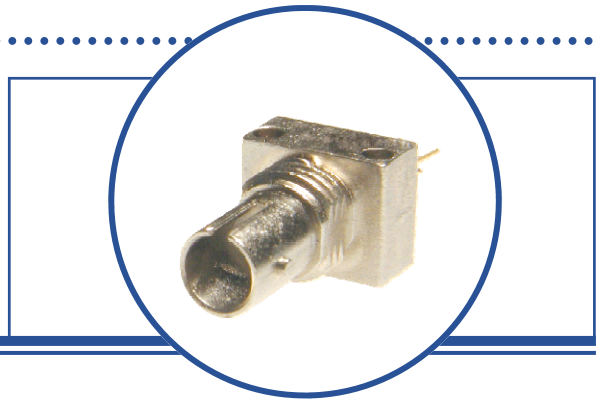
Fiber Optic Detector

OPF472

TT electronics
OPTEK Technology

OPF472

- High speed, low capacitance
- Popular ST® style receptacle
- Pre-tested with fiber to assure performance
- Component pre-mounted and ready to use
- 35MHz operation minimum



The OPF472 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.

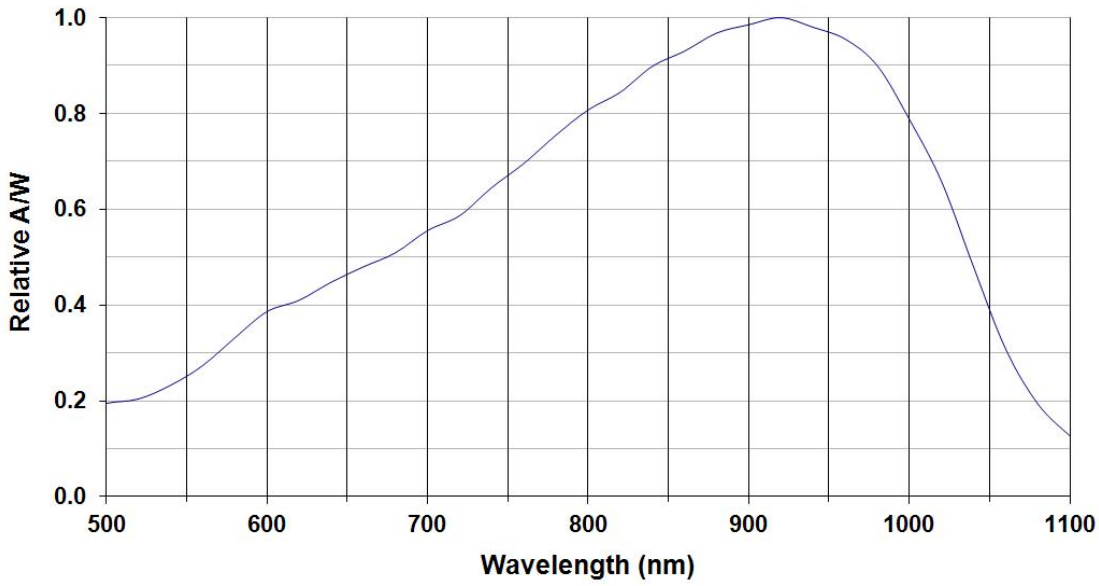
The OPF472 is designed to be compatible with multimode optical fibers from 50/125 to 200/300 microns.

Applications

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

Pb
RoHS

Typical Responsivity



ST® is a registered trademark of AT&T.

