

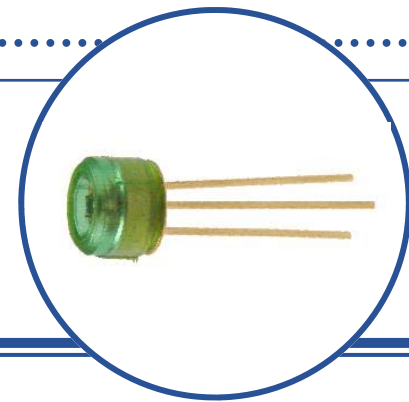
Fiber Optic Detector

OPF480



OPF480

- Electrically isolated plastic cap package
- High speed, low capacitance
- Designed to self align in the 0.228 diameter bore of standard fiber optic receptacles.
- Press fit simplified component installation
- 100MHz operation minimum



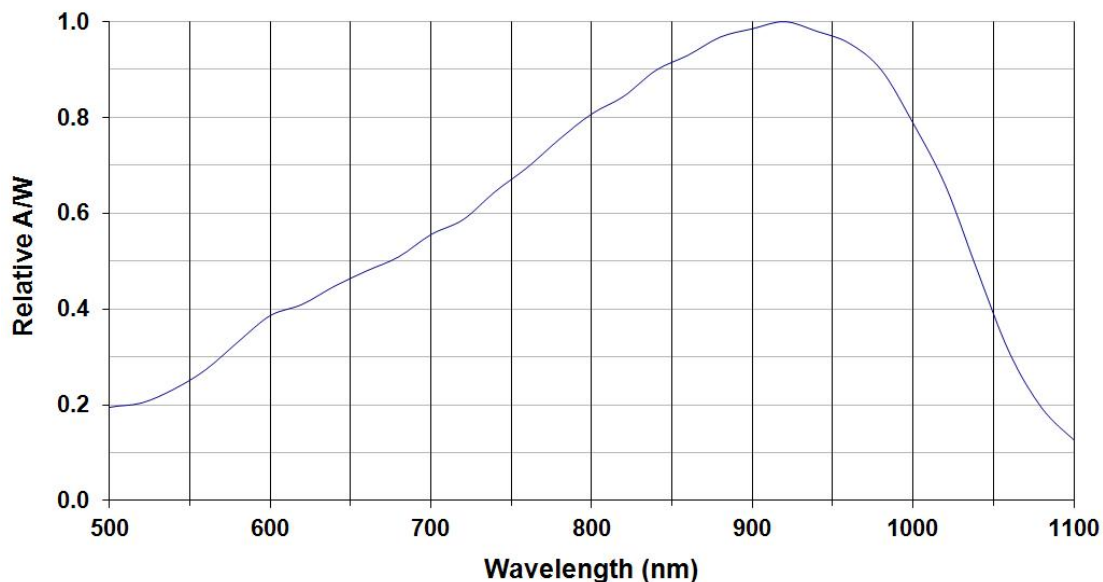
The OPF480 is a low noise silicon PIN photodiode mounted in a low cost package for fiber optic applications. It offers fast response at moderate bias and is compatible with LED and laser diode sources in the 800-1000 nm wavelength region. Low capacitance improves signal to noise performance in typical short haul LAN applications.

The OPF480 is designed to be compatible with multimode optical fibers from 50/125 to 200/300 microns.

Applications

- ◆ Industrial Ethernet equipment
- ◆ Copper-to-fiber media conversion
- ◆ Intra-system fiber optic links
- ◆ Video surveillance systems

Typical Responsivity



RoHS

OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$ unless otherwise noted

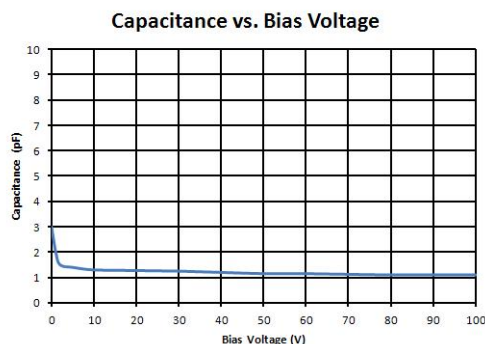
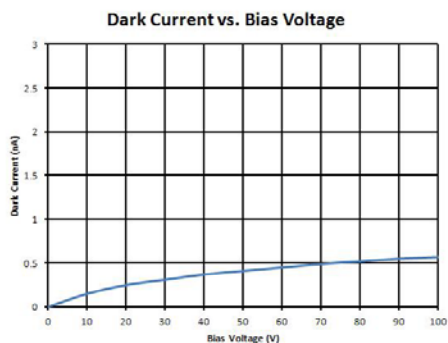
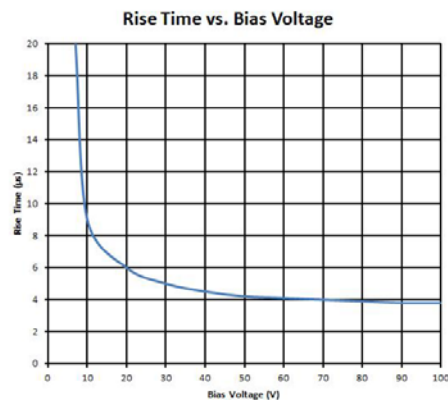
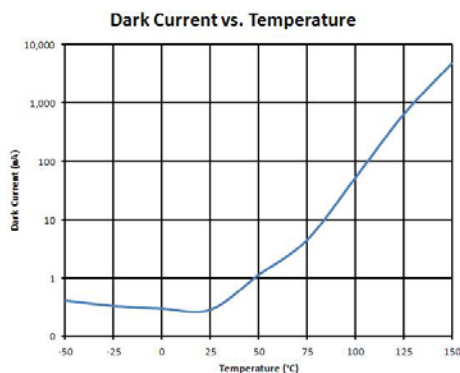
Storage Temperature Range	-55° C to +115° C
Operating Temperature Range	-40° C to +100° C
Lead Soldering Temperature ⁽¹⁾	260° C
Continuous Power Dissipation ⁽²⁾	200 mW
Maximum Reverse Voltage	100 VDC

