Excellent Integrated System Limited

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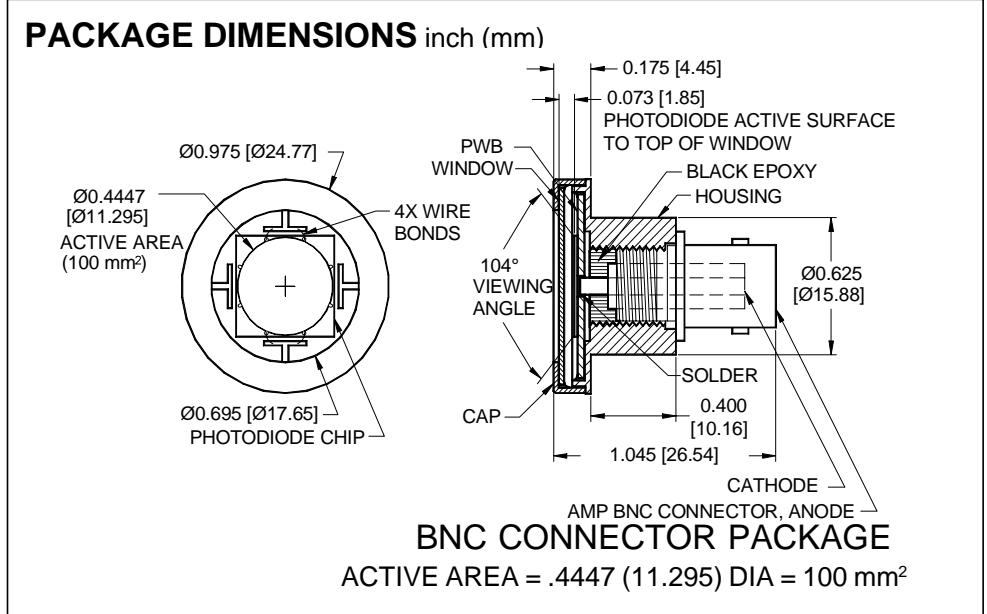
Click to view price, real time Inventory, Delivery & Lifecycle Information:

Advanced Photonix, Inc.
PDB-V112

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

EIS

PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Photovoltaic

Type PDB-V112

PACKAGE DIMENSIONS inch (mm)

0.175 [4.45]
0.073 [1.85]
PHOTODIODE ACTIVE SURFACE TO TOP OF WINDOW

Ø0.975 [Ø24.77]
Ø0.4447 [Ø11.295] ACTIVE AREA (100 mm²)
4X WIRE BONDS
PWB WINDOW
BLACK EPOXY
HOUSING
104° VIEWING ANGLE
Ø0.625 [Ø15.88]
SOLDER
0.400 [10.16]
Ø0.695 [Ø17.65] PHOTODIODE CHIP
CAP
1.045 [26.54]
CATHODE
AMP BNC CONNECTOR, ANODE

BNC CONNECTOR PACKAGE
ACTIVE AREA = .4447 (11.295) DIA = 100 mm²

FEATURES

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

DESCRIPTION

Large area, instrumentation grade, blue enhanced silicon photodiode. Designed for low noise photovoltaic applications. Packaged in a BNC connector package.

APPLICATIONS

- Instrumentation
- Power meters
- Colorimeters
- Laser power meters

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
VBR	Reverse Voltage		75	V
TS	Storage Temperature	-20	+70	°C
TO	Operating Temperature Range	-10	+60	°C
TS	Soldering Temperature*	N/A	N/A	°C
Imax	Light Current		0.5	mA

*1/16 inch from case for 3 secs max

SPECTRAL RESPONSE

QE=100%
RESPONSIVITY
WAVELENGTH (nm)
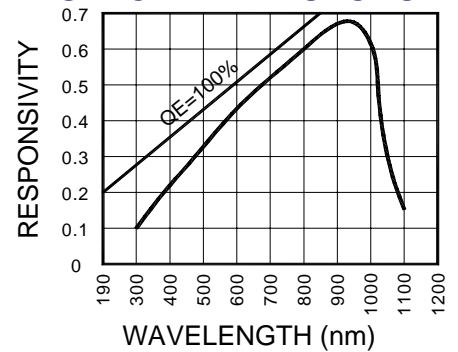
ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
ISC	Short Circuit Current	H = 100 fc, 2850 K	0.9	1.2		mA
ID	Dark Current	H = 0, VR = 10 mV		200	335	nA
RSH	Shunt Resistance	H = 0, VR = 10 mV	30	50		MΩ
TC RSH	RSH Temp. Coefficient	H = 0, VR = 10 mV		-8		% / °C
CJ	Junction Capacitance	H = 0, VR = 0V**		10,000	12,000	pF
Irange	Spectral Application Range	Spot Scan	350		1100	nm
Ip	Spectral Response - Peak	Spot Scan		950		nm
VBR	Breakdown Voltage	I= 10 µA	20	30		V
NEP	Noise Equivalent Power	VR = 10 mV @ Peak		2×10^{-14}		W/ $\sqrt{Hz}$
tr	Response Time	RL = 1 KΩ VR = 0V		2000		nS