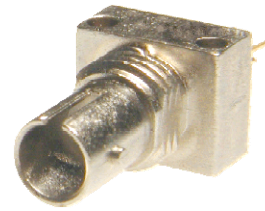


# Fiber Optic Detector

OPF482

## OPF482

- High speed, low capacitance
- Popular ST<sup>®</sup> style receptacle
- Pre-tested with fiber to assure performance
- Component pre-mounted and ready to use
- 100MHz operation minimum



The OPF482 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.

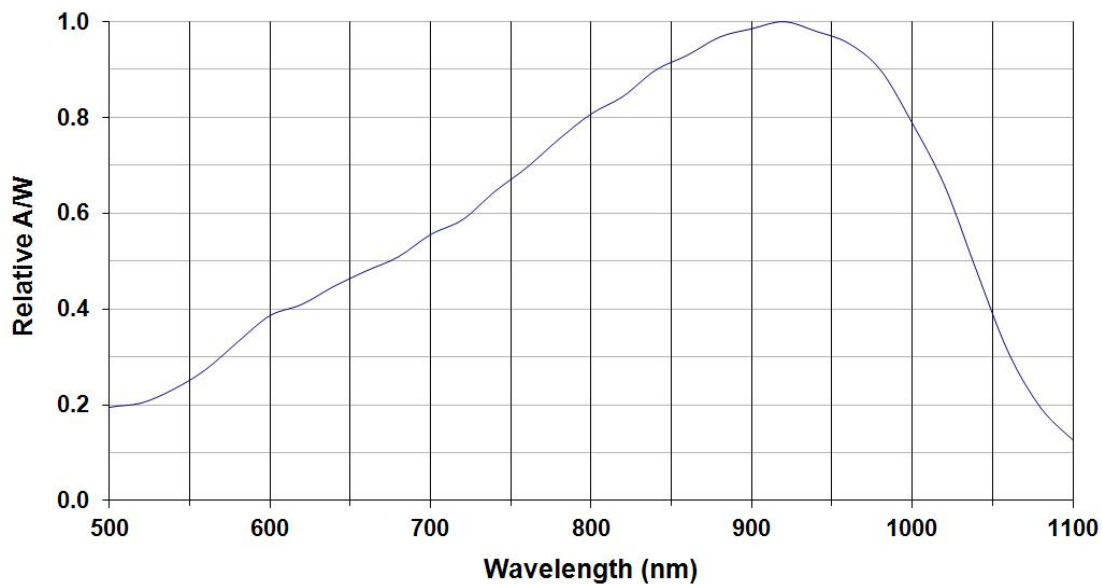
The OPF482 is designed to be compatible with multimode optical fibers from 50/125 to 200/300 microns.

## Applications

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



## Typical Responsivity



ST<sup>®</sup> is a registered trademark of AT&T.

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

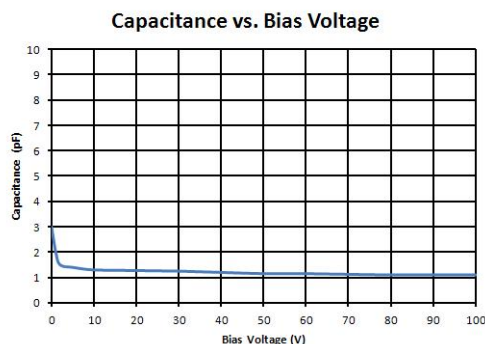
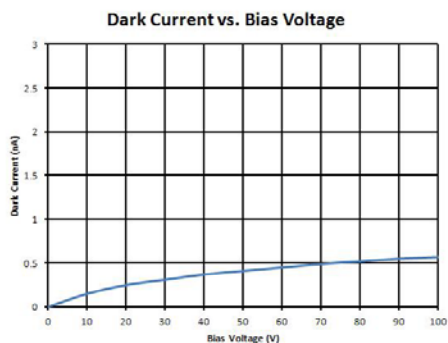
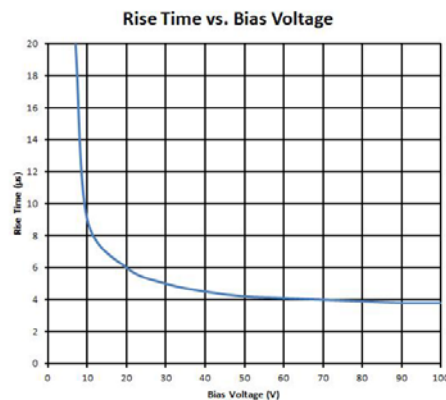
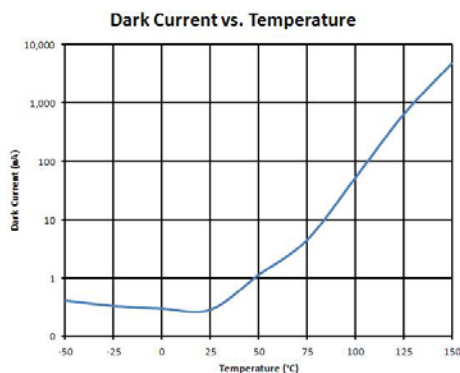
|                                             |                   |
|---------------------------------------------|-------------------|
| Storage Temperature Range                   | -55° C to +100° C |
| Operating Temperature Range                 | -40° C to +85° C  |
| Lead Soldering Temperature <sup>(1)</sup>   | 260° C            |
| Continuous Power Dissipation <sup>(2)</sup> | 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 $\mu\text{m}$ fiber; $\lambda = 850\text{nm}$ |
| $I_D$       | Dark Current             |      | 0.1  | 5.0 | nA    | $V_R = 5.0\text{V}$                                                        |
| $\lambda_p$ | 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    | $V_R = 5\text{V}$                                                          |

