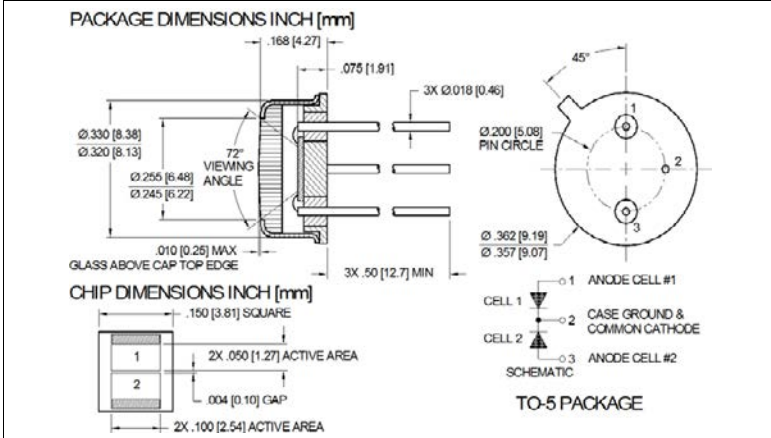


Blue Enhanced Bi-Cell Silicon Photodiode
PDB-C201

Precision – Control – Results



DESCRIPTION

The **PDB-C201** is a blue enhanced Bi-Cell silicon photodiode used for nulling, centering, or measuring small positional changes in packages in a hermetic TO-5 metal package.

FEATURES

- Low Capacitance
- Blue Enhanced
- High Speed
- Low Dark Current

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Emitter Alignment
- Position sensing
- Medical and Industrial

ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN	MAX	UNITS	
Reverse Voltage	-	- 100	V	$T_a = 23^\circ\text{C}$ UNLESS OTHERWISE NOTED
Storage Temperature	-55	- 150	$^\circ\text{C}$	-
Operating Temperature	-40	to +125	$^\circ\text{C}$	-
Soldering Temperature*	-	- +240	$^\circ\text{C}$	-

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

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.

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OPTO-ELECTRICAL PARAMETERS

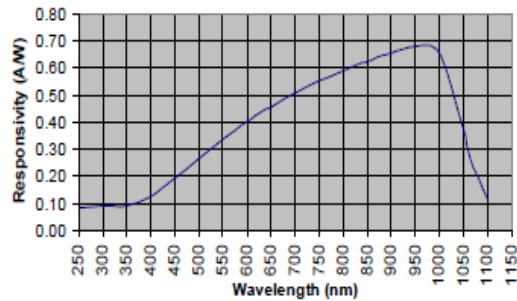
T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Short Circuit Current	H= 100 fc, 2850 K	50	75	-	V
Dark Current	V _R = 5 V	-	0.5	2.0	nA
Shunt Resistance	V _R = 10 mV	250	500	-	MΩ
Junction Capacitance	V _R =10V; f = 1 MHz	-	15	-	pF
Spectral Application Range	Spot Scan	350	-	1100	nm
Breakdown Voltage	I=10 μA	50	75	-	V
Noise Equivalent Power	V _R =0V@λ= Peak	-	1x10 ⁻¹⁴	-	W/√ Hz
Response Time**	RL = 1KΩ, V _R = 0 V	-	190	-	nS
	RL = 1KΩ, V _R = 10 V	-	13	-	

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE



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