Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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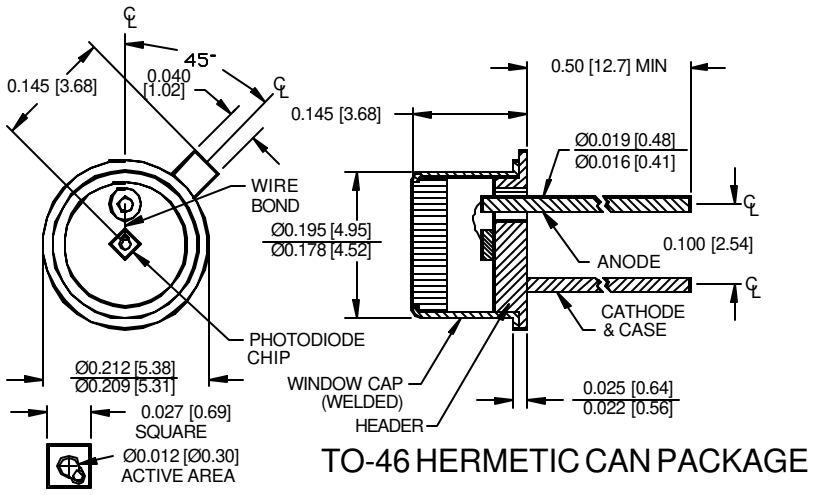
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Photoconductive (MRD 510) Industry Equivalent Type PDB-C120

PACKAGE DIMENSIONS INCH [mm]



TO-46 HERMETIC CAN PACKAGE

ACTIVE AREA = 0.073 mm²

FEATURES

- High speed
- Low capacitance
- Blue enhanced
- Low dark current

DESCRIPTION

The **PDB-C120** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic TO-46 metal can with a flat window.

APPLICATIONS

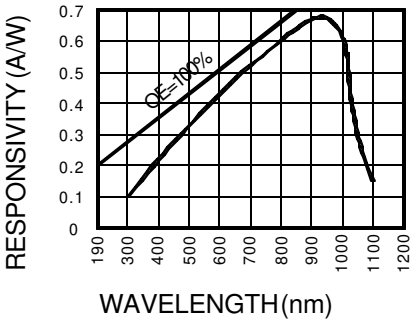
- Fiber optic
- Laser detection
- Light demodulation
- Matched to I.R. LEDs

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		200	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		500	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	1.2	1.5		μA
I_D	Dark Current	H = 0, V_R = 10 V		0.5	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		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λp	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		9.0×10^{-15}		W/$\sqrt{Hz}$
tr	Response Time	RL = 1 KΩ V_R = 50 V		1.0		nS

 **f = 1 MHz