61060	PHOTODIODE "PIGTAIL"	Mii OPTOELECTRONIC PRODUCTS DIVISION

Features:

- Hermetically sealed
- High sensitivity
- Small package
- Suitable for high-density pc board mounting
- Spectrally matched to the 62017 series LED.

Applications:

- Incremental encoding
- Reflective sensors
- Position sensors
- Level sensors

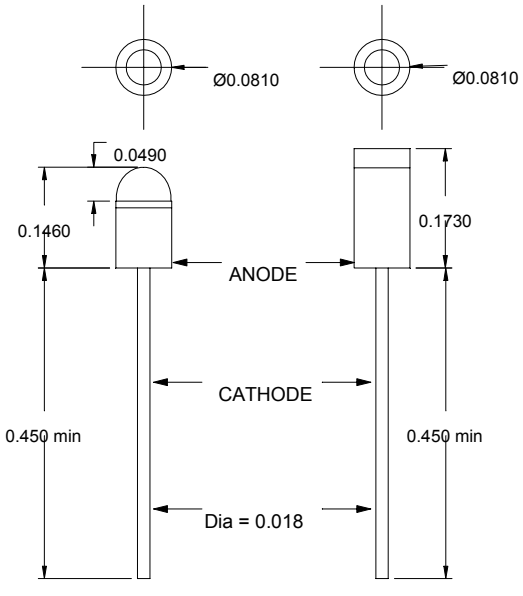
DESCRIPTION

The ***61060*** is a Silicon Photodiode in a package designed to be mounted in a single-clad printed circuit board. It is available with a wide angle flat lens or narrow angle domed lens for minimum response to stray light. High sensitivity, low dark current leakage, and low saturation voltage make this device ideal for interfacing with TTL circuits. Also available with lead attached to the case so that it may be connected without the use of a printed circuit board. Available in custom binned to customer specifications or screened to MIL-PRF-19500.

ABSOLUTE MAXIMUM RATINGS

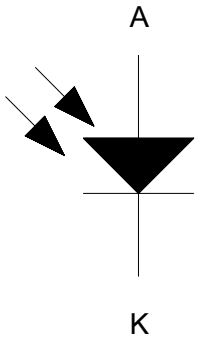
Storage Temperature..... -65°C to +150°C
Operating Temperature (See part selection guide for actual operating temperature)..... -55°C to +125°C
Reverse Voltage 50V
Power Dissipation (Derate at the rate of 1.67 mW/°C above 25°C) 75mW
Lead Soldering Temperature (3 minutes) .....240°C

Package Dimensions



DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE NOTED ALL DIMENSIONS NOMINAL

Schematic Diagram



ELECTRICAL CHARACTERISTICS

T_A = 25°C unless otherwise specified.

PARAMETER		SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Light Current	61060-XXX	I_L	5.0	15		μA	V_R = 5.0V, H = 20mW/cm^2	1
Dark Current	61060-XXX	I_D			25	nA	V_R = 10V, H = 0	1
Reverse Breakdown Voltage	61060-XXX	V_{BR}	50			V	I_R = 5μA, H = 0	
Rise Time	61060-XXX	t_r		300		nS	V_R = 5V,	
Angular Response	61060-X01 61060-X02	θ		30 12		degrees		2

NOTES:

1. Irradiance in mW/cm^2 from a tungsten source at a color temperature of 2870K.
2. The angle between incidence for peak response and incidence for 50% of peak response.

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
61060-001	Photodiode in coax package, domed lens, commercial version	+5μA
61060-101	Photodiode in coax package, domed lens with 100% screening	+5μA
61060-002	Photodiode in coax package, flat lens, commercial version	+5μA
61060-102	Photodiode in coax package, flat lens with 100% screening	+5μA