61082 HIGH SPEED FIBER OPTIC PHOTODIODE

06/03/03

Features:

- Hermetically sealed
- Optimized for fiber optic applications using 50-200 μm fiber
- Electrically isolated TO-46 package

Applications:

- Mobile communication links
- Computer peripherals
- Computer links
- Industrial control links

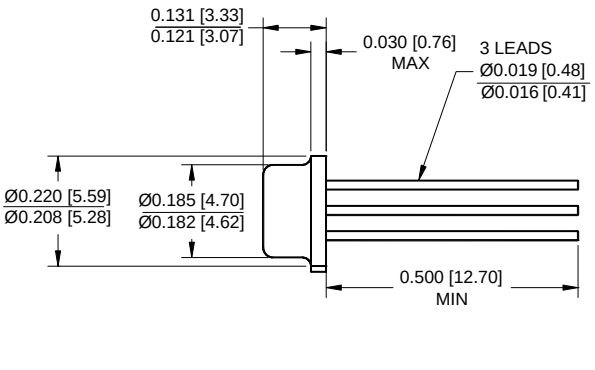
DESCRIPTION

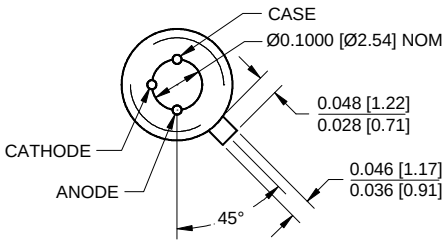
The ***61082*** is designed for high-speed use in fiber optic receivers. The case is electrically isolated to enhance EMI/RFI shielding. The Photodiodes are designed to interface with multimode optical fibers from 50-200 microns. Available custom binned to customer specifications and/or screened to MIL-PRF-19500.

ABSOLUTE MAXIMUM RATINGS

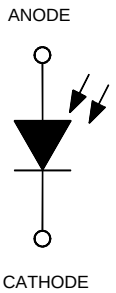
Storage Temperature ..... -65°C to +150°C
Operating Temperature (See part selection guide for actual operating temperature) ..... -55°C to +125°C
Reverse Voltage ..... 100 V
Power Dissipation (Derate at the rate of 2.0 mW/°C above 25°C) ..... 200 mW
Soldering Temperature (1/16" (1.66mm) from case for 10 sec) ..... 240°C

Package Dimensions





Schematic Diagram



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

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ELECTRICAL CHARACTERISTICS

T_A = 25°C unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Flux Responsivity	R	0.40	0.55		A/W	λ = 830 nm	2
Dark Current	I_D			10	nA	V_R = 5V, H = 0	
Peak Response Wavelength	λ_P		880		nm		
Rise Time	t_r			10	ns	V_R = 15V	1
Capacitance	C_T		6		pF	V_R = 20V	
Field of View	F_{OV}		80		degrees		

NOTES:

1. R_L = 50Ω, 10%-90%.
2. Test @ V_R = 5V with 50/200 micron, 0.20 N.A. fiber, @ 10μW optical power @ 850nm.

RECOMMENDED OPERATING CONDITIONS:

PARAMETER	SYMBOL	MIN	MAX	UNITS
Reverse Voltage	V_R	5	10	V
Irradiance (H)	H	15	25	mW/cm^2

SELECTION GUIDE

PART NUMBER	PART DESCRIPTION
61082-001	Commercial
61082-101	Screened