OPTEK Technology Inc.— 1645 Wallace Drive, Carrollton, Texas 75006
Phone: (800) 341-4747 FAX: (972) 323– 2396 sensors@optekinc.com www.optekinc.com

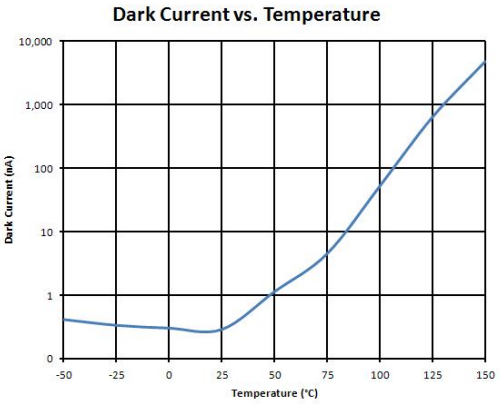
Absolute Maximum Ratings
T_A = 25° C unless otherwise noted

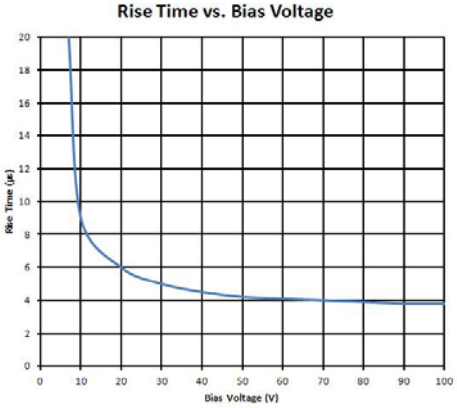
Storage Temperature Range	-55° C to +100° C
Operating Temperature Range	-40° C to +85° C
Lead Soldering Temperature[1]	260° C
Continuous Power Dissipation[2]	200 mW
Maximum Reverse Voltage	100 VDC

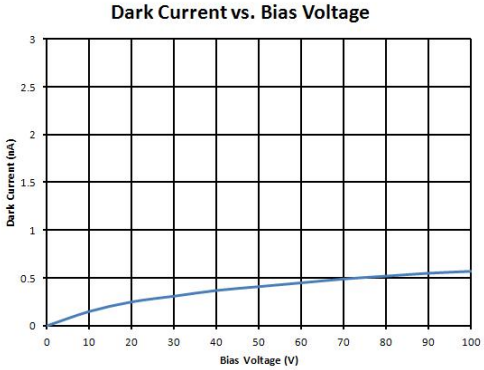
Electrical/Optical Characteristics (T_A = 25°C unless otherwise noted)

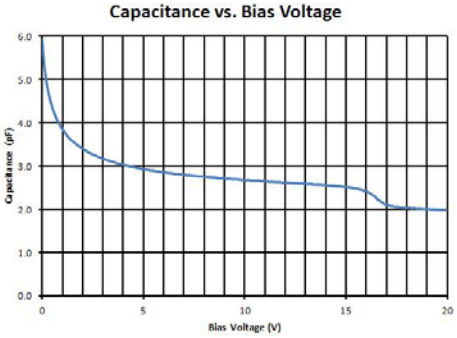
SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
R	Responsivity	0.45	0.55		A/W	V_R = 5.0V; 50/125µm fiber; λ = 850nm
I_D	Dark Current		0.1	5.0	nA	V_R = 5.0V
λ_p	Peak Response Wavelength		905		nm	
t_r	Output Rise Time		6.0		ns	V_R = 15V; R_L = 50Ω, 10%-90%
C_T	Total Capacitance		3.0		pF	V_R = 20V

Notes:
1. Maximum of 5 seconds with soldering iron. Duration can be extended to 10 seconds when flow soldering. RMA flux is recommended.
2. De-rate linearly at 2.67mW/°C above 25°C .









e in order to improve design and to supply the best product possible.

