82R0	131/820
130	91	540	A	1300/91R0	131/910
130	130	650	A	1300/1300	131/131
130	208	800	B	1300/2080	N/A
130	210	800	C	1300/2100	131/211
140	680	121	D	1400/6800	141/681
145	230	890	A	1450/2300	N/A
145	238	900	B	1450/2380	N/A
146	234	900	A	1460/2340	N/A
150	120	670	A	1500/1200	151/121
150	180	820	B	1500/1800	151/181
150	240	920	A	1500/2400	151/241
150	470	111	A	1500/4700	151/471
160	240	960	A	1600/2400	161/241
160	260	990	A	1600/2600	161/261
160	270	101	D	1600/2700	161/271
162	260	101	A	1620/2600	N/A
165	165	830	A	1650/1650	N/A
171	241	101	E	1710/2410	N/A
180	110	680	A	1800/1100	181/111
180	220	990	B	1800/2200	181/221
180	240	101	C	1800/2400	181/241

R1	R2	IMPEDANCE	CODE	LEGACY	LEGACY
(OHMS)	(OHMS)	CODE	SUFFIX	1%	2%,5%
180	270	111	C	1800/2700	181/271
180	300	111	B	1800/3000	181/301
180	330	121	E	1800/3300	181/331
180	360	121	F	1800/3600	181/361
180	390	121	B	1800/3900	181/391
190	190	950	A	1900/1900	191/191
194	312	121	A	1940/3120	N/A
200	200	101	F	2000/2000	201/201
200	270	111	E	2000/2700	201/271
220	150	890	B	2200/2200	221/151
220	180	990	C	2200/1800	221/181
220	220	111	F	2200/2200	221/221
220	230	111	G	2200/2300	221/231
220	240	111	D	2200/2400	221/241
220	270	121	C	2200/2700	221/271
220	320	131	B	2200/3200	221/321
220	330	131	A	2200/3300	221/331
220	470	151	E	2200/4700	221/471
220	680	171	A	2200/6800	221/681
220	1000	181	B	2200/1001	221/102
220	1800	201	A	2200/1801	221/182
240	390	151	A	2400/3900	241/391
242	396	151	F	2420/3960	N/A
243	390	151	B	2430/3900	N/A
250	375	151	C	2500/3750	N/A
260	162	101	G	2600/1620	N/A
270	270	141	A	2700/2700	271/271
270	360	151	D	2700/3600	271/361
270	470	171	B	2700/4700	271/471
310	470	191	C	3100/4700	311/471
330	180	121	J	3300/1800	331/181
330	220	131	C	3300/2200	331/221
330	330	171	C	3300/3300	331/331
330	390	181	A	3300/3900	331/391
330	470	191	A	3300/4700	331/471
330	680	221	B	3300/6800	331/681
331	821	241	A	3310/8210	N/A
360	180	121	G	3600/1800	361/181
360	470	201	C	3600/4700	361/471
360	600	231	A	3600/6000	361/601
360	720	241	C	3600/7200	361/721
360	780	251	B	3600/7800	361/781
390	180	121	H	3900/1800	391/181
390	470	211	A	3900/4700	391/471
390	500	221	A	3900/5000	391/501
390	510	221	C	3900/5100	391/511
390	620	241	D	3900/6200	391/621

R1	R2	IMPEDANCE	CODE	LEGACY	LEGACY
(OHMS)	(OHMS)	CODE	SUFFIX	1%	2%,5%
390	820	261	A	3900/8200	391/821
470	330	191	B	4700/3300	471/331
470	470	241	B	4700/4700	471/471
470	560	261	B	4700/5600	471/561
470	680	281	A	4700/6800	471/681
470	820	301	A	4700/8200	471/821
470	1000	321	A	4700/1001	471/102
500	500	251	C	5000/5000	501/501
500	1000	331	A	5000/1001	501/102
560	560	281	B	5600/5600	561/561
560	1000	361	A	5600/1001	561/102
560	1200	381	B	5600/1201	561/122
560	2000	441	A	5600/2001	561/202
620	820	351	A	6200/8200	621/821
620	910	371	A	6200/9100	621/911
620	1000	381	A	6200/1001	621/102
634	4990	561	A	6340/4991	N/A
660	940	391	A	6600/9400	661/941
680	680	341	A	6800/6800	681/681
680	1000	401	A	6800/1001	681/102
680	1200	431	A	6800/1201	681/122
750	750	381	C	7500/7500	751/751
750	1500	501	A	7500/1501	751/152
1000	680	401	B	1001/6800	102/681
1000	1000	501	B	1001/1001	102/102
1000	1500	601	A	1001/1501	102/152
1000	2000	671	A	1001/2001	102/202
1000	3300	771	A	1001/3301	102/332
1000	4000	801	A	1001/4001	102/402
1100	1100	551	A	1101/1101	112/112
1100	1500	631	A	1101/1501	112/152
1100	2000	711	A	1101/2001	112/202
1200	2400	801	B	1201/2401	122/242
1300	1800	751	A	1301/1801	132/182
1500	3300	102	A	1501/3301	152/332
1600	26	260	A	1601/26R0	162/260
1800	220	201	B	1801/2200	182/221
2000	2000	102	B	2001/2001	202/202
2000	3300	122	D	2001/3301	202/332
2200	2200	112	A	2201/2201	222/222
2200	4400	152	C	2201/4401	222/442
2200	5600	162	A	2201/5601	222/562
2600	3600	152	A	2601/3601	262/362
3000	1000	751	B	3001/1001	302/102
3000	6200	202	B	3001/6201	302/622
3300	2200	132	A	3301/2201	332/222
3300	4700	192	A	3301/4701	332/472
3300	6200	222	A	3301/6201	332/622

