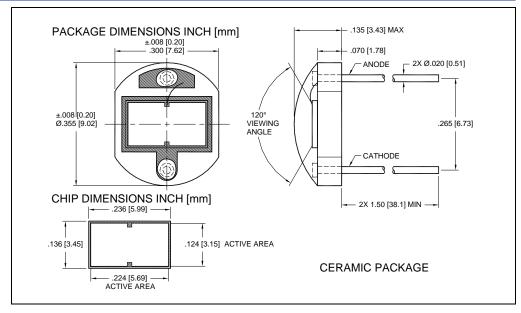


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DESCRIPTION

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

FEATURES

- Low Noise
- Blue Enhanced
- High Shunt Resistance
- High Response

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Instrumentation
- Industrial
- Medical

ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	75	V	T _a = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-40	to	+100	°C	-
Operating Temperature	-40	to	+100	°C	-
Soldering Temperature*	-	-	+240	°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 OTHERWISE NOTED

PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS
Short Circuit Current	H=100 fc, 2850 K	170	-	-	μА
Dark Current	$V_R = 5V$	-	150	300	nA
Shunt Resistance	V _R = 10 mV	200	1000	-	ΜΩ
Junction Capacitance	$V_R = 10V, f = 1 \text{ MHz}$	-	100	-	pF
Spectral Application Range	Spot Scan	350	-	1100	nm
Responsivity	λ = 450nm V, V _R =0V	0.15	0.17	-	A/W
Breakdown Voltage	Ι = 10 μΑ	75	100	-	V
Noise Equivalent Power	V _R = 0V@ λ=Peak	-	3.0x10 ⁻¹³	-	W/ √ _{Hz}
Decrees Time**	$RL = 50\Omega, V_R = 0V$	-	190	-	nS
Response Time**	$RL = 50\Omega$, $V_R = 10V$	-	13	-	

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

