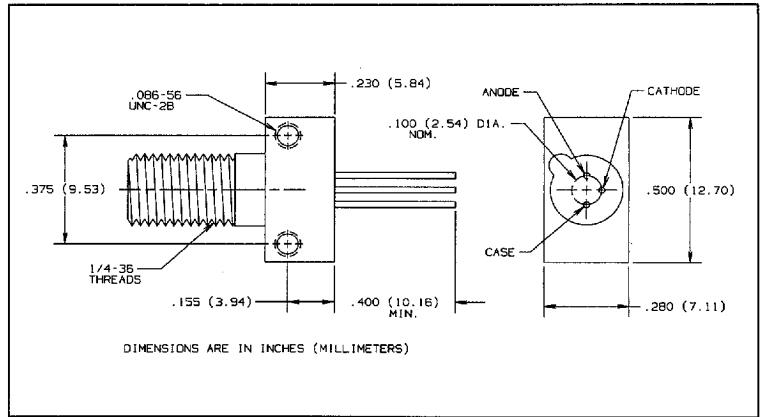
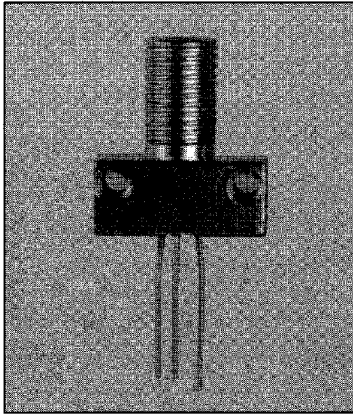


Fiber Optic High Speed PIN Photodiode in SMA Receptacle Type OPF431



Features

- Component pre-mounted and ready to use
- High speed, low capacitance
- Pre-tested with fiber to assure performance
- Popular SMA style receptacle
- Electrically isolated from case

Description

The OPF431 consists of a hermetic PIN photodiode pre-mounted and aligned in an SMA receptacle. This configuration is designed for PC board or panel mounting. Includes lock washer and jam nut, two 2-56 screws, and dust cap.

The PIN Photodiodes are designed to interface with multimode optical fibers from 50/125 to 100/140 microns.

Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Reverse Voltage	100 V
Continuous Power Dissipation	200 mW ⁽¹⁾
Storage Temperature Range	-55° C to +125° C
Operating Temperature Range	-40° C to +100° C
Lead Soldering Temperature [1/16 inch (1.6 mm) from case for 5 sec. with soldering iron]	240° C ⁽²⁾

Notes:

- (1) Derate linearly @ 2.0 mW/° C above 25° C.
- (2) RMA flux is recommended. Duration can be extended to 10 sec. max when flow soldering.
- (3) Test @ $V_R = 5\text{ V}$ with 50/125 micron, 0.20 N.A. fiber, @ 10 μW optical power @ 850 nm.

Responsivity levels apply to 50 μm , 62.5 μm and 100 μm core optical fibers.

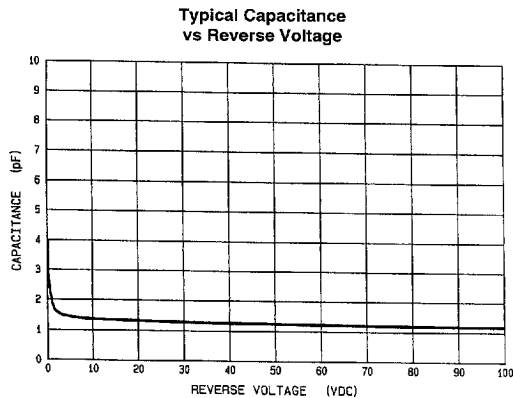
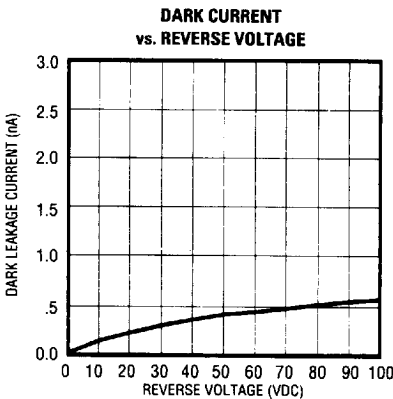
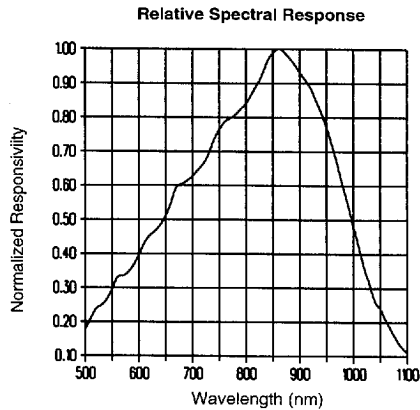
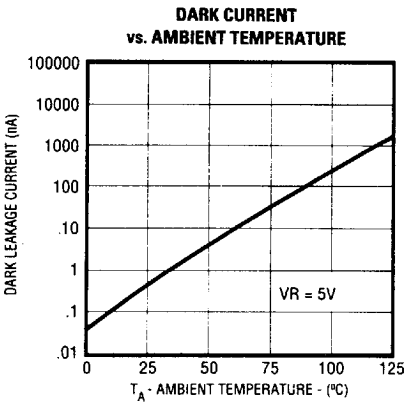
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Type OPF431

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

Symbol	Parameter	Min	Typ	Max	Units	Test Conditions
R	Flux Responsivity	0.45	0.55		A/W	V _R = 5.0 V ⁽³⁾
I _D	Dark Current		0.1	5.0	nA	V _R = 5.0 V
λ _p	Peak Response Wavelength		860		nm	
t _r	Output Rise Time		0.6		ns	V _R = 50 V, R _L = 50Ω, 10%-90%
t _r	Output Rise Time		1.0		ns	V _R = 15 V, R _L = 50Ω, 10%-90%
t _r	Output Rise Time		2.0		ns	V _R = 5.0 V, R _L = 50Ω, 10%-90%
C _T	Total Capacitance		1.5	2.0	pF	V _R = 5.0 V

Typical Performance Curves



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