R1	R2	IMPEDANCE	CODE	LEGACY	LEGACY
(OHMS)	(OHMS)	CODE	SUFFIX	1%	2%,5%
3300	6800	222	B	3301/6801	332/682
3300	10000	252	A	3301/1002	332/103
4700	2200	152	B	4701/1001	472/222
5000	5000	252	B	5001/5001	502/502
5600	5600	282	A	5601/5601	562/562
10000	5600	362	A	1002/5601	103/562
10000	10000	502	A	1002/1002	103/103
12000	15000	672	A	1202/1502	123/153
15000	33000	103	A	1502/3302	153/333
100000	1000	991	A	1003/1001	104/102
270000	270	271	A	2703/2700	274/271
330000	470	471	A	3303/4700	334/471
2200000	2200000	115	A	2204/2204	225/225

SPECIAL NETWORKS ALPHA CODES INDEX

SEQUENTIAL CODE LETTERS - to-"S" (special) NUMBER - FOR MODEL CS206

CODE	S#	CODE	S#	CODE	S#	CODE	S#	CODE	S#	CODE	S#	CODE	S#	CODE	S#	CODE	S#	
A A = 1		C H = 54		E Q = 107		G Y = 160		K F = 213		M N = 266		P V = 319		S D = 372		U L = 425		W T = 478
A B = 2		C J = 55		E R = 108		G Z = 161		K G = 214		M P = 267		P W = 320		S E = 373		U M = 426		W U = 479
A C = 3		C K = 56		E S = 109		H A = 162		K H = 215		M Q = 268		P Y = 321		S F = 374		U N = 427		W V = 480
A D = 4		C L = 57		E T = 110		H B = 163		K J = 216		M R = 269		P Z = 322		S G = 375		U P = 428		W W = 481
A E = 5		C M = 58		E U = 111		H C = 164		K K = 217		M S = 270		Q A = 323		S H = 376		U Q = 429		W X = 482
A F = 6		C N = 59		E V = 112		H D = 165		K L = 218		M T = 271		Q B = 324		S J = 377		U R = 430		W Y = 483
A G = 7		C P = 60		E W = 113		H E = 166		K M = 219		M U = 272		Q C = 325		S K = 378		U S = 431		W Z = 484
A H = 8		C Q = 61		E X = 114		H F = 167		K N = 220		M V = 273		Q D = 326		S L = 379		U T = 432		W AA = 485
A J = 9		C R = 62		E Z = 115		H G = 168		K P = 221		M W = 274		Q E = 327		S M = 380		U U = 433		W AB = 486
A K = 10		C S = 63		F A = 116		H H = 169		K Q = 222		M X = 275		Q F = 328		S N = 381		U V = 434		W AC = 487
A L = 11		C T = 64		F B = 117		H J = 170		K R = 223		M Y = 276		Q G = 329		S P = 382		U W = 435		W AD = 488
A M = 12		C U = 65		F C = 118		H K = 171		K S = 224		N A = 277		Q H = 330		S Q = 383		U X = 436		W AE = 489
A N = 13		C V = 66		F D = 119		H L = 172		K T = 225		N B = 278		Q J = 331		S R = 384		U Y = 437		W AF = 490
A P = 14		C W = 67		F E = 120		H M = 173		K U = 226		N C = 279		Q K = 332		S S = 385		V A = 438		W AG = 491
A Q = 15		C Y = 68		F F = 121		H N = 174		K V = 227		N D = 280		Q L = 333		S T = 386		V B = 439		W AH = 492
A R = 16		C Z = 69		F G = 122		H P = 175		K W = 228		N E = 281		Q M = 334		S U = 387		V C = 440		W AI = 493
A S = 17		D A = 70		F H = 123		H Q = 176		K X = 229		N F = 282		Q N = 335		S V = 388		V D = 441		W AJ = 494
A T = 18		D B = 71		F J = 124		H R = 177		K Z = 230		N G = 283		Q P = 336		S W = 389		V E = 442		W AK = 495
A U = 19		D C = 72		F K = 125		H S = 178		L A = 231		N H = 284		Q Q = 337		S X = 390		V F = 443		W AL = 496
A V = 20		D D = 73		F L = 126		H T = 179		L B = 232		N I = 285		Q R = 338		S Y = 391		V G = 444		W AM = 497
A W = 21		D E = 74		F M = 127		H U = 180		L C = 233		N J = 286		Q S = 339		T A = 392		V H = 445		W AN = 498
A X = 22		D F = 75		F N = 128		H V = 181		L D = 234		N K = 287		Q T = 340		T B = 393		V I = 446		W AO = 499
A Z = 23		D G = 76		F P = 129		H W = 182		L E = 235		N L = 288		Q U = 341		T C = 394		V J = 447		W AP = 500
B A = 24		D H = 77		F Q = 130		H X = 183		L F = 236		N M = 289		Q V = 342		T D = 395		V K = 448		W AQ = 501
