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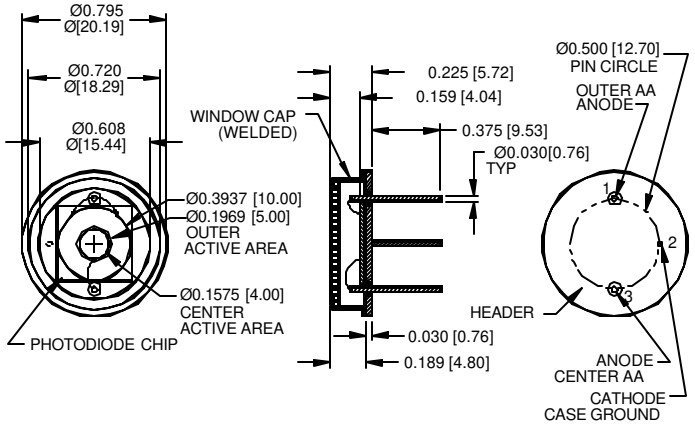
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Ring Detector

Type PDB-C210

PACKAGE DIMENSIONS INCH (mm)



TO-8 .795 INCH [20.19] DIA HERMETIC PACKAGE

ACTIVE AREA= OUTER 58.91 mm², CENTER 12.57 mm²

FEATURES

- Blue enhanced
- Photovoltaic type
- Photoconductive type
- High quantum efficiency

DESCRIPTION:

The **PDB-C210** is a two element "Ring Detector". The center and outer active areas are seperated by a .0394 inch (1.0 mm) gap. Designed for either photovoltaic low noise or photoconductive high speed applications. It is packaged in a hermetic jumbo TO-8 metal can with a flat glass window.

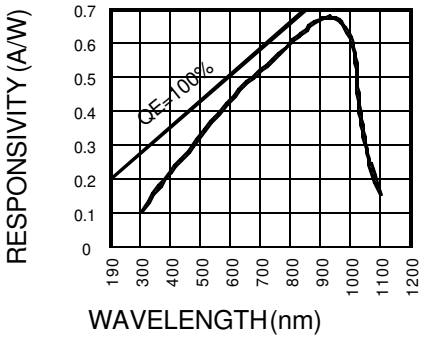
APPLICATIONS

- Medical Sensor
- Position sensor
- Industrial controls
- Instrumentation

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

SYMBOL	PARAMETER	CENTER		OUTER		UNITS
		MIN	MAX	MIN	MAX	
V_{BR}	Reverse Voltage		75		25	V
T_{STG}	Storage Temperature	-40	+125	-40	+125	°C
T_O	Operating Temperature Range	-40	+100	-40	+100	°C
T_S	Soldering Temperature		+224		+224	°C
I_L	Light Current		500		500	mA

SPECTRAL RESPONSE



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	CENTER			OUTER			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	
I_{SC}	Short Circuit Current	H = 100 fc, 2850 K	240			900			μA
I_D	Dark Current	H = 0, V_R = 10 V			25			100	nA
R_{SH}	Shunt Resistance	H = 0, V_R = 10 mV	200	500		25	50		MΩ
TC R_{SH}	R_{SH} Temp. Coefficient	H = 0, V_R = 10 mV		-8			-8		% / °C
C_J	Junction Capacitance	H = 0, V_R = 10 V**		175			800		pF
λrange	Spectral Application Range	Spot Scan	350		1100	350		1100	nm
λp	Spectral Response - Peak	Spot Scan		940			940		nm
V_{BR}	Breakdown Voltage	I = 10 μA		50			50		V
NEP	Noise Equivalent Power	V_R = 10 V @ Peak		$2.5x10^{-13}$ TYP			$6.0x10^{-13}$ TYP		W/ $\sqrt{Hz}$
tr	Response Time	RL = 1 KΩ V_R = 50 V		20			35		nS