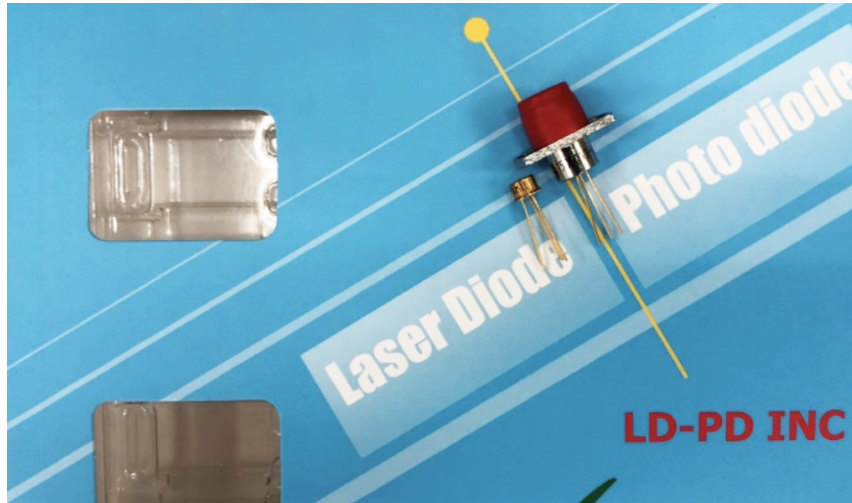


800nm~3600nm 300 μ m InGaAs PIN Photodiode TO46 Package



Description:

InGaAs photodiodes offer superb response from 900nm to 3600nm, perfect for telecom and near IR detection. The 300 and 1000 micron photodiodes are offered in isolated TO-46 packages with a lensed cap for single mode and multi-mode fiber coupling. These two sizes are also available with actively aligned FC receptacles. Photodiode is isolated in a TO-5 package with a broadband double sided AR-coated window. With the high shunt resistance, the 1mm photodiode is suitable for high sensitivity to weak signal applications.

Features:

- High reliability, low dark current
- 800-3600nm spectral range
- Active diameter 0.3mm
- Hermetic package TO46 Can
- Receptacle or with fiber coupling Optional

Application:

- CATV
- Optical transmission
- Optical fiber communication
- Optical fiber Sensors

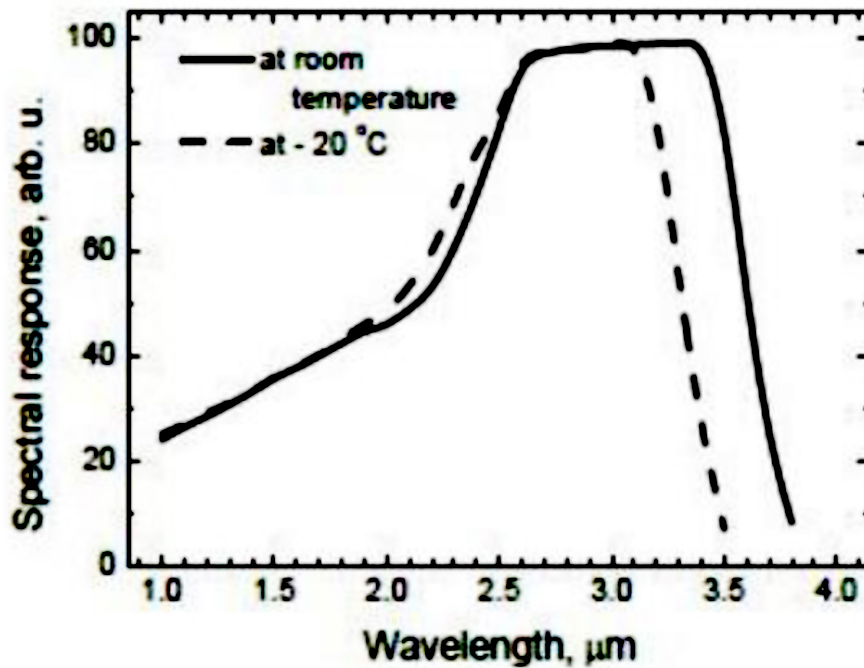
Laser Specifications:

Electrical/Optical Characteristics(Tsub=25° C, CW bias unless stated otherwise)