B B = 25		D J = 78		F R = 131		H Z = 184		L G = 237		N N = 290		Q W = 343		T E = 396		V L = 449		W AR = 502
B C = 26		D K = 79		F S = 132		J A = 185		L H = 238		N O = 291		Q X = 344		T F = 397		V M = 450		W AS = 503
B D = 27		D L = 80		F T = 133		J B = 186		L I = 239		N P = 292		Q Y = 345		T G = 398		V N = 451		W AT = 504
B E = 28		D M = 81		F U = 134		J C = 187		L J = 240		N Q = 293		R A = 346		T H = 399		V O = 452		W AU = 505
B F = 29		D N = 82		F V = 135		J D = 188		L K = 241		N R = 294		R B = 347		T I = 400		V P = 453		W AV = 506
B G = 30		D P = 83		F W = 136		J E = 189		L L = 242		N S = 295		R C = 348		T J = 401		V Q = 454		W AW = 507
B H = 31		D Q = 84		F Y = 137		J F = 190		L M = 243		N T = 296		R D = 349		T K = 402		V R = 455		W AX = 508
B J = 32		D R = 85		F Z = 138		J G = 191		L N = 244		N U = 297		R E = 350		T L = 403		V S = 456		W AY = 509
B K = 33		D S = 86		G A = 139		J H = 192		L O = 245		N V = 298		R F = 351		T M = 404		V T = 457		W AZ = 510
B L = 34		D T = 87		G B = 140		J I = 193		L P = 246		N W = 299		R G = 352		T N = 405		V U = 458		W BA = 511
B M = 35		D U = 88		G C = 141		J J = 194		L Q = 247		N X = 300		R H = 353		T O = 406		V V = 459		W BB = 512
B N = 36		D V = 89		G D = 142		J K = 195		L R = 248		N Y = 301		R I = 354		T P = 407		V W = 460		W BC = 513
B P = 37		D W = 90		G E = 143		J L = 196		L S = 249		N Z = 302		R J = 355		T Q = 408		V X = 461		W BD = 514
B Q = 38		D Y = 91		G F = 144		J M = 197		L T = 250		N AA = 303		R K = 356		T R = 409		V Y = 462		W BE = 515
B R = 39		D Z = 92		G G = 145		J N = 198		L U = 251		N AB = 304		R L = 357		T S = 410		V Z = 463		W BF = 516
B S = 40		E A = 93		G H = 146		J O = 199		L V = 252		N AC = 305		R M = 358		T T = 411		V AA = 464		W BG = 517
B T = 41		E B = 94		G I = 147		J P = 200		L W = 253		N AD = 306		R N = 359		T U = 412		V AB = 465		W BH = 518
B U = 42		E C = 95		G J = 148		J Q = 201		L X = 254		N AE = 307		R O = 360		T V = 413		V AC = 466		W BI = 519
B V = 43		E D = 96		G K = 149		J R = 202		L Y = 255		N AF = 308		R P = 361		T W = 414		V AD = 467		W BJ = 520
B W = 44		E E = 97		G L = 150		J S = 203		L Z = 256		N AG = 309		R Q = 362		T X = 415		V AE = 468		W BK = 521
B X = 45		E F = 98		G M = 151		J T = 204		M A = 257		N AH = 310		R R = 363		T Y = 416		V AF = 469		W BL = 522
B Z = 46		E G = 99		G N = 152		J U = 205		M B = 258		N AI = 311		R S = 364		T Z = 417		V AG = 470		W BM = 523
C A = 47		E H = 100		G O = 153		J V = 206		M C = 259		N AJ = 312		R T = 365		U A = 418		V AH = 471		W BN = 524
C B = 48		E J = 101		G P = 154		J W = 207		M D = 260		N AK = 313		R U = 366		U B = 419		V AI = 472		W BO = 525
C C = 49		E K = 102		G Q = 155		J X = 208		M E = 261		N AL = 314		R V = 367		U C = 420		V AJ = 473		W BP = 526
C D = 50		E L = 103		G R = 156		J Y = 209		M F = 262		N AM = 315		R W = 368		U D = 421		V AK = 474		W BQ = 527
C E = 51		E M = 104		G S = 157		J Z = 210		M G = 263		N AN = 316		R X = 369		U E = 422		V AL = 475		W BR = 528
C F = 52		E N = 105		G T = 158		J AA = 211		M H = 264		N AO = 317		R Y = 370		U F = 423		V AM = 476		W BS = 529
C G = 53		E P = 106		G U = 159		J AB = 212		M I = 265		N AP = 318		R Z = 371		U G = 424		V AN = 477		W BT = 530

To return to Table of Contents, double click * for Dale Wirewound, * for Draloric Wirewound, * for Dale Film, * for Draloric Film, * for Network/Arrays, * for Plasma Displays or * for Thermistors.

