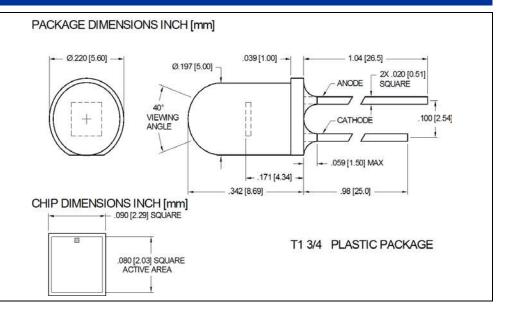


Plastic Photodiode Package with Leads **PDB-C142**

Precision – Control – Results

WWW.LUNAINC.COM





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.				

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.

Page 1/2

© 2016 Luna Optoelectronics. All rights reserved.

REV 01-04-16

Plastic Photodiode Package with Leads PDB-C142

WWW.LUNAINC.COM

Precision – Control – Results

OPTO-ELECTRICAL PARAMETERS

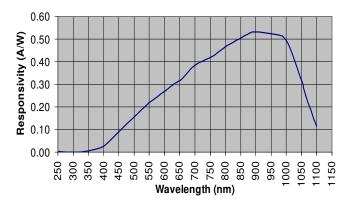
T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS μA
Short Circuit Current	H=100 fc, 2850 K	100	150	-	
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	l=10 μA	15	25	-	V
Noise Equivalent Power	V _R =10V@λ= Peak	-	2x10 ⁻¹⁴	-	W/ $_{\rm Hz}$
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



REV 01-04-16