

## Excellent Integrated System Limited

Stocking Distributor

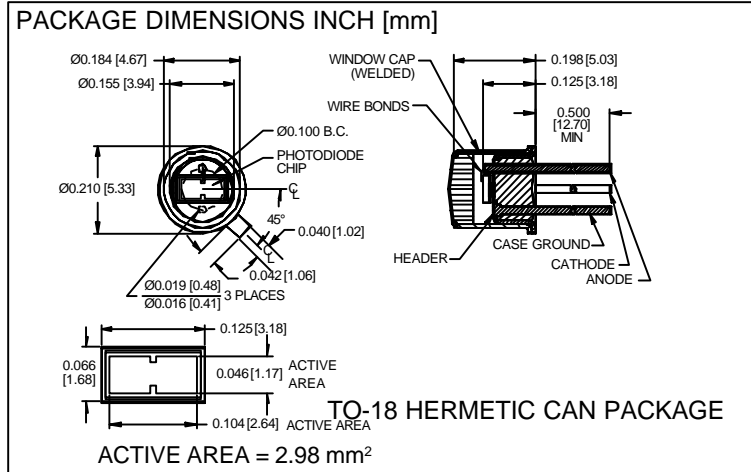
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[Advanced Photonix, Inc.](#)  
[PDB-C104-I](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# PHOTONIC DETECTORS INC. Silicon Photodiode, Blue Enhanced Photoconductive Isolated Type PDB-C104-I



### FEATURES

- High speed
- Low capacitance
- Blue enhanced
- Low dark current

### DESCRIPTION

The **PDB-C104-I** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic TO-18 metal can with a flat window and isolated ground lead.

### APPLICATIONS

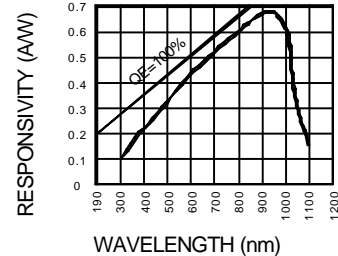
- Instrumentation
- Character recognition
- Laser detection
- Fiber optic

### 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	40	45		mA
$I_D$	Dark Current	H = 0, $V_R = 10$ V		.15	1.0	nA
$R_{SH}$	Shunt Resistance	H = 0, $V_R = 10$ mV	.5	1.0		GΩ
TC $R_{SH}$	RSH Temp. Coefficient	H = 0, $V_R = 10$ mV		-8		% / °C
$C_J$	Junction Capacitance	H = 0, $V_R = 10$ V**		10		pF
$\lambda_{range}$	Spectral Application Range	Spot Scan	350		1100	nm
$\lambda_p$	Spectral Response - Peak	Spot Scan		950		nm
$V_{BR}$	Breakdown Voltage	I = 10 mA	70	100		V
NEP	Noise Equivalent Power	$V_R = 10$ V @ Peak		$1.5 \times 10^{-14}$		W/√Hz
tr	Response Time	RL = 1 KΩ $V_R = 50$ V		10		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