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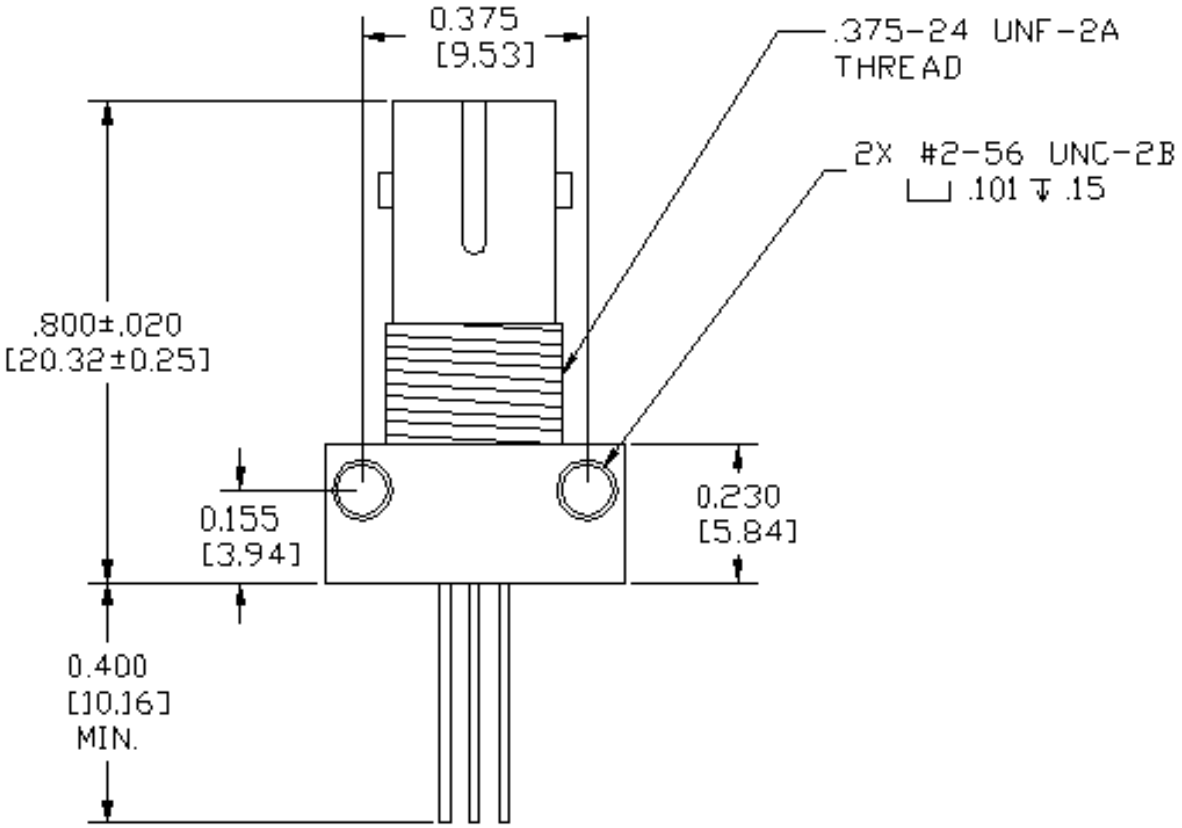
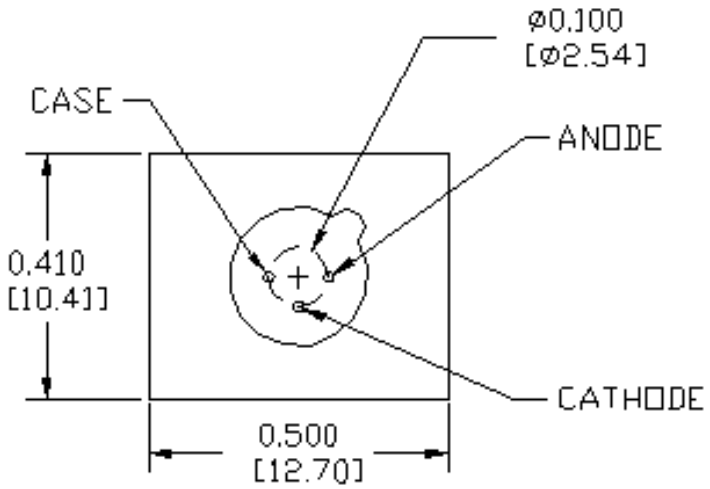
Mechanical Data





DIMENSIONS ARE IN INCHES (MILLIMETERS)