Fiber Optic Detector

OPF422



Features:

- 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



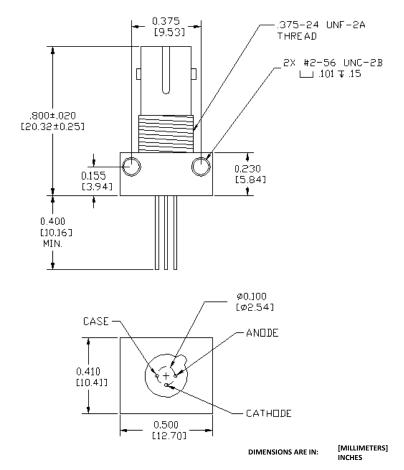
Description:

The OPF422 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 OPF422 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





General Note

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Electrical Specifications

Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)

Storage Temperature Range	-55° C to +125° 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 Characteristics (T_A = 25° C unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
R	Responsivity	0.45	0.55		A/W	V _R = 5.0V; 50/125μm fiber; ι = 850nm
I _D	Dark Current		0.1	5.0	nA	V _R = 5.0V
Ip	Peak Response Wavelength		905		nm	
t _r	Output Rise Time		6.0		ns	$V_R = 15V; R_L = 50\Omega, 10\%-90\%$
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 2.13mW/°C above 25°C.

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Performance