VALUE CODES FOR SPECIALS

(For TNPW, CMF and others)

Value codes usable across all sizes			
Suffix	Value	Special Code	Style
A1	99.68K	99S7	TNPW
A2	949.9	950S	TNPW
A3	2.841K	2S84	TNPW
A4	4.455K	4S46	TNPW
A5	4.466K	4S47	TNPW
A6	35.824K	35S8	TNPW
A7	538.11K	538S	TNPW
A8	538.112K	538S	TNPW
A9	110.8K	111S	TNPW
B1	3.125K	3S12	TNPW
B2	1.31991K	1S3199	CMF
B3	1.5625K	1S56	TNPW
B4	2.551K	2S55	TNPW
B5	1.071K	1S07	TNPW
B6	240.738K	240S74	CMF
114	105.901K	105S90	ERC-55-114



VISHAY COMMODITY RESISTORS PREFERRED PACKAGING LIST

VISHAY PREFERRED PACKAGING CODES Updated 10/10/2011

WIREWOUND RESISTORS	Preferred Package Type	SAP / Legacy Lead Free Pack Code	SAP Lead Bearing Pack Code	Legacy Lead Bearing Pack Code	Package Minimum QTY	Package Multiple QTY
RS, NS, CW, LVR, G, GN (LVR10 not included)	BULK	E12	B12	B12	100	100
RS005, NS005, CW005, LVR05, G010, GN010 and Larger (LVR10 not included)	REEL	E73	S73	S73 500	500	
Smaller than RS005, NS005, CW005, LVR05, G010 and GN010	REEL	E70	S70	S70 1000	1000	
LVR10	LACER	E03	L03	L03	20	20
RH005, NH005, RH010, NH010	CARD	E02	C02	C02	10	10
RH025, NH025, RH050, NH050	CARD	E02	C02	C02	5	5
RH100, NH100, RH250, NH250	SKIN	E01	J01	J01	1	1
HL, NHL, HLA, HLZ, HLT, HLM, NHLM	SKIN	E	J	J01	1	1
HLW, NHLW	FOAM	E	F	F01	1	1
WSC, WSF, WSN, WSZ	BULK	EK	BA	B43	100	100
WSC01/2, WSN01/2, WSF2012	REEL	EA	TA	R86	2000	2000
WSC0001, WSN0001, WSC2515, WSN2515, WSF2515	REEL	EA	TA	R86	2000	2000
WSC0002, WSN0002, WSC4527, WSN4527, WSF4527	REEL	EA	TA	R86	1200	1200
WSC6927, WSN6927	REEL	EA	TA	R86	725	725
WSZ7532	REEL	EA	TA	R86	350	350
WSR ALL	BULK	EK	BA	B43	100	100
WSR2, WSR3, WSR5	REEL	EA	TA	R86	1500	1500
WSR2-3	REEL	EA	TA	R86	5000	5000
WSL, WSK, WSL...E, WSE, WSH	BULK	EK	BA	B43	100	100
WSL0603, WSL2816	REEL	EA	-	-	5000	5000
WSL0805, WSE0805, WSLP0805	REEL	EA	TG	RT1	5000	5000
WSL1206, WSL2010, WSL1506E, WSL2010E, WSLP1206, WSLT2010	REEL	EA	TA	R86 4000	4000	
WSL2512, WSK2512, WSL2512E, WSLT2512	REEL	EA	TA	R86	2000	2000
WSL2816	REEL	EH	TH	RJ9	2000	2000
WSH2818	REEL	EA	-	-	3500	3500
WSL3637	REEL	EA	TA	R86	4000	4000
WSL3921, WSLT3921	REEL	EA	-	-	3000	3000
WSL5931, WSLT5391, WSL2726, WSL4026	REEL	EA	-	-	1500	1500
CPW, CPWN, CPL, CA, CPSL, CPS, CL, PCT And SR smaller than 10 watt	BULK	E14	B14	B14 10	1	
CP0010, CPW10, CPWN10, CPL10, CPSL10 10 watt or larger	BULK	E14	B14	B14 5	1	
CPR05 and smaller	BULK	E14	B14	B14	10	1
CPR07 or larger	FOAM	E10	F10	F10	10	1
CP	BULK	E14	B14	B14	100	1
CPCC, CPCP, CPCF, CPCL	BULK	E32	B32	B32	10	1
R RER40, RER60, RE60, RER45, RER65, RE65 RER50, RER70, RE70, RER55, RER75, RE75 RE77, RE80	CARD CARD SKIN	NOT AVAILABLE	C02 C02 J01	C02 C02 J01	10 5 1	10 5 1
RW ALL	BULK	NOT AVAILABLE	B12	B12	100	100
RW ALL	REEL	NOT AVAILABLE	S73	S73	500	500
RW69, RW70, RW79, RW80, RW81	REEL	NOT AVAILABLE	S70	S70	1000	1000
RWR ALL	BULK	NOT AVAILABLE	B12	B12	100	100
RWR ALL	REEL	NOT AVAILABLE	S73	S73	500	500
RWR80, RWR81, RWR82, RWR89, RWR71	REEL	NOT AVAILABLE	S70	S70	1000	1000

