



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



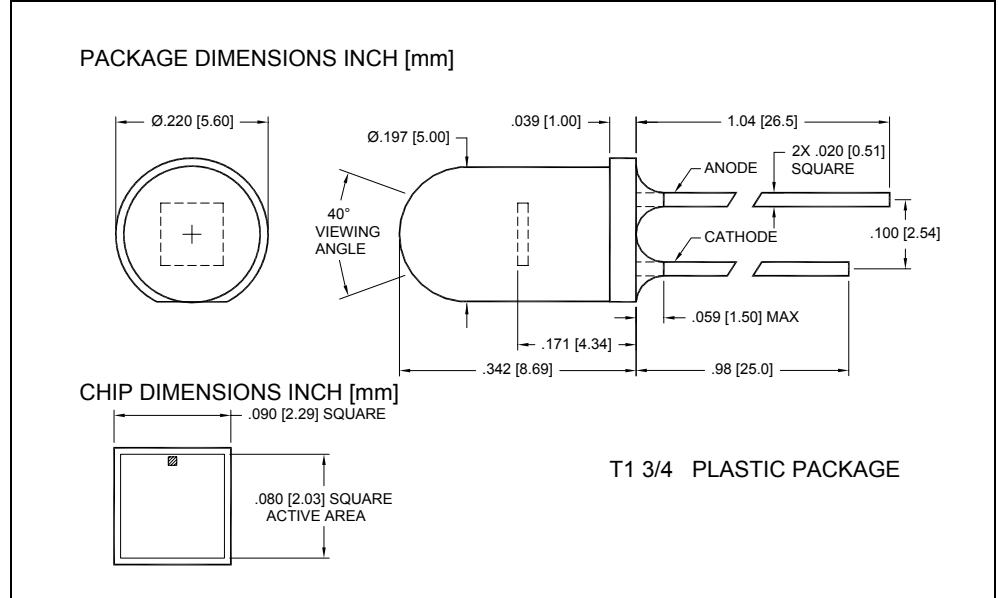
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FEATURES

- 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

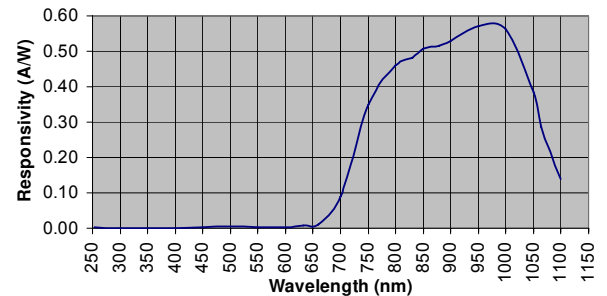
- Smoke detectors
- Light pen detectors
- TV & VCR remotes
- Bar code detectors

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
T _O	Operating Temperature	-40	+80	°C
T _S	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		μA
I _D	Dark Current	V _R = 10 V		5	30	nA
R _{SH}	Shunt Resistance	V _R = 10 mV	100	500		MΩ
C _J	Junction Capacitance	V _R = 10 V, f = 1 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/√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.