



DESCRIPTION

The **PDB-C201** is a blue enhanced Bi-Cell silicon photodiode used for nulling, centering, or measuring small positional changes 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°C UNLESS OTHERWISE NOTED
Storage Temperature	-55	-	150	°C	
Operating Temperature	-40	to	+125	°C	
Soldering Temperature*	-	-	+240	°C	

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

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