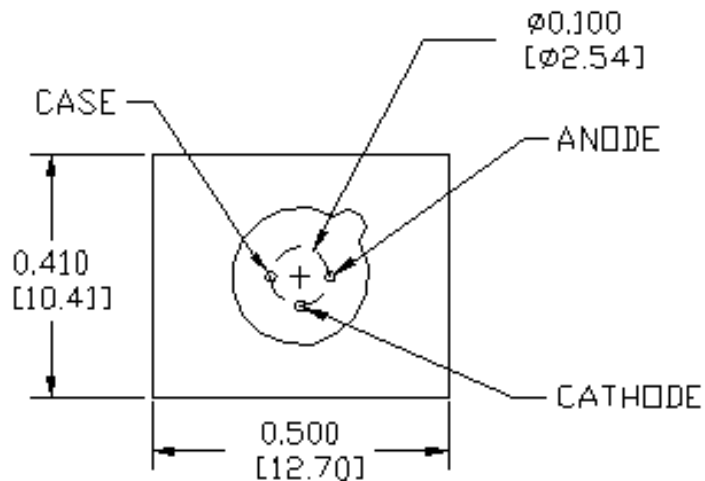
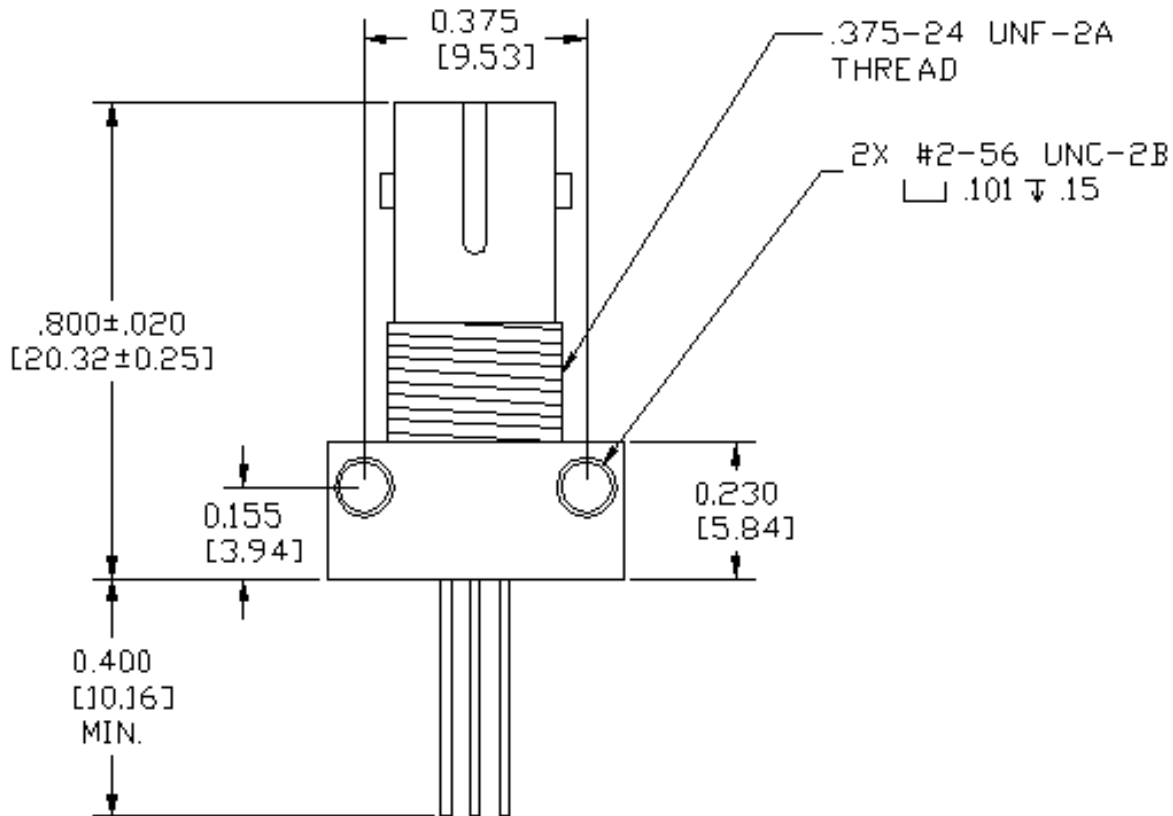
Notes:

- 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 2.67mW/°C above 25°C.



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Mechanical Data



DIMENSIONS ARE IN INCHES (MILLIMETERS)

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# AMEYA360

Components Supply Platform

Authorized Distribution Brand :



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