FILM RESISTORS	Preferred Package Type	SAP / Legacy Lead Free Pack Code	SAP Lead Bearing Pack Code	Legacy Lead Bearing Pack Code	Package Minimum QTY	Package Multiple QTY
CRCC1206	REEL	EA	TF	R02	4000	4000
RN ALL, RL ALL RN ALL, RL ALL RN50, 55, RL07 RN60, 65, 70, RL20	BULK REEL REEL REEL	NOT AVAILABLE	B14 RE6 R36 R36	B14 RE6 R36 R36	100 1000 5000 2500	100 1000 5000 2500
CMF ALL CMF ALL CMF07, 50, 55 CMF20, 60, 65, 70 CMF65-146, CMF65-147, CMF70-146, CMF70-147 CMF65-146, CMF65-147, CMF70-146, CMF70-147	BULK REEL REEL REEL BULK REEL	EK EB EA EA EK EA	BF R6 RE RE BF CP	B14 RE6 R36 R36 B14 R55	100 1000 5000 2500 100 1000	100 1000 5000 2500 100 1000
M55342 & M32159 ALL / D55342 07 M55342 ALL / D55342 07 Space Level T M55342 & M32159 ALL / D55342 07 M55342 ALL / D55342 07 Space Level T M55342 & M32159 ALL / D55342 07 M55342 ALL / D55342 07 Space Level T M55342 & M32159 01, 02, 03, 04, 05, 06 08, 10, 11, 12, 13 / D55342 07 M55342 & M32159 09 M55342 ALL / D55342 07 Space Level T M55342 & M32159 01, 02, 03, 06, 10, 11, 12, 13 / D55342 07 M55342 & M32159 04, 05, 08 M55342 & M32159 09 M55342 ALL / D55342 07 Space Level T	REEL REEL REEL REEL REEL REEL REEL NOT AVAILABLE REEL REEL TRAY TRAY TRAY TRAY		S6 ST S2 SU S3 SV TP TP TN WB WB WB WA	S82 S76 S83 S77 S84 S78 R01 R01 R78 T03 T03 T03 M18	300 300 500 500 1000 1000 4000 2000 100 100 50 25 25	300 300 500 500 1000 1000 4000 2000 1 100 50 25 1
RCWP ALL RCWP ALL RCWP ALL RCWP 540, 550, 575, 0302, 0402, 0502, 0603, 1100, 1206, 2010, 5100, 5150, 7225 RCWP 2512 RCWP 540, 550, 575, 0302, 0402, 0502, 0603, 1100, 1206, 5100 RCWP 2010, 5150, 7225 RCWP 2512 RCWP 0201 RCWP 0201 RCWP 0201 RCWP 0201	REEL REEL REEL REEL REEL TRAY TRAY TRAY REEL REEL REEL REEL	ED EC EB EA EA ET ET ET ED EC EB EA	S6 S2 S3 TP TP WB WB WB UB UC UD UA	S82 S83 S84 R01 R01 T03 T03 T03 UB UC UD UA	300 500 1000 4000 2000 100 50 25 300 500 1000 4000	300 500 1000 4000 2000 100 50 25 300 500 1000 4000
RNC ALL RNC 50, 55, 60 RNC 50, 55, 60 RNC 65 AND 70 RNC 65 AND 70	BULK REEL REEL REEL REEL		B14 RE6 R36 RE6 R64	B14 RE6 R36 RE6 R64	100 1000 5000 1000 2500	100 1000 5000 1000 2500
RCP1206	REEL REEL REEL REEL TRAY	ED EC EB EA ET	S6 S2 S3 TP WB	S82 S83 S84 R01 T03	300 500 1000 4000 100	300 500 1000 4000 100

