61063	**PHOTODIODE "PILL PACK"**	***Mii*** **OPTOELECTRONIC PRODUCTS DIVISION**

Features:	**Applications:**
• Hermetically sealed • High sensitivity • Small package • Suitable for high-density pc board mounting • Spectrally matched to the 62000 series LED.	• Incremental encoding • Reflective sensors • Position sensors • Level sensors

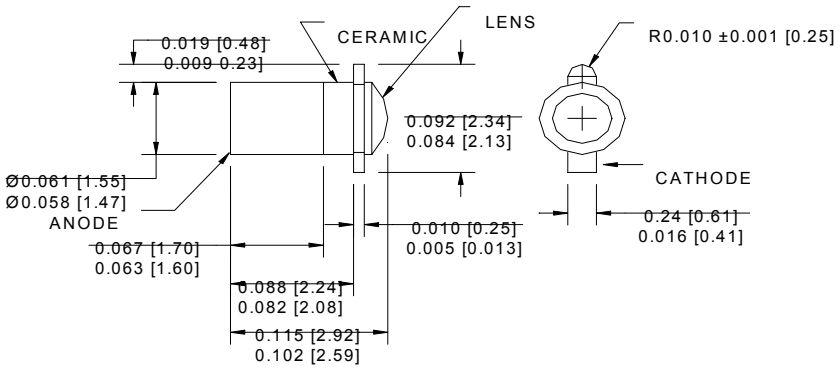
DESCRIPTION

The ***61063*** is a Silicon Photodiode in a package designed to be mounted in a double-clad printed circuit board. It is available in a range of sensitivities and is lensed 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. Available in custom binned to customer specifications or screened to MIL-PRF-19500.

ABSOLUTE MAXIMUM RATINGS

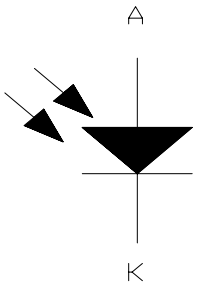
Storage Temperature..... -65°C to +150°C
Operating Temperature (See part selection guide for actual operating temperature)..... -65°C to +125°C
Reverse Voltage 30V
Power Dissipation (Derate at the rate of 1.67 mW/°C above 25°C) 150mW
Lead Soldering Temperature (3 minutes) ..... 240°C

Package Dimensions



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

Schematic Diagram



ELECTRICAL CHARACTERISTICS

T_A = 25°C unless otherwise specified.

PARAMETER		SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Light Current	61063-X01	I_L	6.0	15		μA	V_R = 5.0V, H = 20mW/cm^2	1
Dark Current	61063-XXX	I_D			250	nA	V_{CE} = 5V, H = 0	1
Reverse Breakdown Voltage	61063-XXX	V_{BR}	15			V	I_R = 100μA, H = 0	
Rise Time	61063-X01	t_r		300		nS	V_R = 5V	
Fall Time	61063-X01	t_f		300		nS	V_R = 5V	
Angular Response	61063-X01	θ		24		degrees		2

NOTES:6

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
61063-001	Silicon Photodiode in pill package, commercial version	+6μA
61063-101	Silicon Photodiode in pill package (-55° to +100°C) with 100% screening	+6μA