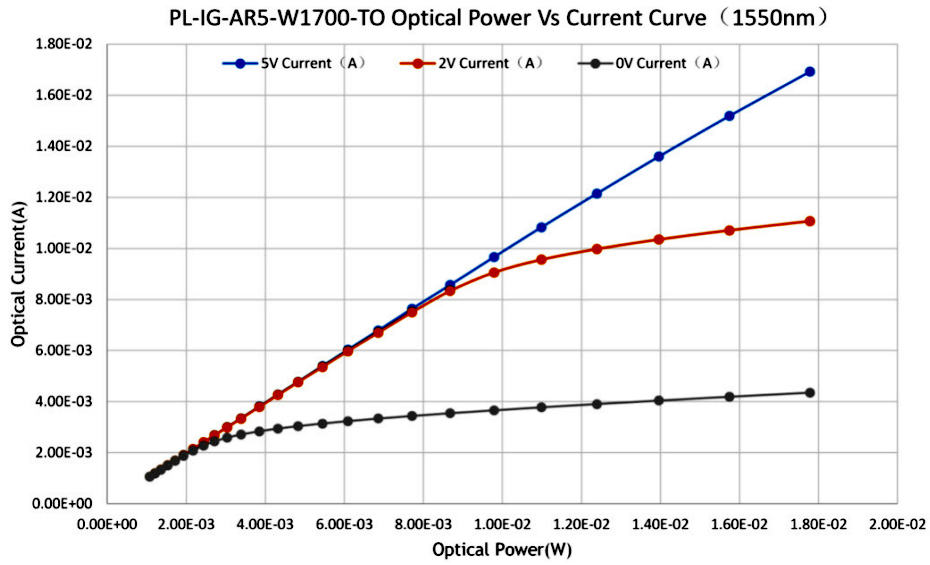
Parameter	Symbol	Unit	Typical Value
Active diameter	Φ	mm	0.3
Spectral range	λ	nm	800-3600
Responsivity	Re (VR=-0.2V, λ =800nm)	mA/mW	0.08
	Re (VR=-0.2V, λ =3000nm)	mA/mW	1.0
	Re (VR=-0.2V, λ =3600nm)	mA/mW	0.2
Response time	Tr (RL=50 Ω ,VR=-0.2V)	ns	40
Dark current	Id (VR=-0.2V)	uA	250
Reverse Breakdown voltage	VBR (IR=10 μ A)	V	1
Junction capacitance	Cj (f=1MHz, VR=-0.2V)	pF	20
Saturated Optical Power	Ps(VR=-0.2V)	mW	2
Operating voltage	VR	V	0-0.2
Package	Hermetic package TO46 Can or with receptacle or fiber coupling		

Typical characteristic curve:

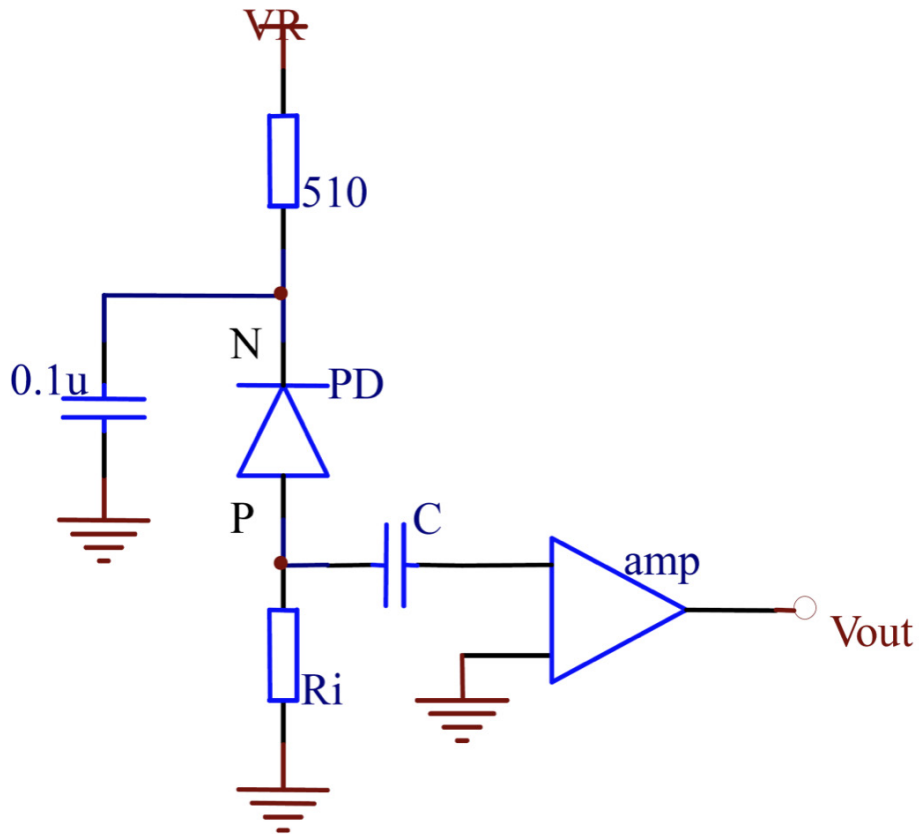
Responsivity, R (A/W)



