imall

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!



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PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Photovoltaic Type PDB-V105



PACKAGE DIMENSIONS INCH [mm] WINDOW CAP-(WELDED) Ø0.325 [8.25] 0.168 [4.26] Ø0.250 [6.35] 0.030 [0.76] 0.075 [1.91] WIRE 0.500 BONDS [12.70] MIN r۹ 77777 78° VIEWING Ø0.358 [9.09] 0.200 [5.08] ANGLE 0.035 LG ANODE Ø0.018 [0.46] HEADER CATHODE Ø0.018 [0.46] PHOTODIODE 0.095 [2.41] SQ 0.086 2.18] SQ ACTIVE **TO-5 HERMETIC CAN PACKAGE** ACTIVE AREA = 4.48 mm² **APPLICATIONS** DESCRIPTION

FEATURES

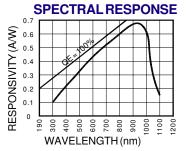
- Low noise
- Blue enhanced
- High shunt resistance
- · High response

The PDB-V105 is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for low noise photovoltaic applications. Packaged in a hermetic TO-5 metal can with a flat window.

- Instrumentation
- Industrial measurement
- Exposure sensor
- Flame monitor

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
VBR	Reverse Voltage		75	V
T _{STG}	Storage Temperature	-55	+150	°C
То	Operating Temperature Range	-40	+125	°C
Ts	Soldering Temperature*		+240	°C
I _L	Light Current		0.5	mA



1/16 inch from case for 3 secs max

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

SYMBOL	CHARACTERISTIC	TESTCONDITIONS	MIN	TYP	MAX	UNITS
lsc	Short Circuit Current	H = 100 fc, 2850 K	30	50		μ A
١D	Dark Current	$H = 0, V_{_{\rm R}} = 10 \text{ V}$		200	400	pА
Rsн	Shunt Resistance	$H = 0, V_{R} = 10 \text{ mV}$	2	5		GΩ
TC Rsh	RSH Temp. Coefficient	$H = 0, V_{R} = 10 \text{ mV}$		-8		%/°C
CJ	Junction Capacitance	$H = 0, V_{R} = 0 V^{**}$		500		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λρ	Spectral Response - Peak	Spot Scan		950		nm
VBR	Breakdown Voltage	I = 10 μA	10	50		V
NEP	Noise Equivalent Power	V _R = 10 mV @ Peak		.5x10 ⁻¹⁴		W/ \sqrt{Hz}
tr	Response Time	$RL = 1 K\Omega V_{R} = 0 V$		500		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-V105 REV B]