61082	FIBER OPTIC PIN PHOTODIODE	Mii OPTOELECTRONIC PRODUCTS DIVISION

Features:	Applications:
• Hermetically sealed • Optimized for fiber optic applications using 50-200μm fiber • Electrically isolated TO-46 package • Spectrally matched to the 62074 series LED.	• Mobile communication links • Computer peripherals • Computer links • Industrial control links

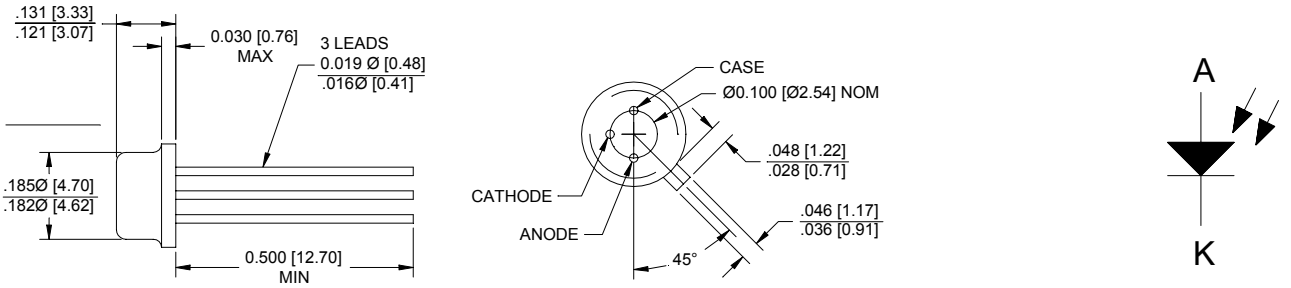
DESCRIPTION

The ***61082*** is designed for high speed use in fiber optic receivers. The case is electrically isolated to enhance EMI/RFI shielding. The Pin Photodiodes are designed to interface with multimode optical fibers from 50-125 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 25V
Power Dissipation (Derate at the rate of 2.0 mW/°C above 25°C) 200mW
Lead Soldering Temperature (1/16" (1.66mm) from case for 5 sec. with soldering iron)..... 240°C

Package Dimensions **Schematic Diagram**



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

ELECTRICAL CHARACTERISTICS

T_A = 25°C unless otherwise specified.

PARAMETER		SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Flux Responsivity	61082-XXX	R	0.40	0.55		A/W	V_R = 5.0V	2
Dark Current	61082-XXX	I_D			10	nA	V_R = 5V, H = 0	
Peak Response Wavelength	61082-XXX	λ_P		880		nm		
Rise Time	61082-XXX	t_r		10		nS	V_R = 15V	1
Total Capacitance	61082-XXX	C_T		6		pF	V_R = 20V	
Field of View	61082-XXX	F_{OV}		80		degrees		

NOTES:

1. R_L = 50Ω, 10%-90%.
2. Test @ V_R = 5V with 50/125 micron, 0.20 N.A. fiber, @ 10μW optical power @ 850nm. Responsivity levels apply to 50μm, 62.5μm and 100μm core optical fibers.

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	I_L Range
61082-001	Photodiode in coax package, domed lens, commercial version	+5μA
61082-101	Photodiode in coax package, domed lens (-55° to +100°C) with 100% screening	+5μA