Electrical/Optical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
R	Responsivity	0.45	0.55		A/W	$V_R = 5.0\text{V}$; 50/125 μm fiber; $\lambda = 850\text{nm}$
I_D	Dark Current		0.1	5.0	nA	$V_R = 5.0\text{V}$
λ_p	Peak Response Wavelength		905		nm	
t_r	Output Rise Time		2.0		ns	$V_R = 5\text{V}$; $R_L = 50\Omega$, 10%-90%
C_T	Total Capacitance		1.5	2.0	pF	$V_R = 5\text{V}$
FoV	Field of View		80		deg	

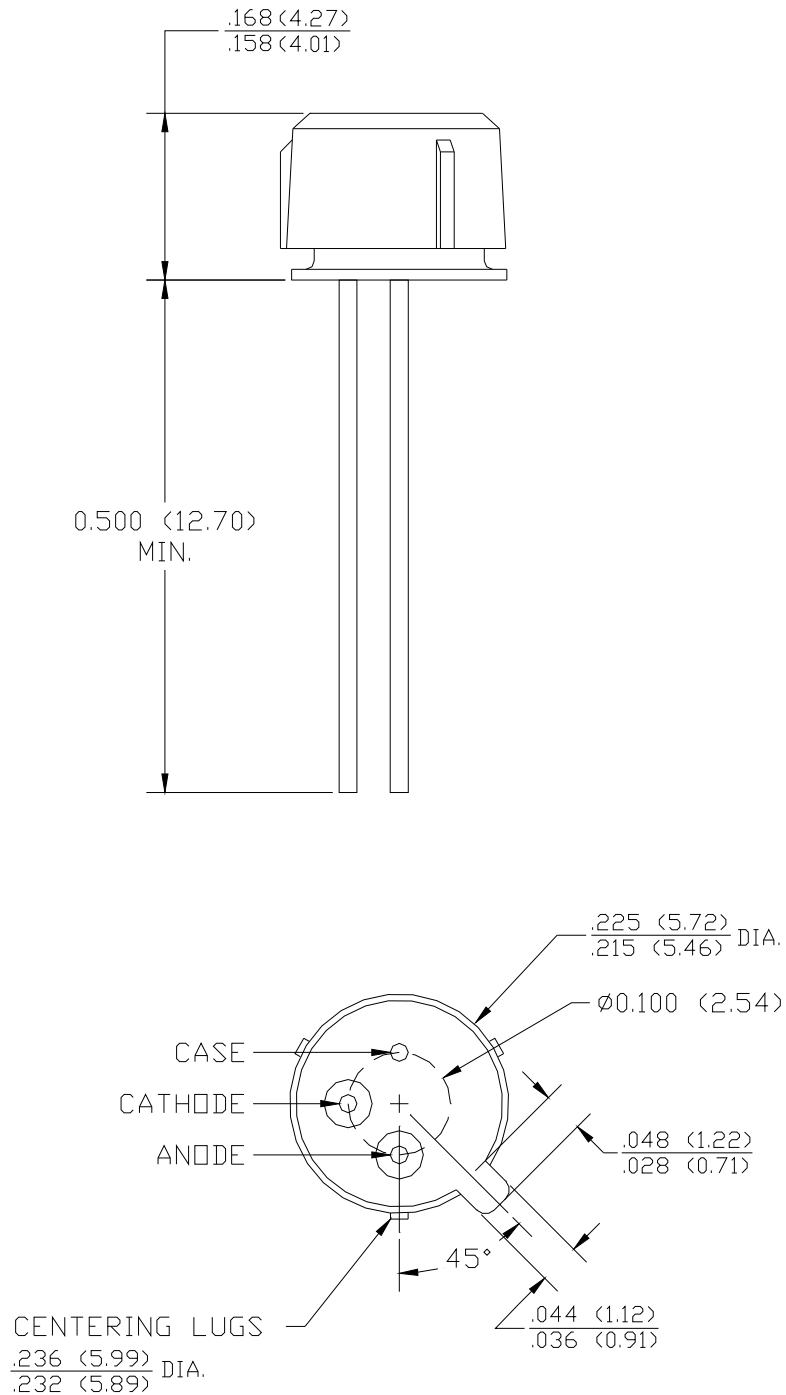
Notes:

- Maximum of 5 seconds with soldering iron. Duration can be extended to 10 seconds when flow soldering. RMA flux is recommended.
- De-rate linearly at 2.13mW/°C above 25°C.



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Mechanical Data



DIMENSIONS ARE IN INCHES (MILLIMETERS)

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