FILM RESISTORS	Preferred Package Type	SAP / Legacy Lead Free Pack Code*	SAP Lead Bearing Pack Code	Legacy Lead Bearing Pack Code	Package Minimum QTY	Package Multiple QTY
ERC ALL (CUSTOM)	BULK	EK	BF	B14	100	100
ERC 50, 55, 60 (CUSTOM)	REEL	EB	R6	RE6	1000	1000
ERC 50, 55, 60 (CUSTOM)	REEL	EA	RE	R36	5000	5000
ERC 65 AND 70 (CUSTOM)	REEL	EB	R6	RE6	1000	1000
ERC 65 AND 70 (CUSTOM)	REEL	EA	RH	R64	2500	2500
RLR ALL	REEL	NOT AVAILABLE	RE6	RE6	1000	1000
RLR ALL	BULK		B14	B14	100	100
RLR05 AND 07	REEL		R36	R36	5000	5000
RLR20	REEL		R36	R36	2500	2500
RLR32	REEL		R64	R64	2500	2500
ERL ALL (CUSTOM)	REEL	EB	R6	RE6	1000	1000
ERL ALL (CUSTOM)	BULK	EK	BF	B14	100	100
ERL05 AND 07 (CUSTOM)	REEL	EA	RE	R36	5000	5000
ERL20 (CUSTOM)	REEL	EA	RE	R36	2500	2500
ERL32 (CUSTOM)	REEL	EA	RH	R64	2500	2500
ERL62 (CUSTOM)	REEL	EA	CP	R55	1000	1000
PTF ALL	BULK	EK	BF	B14	100	100
PTF ALL	REEL	EB	R6	RE6	1000	1000
PTF51, 56	REEL	EA	RE	R36	5000	5000
PTF65	REEL	EA	RE	R36	2500	2500
PSF ALL	BULK	EK	BA	B43	100	100
PSF2012	REEL	EA	TA	R86	2000	2000
PSF4527	REEL	EA	TA	R86	1200	1200
CPF ALL	BULK	E14	B14	B14	100	100
CPF ALL	REEL	EE6	RE6	RE6	1000	1000
CPF1	REEL	E36	R36	R36	5000	5000
CPF2 AND CPF3	REEL	E36	R36	R36	2500	2500
CCF50	REEL	E36	R36	R36	5000	5000
CCF60 / CCF2	REEL	E36	R36	R36	2500	2500
FRJ50	REEL	E36	R36	R36	5000	5000
RNX ALL	LACER	EL	LB	L05	100	20
RNX025, 038, 050	REEL	EB	R6	RE6	1000	1000
RNX025, 038, 050, 075, 100	REEL	EE	RC	R19	1000	1000
ROX050, 075, 100, 150, 200	LACER	EL	LB	L05	100	20
ROX050, 075, 100	REEL	EE	RF	R48	1000	1000
ROX300, 400, 500, 600	FOAM	EM	F5	F05	25	5
RDX	SKIN	E03*	J03	J03	5	1
HVW / HVX 1/2, 3/4	BULK	EK	BJ	B21	100	100
HVW / HVX ALL	LACER	EL	LB	L05	100	100
HVW / HVX 1/2, 3/4	REEL	EE	RC	R19	2500	2500
MVW	BULK	BJ / B21 **	NOT AVAILABLE	NOT AVAILABLE	100	100
MVW	LACER	LB / L05 **	AVAILABLE	AVAILABLE	100	100
MVW	REEL	RC / R19 **	E	AVAILABLE	2500	2500
SPW	CUSTOM	SL / S51 **	NOT AVAILABLE	NOT AVAILABLE	PER TPI	PER TPI
RJU	FOAM	E07*	F07	F07	2	1
B SERIES	FOAM	E08	F08	F08	5	5
T SERIES	BULK	E22	B22	B22	100	100
(D/G)PW, PX, VY, ZW, ZZ	BULK	E19*	B19	B19	5	1
(D/G)JU	SKIN	E03*	J03	J03	2	1

*Although lead free packaging codes are assigned – lead free will not be available on products with an asterisk until late Q4 2011. ** Note: Product family already lead free. No change in Historical packaging codes.

CHIP ARRAYS / NETWORKS	Preferred Package Type	SAP / Legacy Lead Free Pack Code*	SAP Lead Bearing Pack Code	Legacy Lead Bearing Pack Code	Package Minimum QTY	Package Multiple QTY
CRCA12	REEL	E	R	RB8	2000	2000
CZA04	REEL	EA	TD	RT7	10000	10000
CZA06	REEL	EA	RT	RG5	4000	4000
CS201 / CS206	BULK	E	P	P03	100	100
CSC12	BULK	EK	PA	P03	2000	500
CSC11	BULK	EK	PA	P03	2000	500
CSC10	BULK	EK	PA	P03	2000	1000
CSC09	BULK	EK	PA	P03	2000	1000
CSC08	BULK	EK	PA	P03	2000	1000
CSC07	BULK	EK	PA	P03	2000	1000
CSC06	BULK	EK	PA	P03	2000	2000
CSC05	BULK	EK	PA	P03	2000	2000
CSC04	BULK	EK	PA	P03	2000	2000
CSRC	BULK	E*	P	P03	100	1
DFM14	TUBE	NOT AVAILABLE	D05	D05	20	1
DFP14, 16	TUBE	E05*	D05	D05	20	1
DFRC16	TUBE	E05*	D05	D05	20	1
MDM14,16	TUBE	NOT AVAILABLE	D04	D04	100	25
MDP14,16	TUBE	E04	D04	D04	250	25
MDRC16	TUBE	E04	D04	D04	250	25
MSM06	TUBE	NOT AVAILABLE	D03	D03	152	38
MSM08	TUBE		D03	D03	140	28
MSM10	TUBE		D03	D03	132	22
MSP06	TUBE	EJ	DA	D03	456	38
MSP08	TUBE	EJ	DA	D03	336	28
MSP09	TUBE	EJ	DA	D03	300	25
MSP10	TUBE	EJ	DA	D03	264	22
SOGC16	REEL	EA	RZ	R61	1500	1500
SOGC16	TUBE	EJ	DC	D02	1508	52
SOGC20	REEL	EA	RZ	R61	1500	1500
SOGC20	TUBE	EJ	DC	D02	1512	42
SOMC14	REEL	EA	RZ	R61	2000	2000
SOMC14	TUBE	EJ	DC	D02	348	58
SOMC16	REEL	EA	RZ	R61	2000	2000
SOMC16	TUBE	EJ	DC	D02	312	52
SOMC20	REEL	EA	RZ	R61	2000	2000
SOMC20	TUBE	EJ	DC	D02	252	42

*Although lead free packaging codes are assigned – lead free will not be available on products with an asterisk until late Q4 2011.

