



DESCRIPTION

The **PDB-C113** 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

This Luna high-reliability device is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test. Contact Luna Optoelectronics for recommendations on specific test conditions and procedures.

APPLICATIONS

- Instrumentation
- Industrial
- Medical

ABSOLUTE MAXIMUM RATINGS

T_a = 23°C NON CONDENSING 1/16 INCH FROM CASE FOR 3 SECONDS MAX

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	75	V	-
Operating Temperature	-40	to	+100	°C	-
Storage Temperature	-55	to	+90	°C	-
Soldering Temperature	-	-	+240	°C	-
Wavelength Range	300	to	1100	nm	

OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS OTHERWISE NOTED

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Short Circuit Current	H=100 fc, 2850 K	90	110	-	μA
Dark Current	V _R = 10V	-	5	30	nA
Shunt Resistance	V _R = 10 mV	100	250	-	MΩ
Junction Capacitance	V _R = 10V, f = 1 MHz	-	60	-	pF
Spectral Application Range	Spot Scan	350	-	1100	nm
Responsivity	I = 450nm V, V _R = 0V	0.15	0.18	-	A/W
Breakdown Voltage	I = 10 μA	75	100	-	V
Noise Equivalent Power	V _R = 0V @ I = 950nm	-	9x10 ⁻¹⁴	-	W/√Hz
Response Time	RL = 50Ω, V _R = 0V	-	190	-	nS
	RL = 50Ω, V _R = 10V	-	13	-	

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

