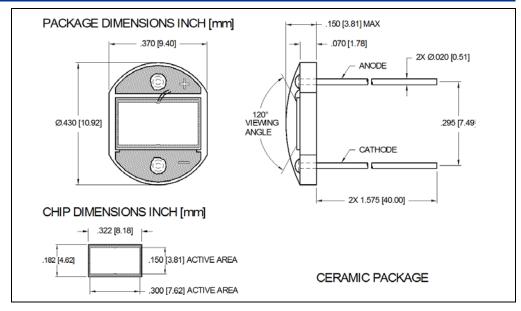


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Precision – Control – Results





DESCRIPTION

The **PDB-C140** 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.



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OPTO-ELECTRICAL PARAMETERS $T_a = 23^{\circ}\text{C UNLESS OTHERWISE NOTED}$

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS μA
Short Circuit Current	H=100 fc, 2850 K	300	350	-	
Dark Current	V _R = 10V	-	10	25	nA
Shunt Resistance	V _R = 10 mV	5	50	-	МΩ
Junction Capacitance	$V_R = 10V, f = 1 \text{ MHz}$	-	200	-	pF
Spectral Application Range	Spot Scan	350	-	1100	nm
Responsivity	λ = 450nm V, V _R =0V	0.15	0.18	-	A/W
Breakdown Voltage	Ι = 10 μΑ	50	75	-	V
Noise Equivalent Power	V _R = 10V@ λ=950mn	-	9x10 ⁻¹³	-	W/√ _{Hz}
D T' ++	$RL = 50\Omega, V_R = 0V$	-	190	-	. 0
Response Time**	$RL = 50\Omega$, $V_R = 10V$	-	13	-	nS

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