** Note: Product family already lead free. No change in Historical packaging codes.

VISHAY PREFERRED PACKAGING CODES

ANGSTROHM FILM RESISTORS	Preferred Package Type	SAP / Legacy Lead Free Pack Code	SAP Lead Bearing Pack Code	Legacy Lead Bearing Pack Code	Package Minimum QTY	Package Multiple QTY
GSR55, 57, 60	BULK		MR	M76	25	25
GSR65, 70, 75	BULK		MS	M77	25	25
GSR55, 57, 60	REEL		CS	RJ7	100	1
GSR65, 70, 75	REEL		CT	RJ8	100	1
HDN55, 57, 60	BULK		MR	M76	25	25
HDN65, 70, 75	BULK		MS	M77	25	25
HDN55, 57, 60	REEL		CS	RJ7	100	1
HDN65, 70, 75	REEL		CT	RJ8	100	1
RNR55, 57, 60	BULK		M76	M76	25	25
RNR65, 70, 75	BULK		M77	M77	25	25
RNR55, 57, 60	REEL		RJ7	RJ7	100	1
RNR65, 70, 75	REEL		RJ8	RJ8	100	1
RNN55, 57, 60	BULK		M76	M76	25	25
RNN65, 70, 75	BULK		M77	M77	25	25
RNN55, 57, 60	REEL		RJ7	RJ7	100	1
RNN65, 70, 75	REEL		RJ8	RJ8	100	1
HMS	CUSTOM		S51	S51	PER TPI	PER TPI

TECHNO NETWORKS	Preferred Package Type	SAP / Legacy Lead Free Pack Code*	SAP / Legacy Lead Bearing Pack Code*	SAP / Legacy No Solder Pack Code*	Package Minimum QTY	Package Multiple QTY
MCN ALL	BULK	CB	TB	NOT AVAILABLE	100	1
MRCN ALL	BULK	CB	TB	NOT AVAILABLE	100	1
MRCN ALL	TRAY	CW	TW	AVAILABLE	100	1
T14L	TUBE	CT	TT	NOT AVAILABLE	100	1
T16L	TUBE	CT	TT	AVAILABLE	100	1
TCN ALL	BULK	CB	TB	NOT AVAILABLE	100	1
TRC ALL	BULK	CB	TB	NOT AVAILABLE	100	1
TSR	BULK	CB**	RB	NOT AVAILABLE	100	1
TSR	STRIP	CS**	RS	AVAILABLE	100	1
TxxS ALL	BULK	CB	RB	NOT AVAILABLE	250	1

*Combination of both the Terminal Finish and the Packaging Code.

**Although lead free packaging codes are assigned – lead free will not be available on products with an asterisk until late Q4 2011.

Listings in Blue are the default pack codes

VISHAY PREFERRED PACKAGING CODES

TECHNO FILM RESISTORS	Preferred Package Type	SAP / Legacy Lead Free Pack Code*	SAP / Legacy Lead Bearing Pack Code*	SAP / Legacy No Solder Pack Code*	Package Minimum QTY	Package Multiple QTY
CDHV2512	BULK	EB	TB	NB	250	1
CDHV2512	REEL	EF	TF	NF	2000	2000
CDHV2512	REEL	E1	T1	N1	1000	1000
CDHV2512	REEL	E5	T5	N5	500	500
CDHV2512	REEL	ET	TT	NT	250	1
CDHV2512	TRAY	EW	TW	NW	250	1
RC ALL	BULK	FB	SB	NB	250	1
RC ALL	REEL	FF	SF	NF	4000	4000
RC ALL	REEL	F1	S1	N1	1000	1000
RC ALL	REEL	F5	S5	N5	500	500
RC ALL	REEL	FT	ST	NT	250	1
RC ALL	TRAY	FW	SW	NW	250	1
CRHV ALL	BULK	EB	TB	NB	250	1
CRHV1206, 1210, 2010	REEL	EF	TF	NF	4000	4000
CRHV2510, 2512	REEL	EF	TF	NF	2000	2000
CRHV ALL	REEL	E1	T1	N1	1000	1000
CRHV ALL	REEL	E5	T5	N5	500	500
CRHV ALL	REEL	ET	TT	NT	250	1
CRHV ALL	TRAY	EW	TW	NW	250	1
CRMV ALL	BULK	EB	TB	NB	250	1
CRMV1206, 1210, 2010	REEL	EF	TF	NF	4000	4000
CRMV2510, 2512	REEL	EF	TF	NF	2000	2000
CRMV ALL	REEL	E1	T1	N1	1000	1000
CRMV ALL	REEL	E5	T5	N5	500	500
CRMV ALL	REEL	ET	TT	NT	250	1
CRMV ALL	TRAY	EW	TW	NW	250	1
RCHR ALL	BULK	EB	TB	NB	250	1
RCHR ALL	REEL	EF	TF	NF	4000	4000
RCHR ALL	REEL	E1	T1	N1	1000	1000
RCHR ALL	REEL	E5	T5	N5	500	500
RCHR ALL	REEL	ET	TT	NT	250	1
RCHR ALL	TRAY	EW	TW	NW	250	1
FHV025, 050	BULK	EB	RB	NOT AVAILABLE	100	1
FHV075, 100, 150, 160, 200, 400, 500	BULK	EB	RB	AVAILABLE	100	1
FHV075, 100, 150, 160, 200, 400, 500	STRIP	ES	RS		100	1
FHV026, 051, 076, 101, 151, 161, 201, 401, 501	BULK	EB	RB	NOT AVAILABLE	100	1
FHV026, 051, 076, 101, 151, 161, 201, 401, 501	TRAY	EW	RW		100	1
TD03, 10, 15, 20, 30	BULK	EB	RB	NOT AVAILABLE	250	1
TD05	BULK	EB	RB	AVAILABLE	250	1
TD03, 10, 15, 20, 30	STRIP	ES	RS		250	1
TR ALL	BULK	EB	RB	NOT AVAILABLE	100	1
TR ALL	STRIP	ES	RS	AVAILABLE	100	1
HML01	LACER	E05	NOT AVAILABLE	NOT AVAILABLE	100	20

*Combination of both the Solder Termination/Terminal Finish and the Packaging Code.

