

### FEATURES

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

### DESCRIPTION

The **PDB-C107** is a blue enhanced PIN silicon photodiode in a photoconductive mode, packaged in a ceramic package.

### APPLICATIONS

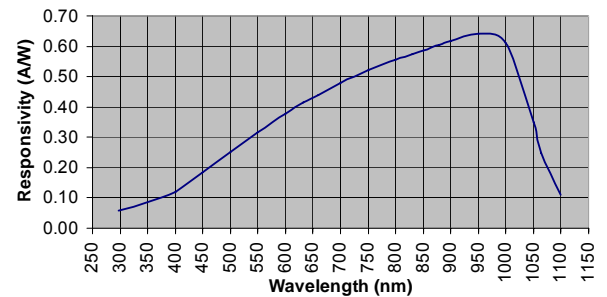
- Instrumentation
- Industrial
- Medical

### ABSOLUTE MAXIMUM RATING (TA)= 23°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	-40	+100	°C
$T_S$	Soldering Temperature*		+240	°C

\* 1/16 inch from case for 3 seconds max.

### SPECTRAL RESPONSE



### ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{SC}$	Short Circuit Current	H = 100 fc, 2850 K	170			$\mu A$
$I_D$	Dark Current	$V_R = 5V$		150	300	nA
$R_{SH}$	Shunt Resistance	$V_R = 10 mV$	200	1000		$M\Omega$
$C_J$	Junction Capacitance	$V_R = 10 V, f = 1 MHz$		100		pF
$\lambda$ range	Spectral Application Range	Spot Scan	350		1100	nm
R	Responsivity	$\lambda = 450 nm V, V_R = 0 V$	0.15	0.17		A/W
$V_{BR}$	Breakdown Voltage	$I = 10 \mu A$	75	100		V
NEP	Noise Equivalent Power	$V_R = 0V @ \lambda = Peak$		$3 \times 10^{-13}$		$W / \sqrt{Hz}$
$t_r$	Response Time**	$RL = 50 \Omega, V_R = 0 V$		190		nS
		$RL = 50 \Omega, V_R = 10 V$		13		

\*\*Response time of 10% to 90% is specified at 660nm wavelength light.

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.