Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

Advanced Photonix, Inc.
PDB-V140

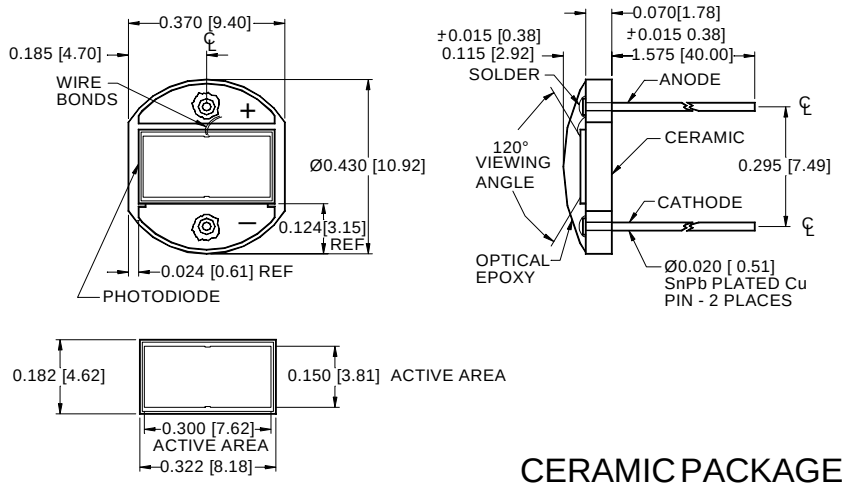
For any questions, you can email us directly:
sales@integrated-circuit.com

PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Photovoltaic

Type PDB-V140

PACKAGE DIMENSIONS INCH (mm)



CERAMIC PACKAGE

ACTIVE AREA = 29.02 mm²

FEATURES

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

DESCRIPTION

The **PDB-V140** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged on a two lead ceramic substrate with a clear epoxy glob top.

APPLICATIONS

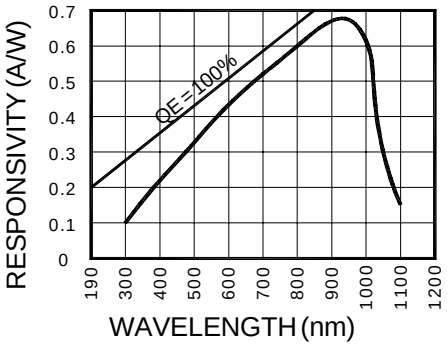
- Bar code scanner
- Instrumentation
- Industrial controls
- Laser detection

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		75	V
T_{STG}	Storage Temperature	-40	+100	°C
T_O	Operating Temperature Range	-40	+90	°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	300	400		μA
I_D	Dark Current	H = 0, V_R = 10 V		2.0	5.0	nA
R_{SH}	Shunt Resistance	H = 0, V_R = 10 mV	50	100		MΩ
TC R_{SH}	RSH Temp. Coefficient	H = 0, V_R = 10 mV		-8		% / °C
C_J	Junction Capacitance	H = 0, V_R = 0 V**		3800		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	30	50		V
NEP	Noise Equivalent Power	V_R = 10 mV @ Peak		$1x10^{-13}$		W/$\sqrt{Hz}$
tr	Response Time	RL = 1 KΩ V_R = 0 V		925		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