Listings in Blue are the default pack codes

VISHAY PREFERRED PACKAGING CODES – SINGLE LOT DATE CODES

DALE FILM RESISTORS	Preferred Package Type	SAP Lead Bearing Pack Code	Legacy Lead Bearing Pack Code	Legacy Base Packaging Code	Package Minimum QTY	Package Multiple QTY
RN ALL	BULK	BSL	BSL	B14	100	100
RN ALL	REEL	RSL	RSL	R36	500	100
RL ALL	BULK	BSL	BSL	B14	100	100
RL ALL	REEL	RSL	RSL	R36	500	100
M55342 ALL / D55342 07	REEL	UL	RSL	R78	300	100
Space level – M55342 ALL / D55342 07	REEL	UL	RSL	R78	100	1
M55342 01, 02, 03, 06, 10, 11, 12, 13 D55342 07	TRAY	WL	TSL	M18	100	100
M55342 04, 05, 08	TRAY	WL	TSL	M18	50	50
M55342 09	TRAY	WL	TSL	M18	25	25
Space level – M55342 ALL / D55342 07	TRAY	WL	TSL	M18	25	1
RNC ALL	BULK	BSL	BSL	B14	100	100
RNC 50, 55, 60	REEL	RSL	RSL	R36	500	100
RNC 65, 70	REEL	RSL	RSL	R64	500	100
RNR ALL	BULK	BSL	BSL	B14	100	100
RNR 50, 55, 60	REEL	RSL	RSL	R36	500	100
RNR 65, 70	REEL	RSL	RSL	R64	500	100
RLR ALL	BULK	BSL	BSL	B14	100	100
RLR 05, 07, 20	REEL	RSL	RSL	R36	500	100
RLR 32	REEL	RSL	RSL	R64	500	100
ERL ALL	BULK	BS	BSL	B14	1000	100
ERL ALL	REEL	UL	RSL	R36/R64	1000	100
ERC ALL	BULK	BS	BSL	B14	1000	100
ERC ALL	REEL	UL	RSL	R36/R64	1000	100
ANGSTROHM FILM RESISTORS						
RNR 55, 57, 60	BULK	BSL	BSL	M76	25	25
RNR 65, 70, 75	BULK	BSL	BSL	M77	25	25
RNR 55, 57, 60	REEL	RSL	RSL	RJ7	100	1
RNR 65, 70, 75	REEL	RSL	RSL	RJ8	100	1
RNN 55, 57, 60	BULK	BSL	BSL	M76	25	25
RNN 75, 65, 70	BULK	BSL	BSL	M77	25	25
RNN 55, 57, 60	REEL	RSL	RSL	RJ7	100	1
RNN 65, 70, 75	REEL	RSL	RSL	RJ8	100	1
NETWORKS						
M83401 03	TUBE	DSL	DSL	D05	20	1
M83401 01, 02	TUBE	DSL	DSL	D04	100	25
M83401 04, 07, 18	TUBE	DSL	DSL	D03	152	38
M83401 05, 08, 19	TUBE	DSL	DSL	D03	140	28
M83401 06, 09, 24	TUBE	DSL	DSL	D03	132	22
WIREWOUND RESISTORS						
RER 40, 45, 60, 65	CARD	CSL	CSL	C02	10	10
RER 50, 55, 70, 75	CARD	CSL	CSL	C02	5	5
RWR ALL	BULK	BSL	BSL	B12	100	100
RWR 71, 74, 78, 84	REEL	RSL	RSL	S73	100	1
RWR 80, 81, 82, 89	REEL	RSL	RSL	S70	100	1



VISHAY COMMODITY RESISTORS PREFERRED PACKAGING LIST

VISHAY PREFERRED PACKAGING CODES – SINGLE DATE CODES						
ANGSTROHM FILM RESISTORS	Preferred Package Type	SAP Lead Bearing Pack Code	Legacy Lead Bearing Pack Code	Legacy Base Packaging Code	Package Minimum QTY	Package Multiple QTY
RNR 55, 57, 60	BULK	BSD	BSD	M76	25	25
RNR 65, 70, 75	BULK	BSD	BSD	M77	25	25
RNR 55, 57, 60	REEL	RSD	RSD	RJ7	100	1
RNR 65, 70, 75	REEL	RSD	RSD	RJ8	100	1
RNN 55, 57, 60	BULK	BSD	BSD	M76	25	25
RNN 65, 70, 75	BULK	BSD	BSD	M77	25	25
RNN 55, 57, 60	REEL	RSD	RSD	RJ7	100	1
RNN 65, 70, 75	REEL	RSD	RSD	RJ8	100	1