1mm Extended InGaAs Photodiodes



Description:

LD-PD-3000E Extended InGaAs Photodiodes, high sensitivity photo-diode for use in infrared instrumentation and sensing applications. High spectral response in the region 800 nm to 2200 nm.

Features:

- Top illumination planar PD
- Narrow Element gap
- Low Crosstalk,High reliability
- Good Reponsivity homogeneity of each Quadrant

Application:

- Laser guidance
- Laser positioning
- Laser navigation
- Laser range finder

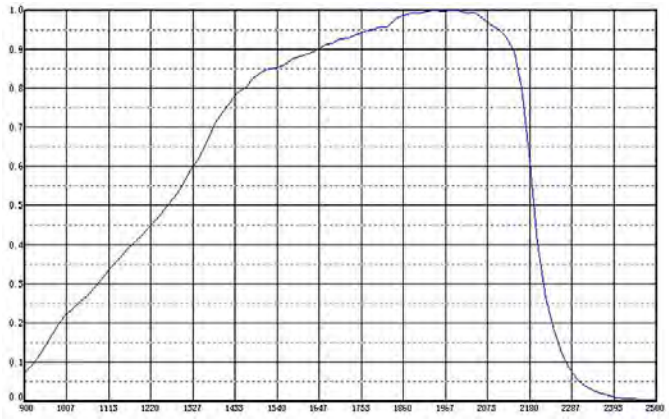
Electrical/Optical Characteristics:

Tsub=25°C, CW bias unless stated otherwise

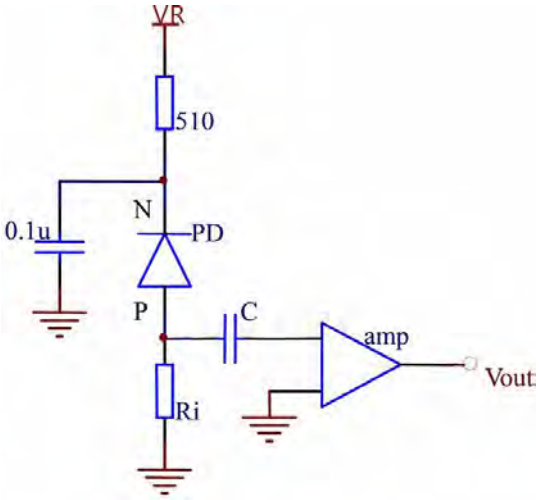
Parameters	Sym.	Min	Typ	Max	Unit
Peak Wavelength (typ)	λ	900~2200			nm
Active diameter	φ	1000			um
Responsivity @λP(min/typ)	Re	0.9	1.0		A/W
Shunt Resistance (min/typ)		40k	75k		Ω
Dark Current (max) @ 1V				10	uA
Capacitance (typ) @ 0V			1000		pF
Bandwidth w/ 50Ω@ 0 V (typ)			3.18		MHz
Rise time w/ 50Ω@ 0 V (typ)			110		ns
NEP @λPEAK (typ)			46.8 x10-14		$W/Hz^{1/2}$
Linearity (±0.2 dB @ 0 V)			6		dBm
Case Style	TO-46				

Typical characteristical curve:

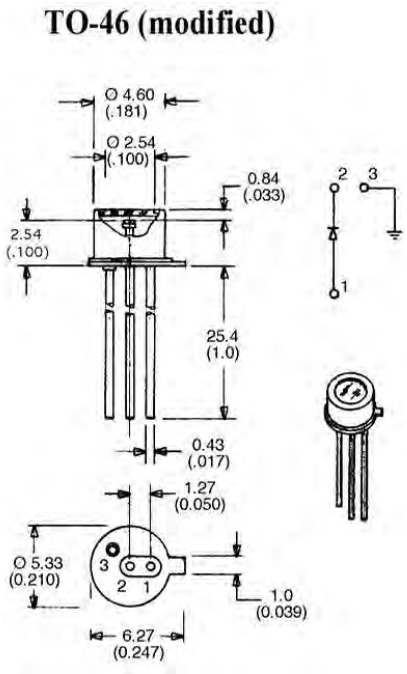
Relative Responsivity(X100%)



Application electric circuit:



Dimensions and Pin definitions:



Absolute Maximem Ratings:

Item	Symbol	Unit	Min	Typ	Max
Storage Temperature	Tstg	℃	-40	-	125
Operating Temperature	TOP	℃	-40	-	85
Reverse Voltage	VPD	V	1		
Reverse Current	IPR	mA	10		
Forward Current	IPF	mA	10		
Power Dissipation		mW	50		

Ordering Info:

PL-W□□□□-☆-AR▽-XX

W□□□□: Cut off Wavelength

400: 400nm

900: 900nm

1700: 1700nm

2100: 2100nm

2400: 2400nm

2700: 2700nm

☆ : Material

IG: InGaAs

Si: Si

▽: Active Area

1: 1mm

2: 2mm

….

5: 5mm

XX: Package/Fiber and Connector Type

TO: TO5 Package

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

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.