



DESCRIPTION

The **PDB-C142** is a blue enhanced PIN silicon photodiode in a photoconductive mode packaged in a water clear T1 3/4 plastic package.

FEATURES

- Large active area
- Photoconductive
- High Speed
- Low cost

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Smoke detectors
- Light pen detectors
- TV & VCR remotes
- Bar code detectors



ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN	MAX	UNITS		
Reverse Voltage	-	-	100	V	T _a = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-40	-	+100	°C	
Operating Temperature	-40	to	+80	°C	
Soldering Temperature*	-	-	+260	°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	100	150	-	μA
Dark Current	V _R = 10 V	-	5	30	nA
Shunt Resistance	V _R = 10 mV	100	500	-	MΩ
Junction Capacitance	V _R =10V; f = 1 MHz	-	18	25	pF
Spectral Application Range	Spot Scan	400	-	1100	nm
Breakdown Voltage	I=10 μA	15	25	-	V
Noise Equivalent Power	V _R =10V@λ= Peak	-	2x10 ⁻¹⁴	-	W/√Hz
Response Time**	RL = 1KΩ, V _R = 10 V	-	50	-	nS

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

