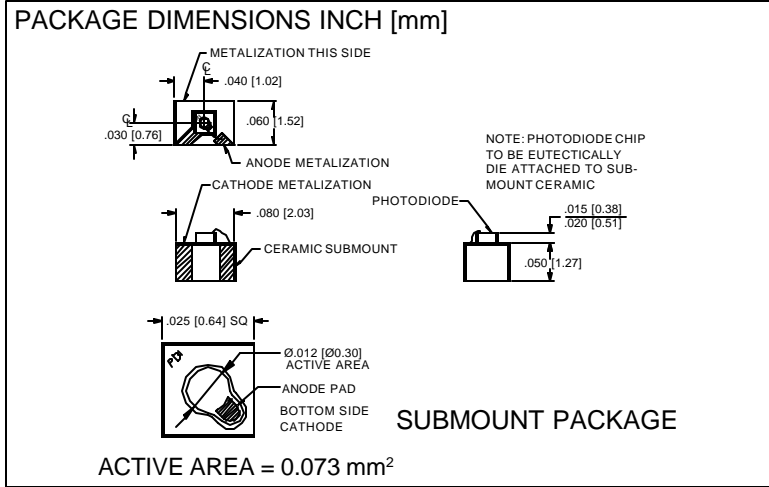
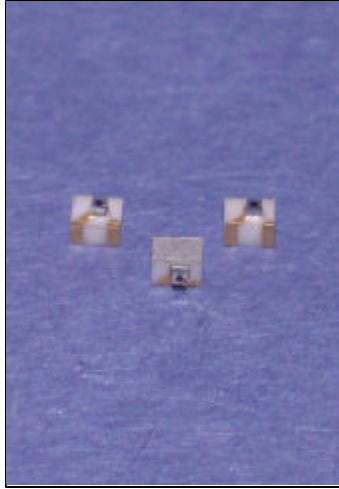


PHOTONIC DETECTORS INC.

High Speed Silicon Photodiode, Photoconductive chip on submount Type PDB-C116



FEATURES

- High speed
- Low cost
- High reliability

DESCRIPTION

The **PDB-C116** is a high speed silicon, PIN planar diffused photodiode, packaged as a submount. It is used as an optical feedback detector in laser diode modules and other fiber optic data link modules.

APPLICATIONS

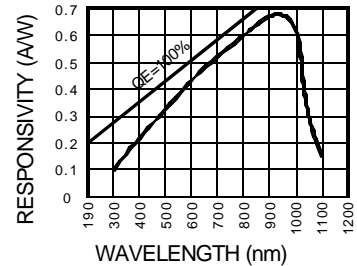
- Laser diodes
- Modules
- Fiber optic modules

ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		150	V
T _{STG}	Storage Temperature	-65	+150	°C
T _O	Operating Temperature Range	-55	+125	°C
T _S	Soldering Temperature*		+240	°C
I _L	Light Current		0.5	mA

*1/16 inch from case for 3 secs max

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	7.0	8.0		μA
I _D	Dark Current	H = 0, V _R = 10 V		.5	2.0	nA
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV	400	500		MΩ
TC R _{SH}	RSH Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
C _J	Junction Capacitance	H = 0, V _R = 10 V**		1.0		pF
λ _{range}	Spectral Application Range	Spot Scan	350		1100	nm
λ _p	Spectral Response - Peak	Spot Scan		950		nm
V _{BR}	Breakdown Voltage	I = 10 μA	100	150		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		9.0x10 ⁻¹⁵		W/√Hz
tr	Response Time	RL = 1 KΩ V _R = 10 V		1.0		nS

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. ** f = 1 MHz

[FORM NO. 100-PDB-C116 REV A]