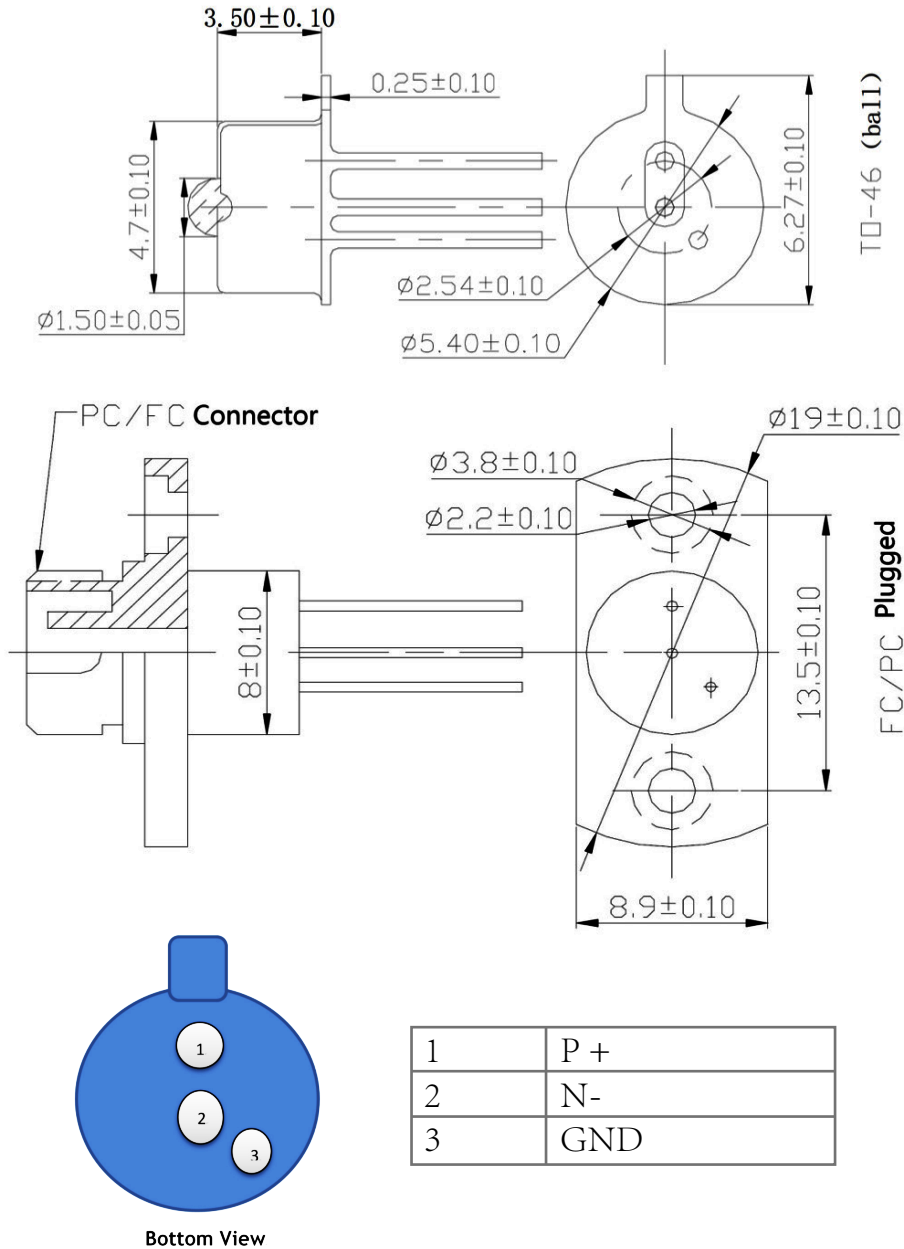
P-I Curve:



Application electric circuit:



Dimensions and Pin definitions:



ABSOLUTE MAXIMUM RATINGS:

Parameter	Symbol	Value	Unit
Operating temperature	Top	-20 ~ +50	°C
Storage temperature	Tstg	-55 ~ +70	°C
Forward current	If	10	mA
Reverse Voltage	Vr	1	V
Reverse current	Ir	1	mA
Soldering temperature(time)	Ts (10s)	260	°C

Ordering Info:

PL-☆-AR▽-W□□□□-XX
 (EG:PL-IG-AR0080-W3600-TO USD480/EA)

☆ : Material

IG: InGaAs

Si: Si

▽ : Active Area

0080:80um

1: 1mm

□□□□ : Cut off Wavelength

400:400nm

900:900nm

1700:1700nm

2100:2100nm

2400:2400nm

2700:2700nm

3600:3600nm

XX: Package/Fiber and Connector Type

TO:TO46 Package

FPG:FC/PC Plugged

FSA=SMF-28E Fiber coupled + FC/APC

FSP=SMF-28E Fiber coupled + FC/PC

FPP=PM Fiber Fiber coupled + FC/PC

FPA=PM Fiber Fiber coupled + FC/APC

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 User Safety

Safety and Operating Considerations

This device operates under reverse bias voltage, and the polarity of the device can't be reversed.

Operating the Photodiode outside of its maximum ratings may cause device failure or a safety hazard. Power supplies used with this component cannot exceed maximum peak optical power.

ESD PROTECTION——Electrostatic discharge (ESD) is the primary cause of unexpected laser diode failure. Take extreme precaution to prevent ESD. Use wrist straps, grounded work surfaces, and rigorous antistatic techniques when handling Photodiodes.