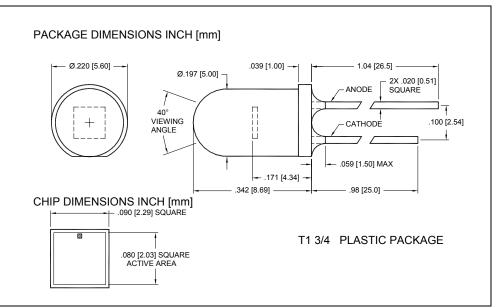


Plastic Photodiode Package with Visible Blocking Filter

PDB-C142F





FEATURES

- · Large active area
- Photoconductive
- Low cost
- · High speed

DESCRIPTION

The **PDB-C142F** is a blue enhanced PIN silicon photodiode in a photoconductive mode with a daylight filter, packaged in a T1 ³/₄ plastic package.

APPLICATIONS

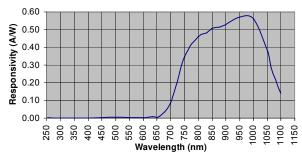
- · Smoke detectors
- · Light pen detectors
- TV & VCR remotes
- · Bar code detectors

ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		50	V
T _{STG}	Storage Temperature	-40	+100	°C
To	Operating Temperature	-40	+80	°C
Ts	Soldering Temperature*		+260	°C

^{* 1/16} inch from case for 3 seconds max.

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	100	150		μ A
I_D	Dark Current	V _R = 10 V		5	30	nA
R _{SH}	Shunt Resistance	$V_R = 10 \text{ mV}$	100	500		$\mathbf{M}\Omega$
С	Junction Capacitance	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		18	25	pF
λ range	Spectral Application Range	Spot Scan	700		1100	nm
V_{BR}	Breakdown Voltage	I = 10 μA	15	25		V
NEP	Noise Equivalent Power	V_R = 10V @ λ = Peak		2.4x10 ⁻¹⁴		W/ $\sqrt{_{Hz}}$
t _r	Response Time	RL = 50 Ω , V _R = 50 V		50		nS

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

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.