Excellent Integrated System Limited

Stocking Distributor

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

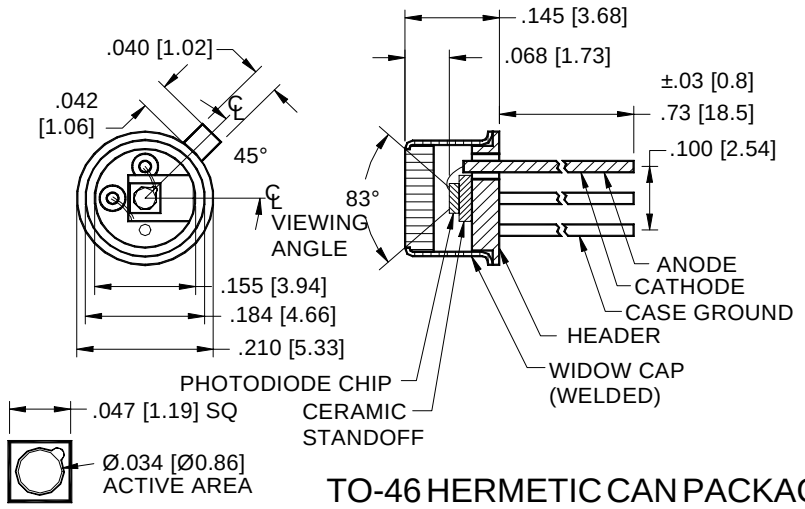
Advanced Photonix, Inc.
PDB-C100

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

PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Photoconductive Isolated Type PDB-C100

PACKAGE DIMENSIONS inch [mm]



TO-46 HERMETIC CAN PACKAGE

ACTIVE AREA = 0.59 mm²

FEATURES

- High speed
- Low capacitance
- Isolated chip
- Low dark current

DESCRIPTION

The **PDB-C100** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive & fiberoptic applications.Packaged in a hermetic TO-46 metal can with a flat window and isolated ground lead.

APPLICATIONS

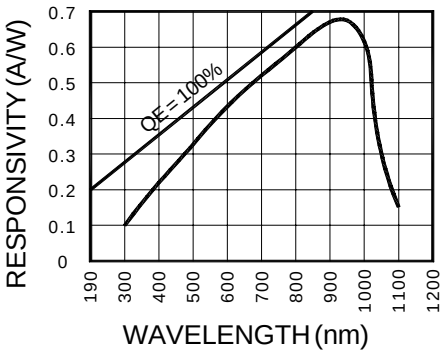
- Fiber optic
- Industrial controls
- Laser detection
- Particle detection

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		100	V
T_{STG}	Storage Temperature	-55	+150	°C
T_O	Operating Temperature Range	-40	+125	°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	9	11		μA
I_D	Dark Current	H = 0, V_R = 15 V		1.0	2.0	nA
R_{SH}	Shunt Resistance	H = 0, V_R = 10 mV	.50	5		GΩ
TCR_{SH}	RSH Temp. Coefficient	H = 0, V_R = 10 mV		-8		% / °C
C_J	Junction Capacitance	H = 0, V_R = 15 V**		5	7	pF
λ range	Spectral Application Range	Spot Scan	400		1150	nm
λp	Spectral Response - Peak	Spot Scan		850		nm
V_{BR}	Breakdown Voltage	I = 10 μA	100	125		V
NEP	Noise Equivalent Power	V_R = 15 V @ Peak		$40x10^{-15}$		W/√Hz
tr	Response Time	RL = 50 Ω V_R = 15 V		3		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 = 1MHz