



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!



## Contact us

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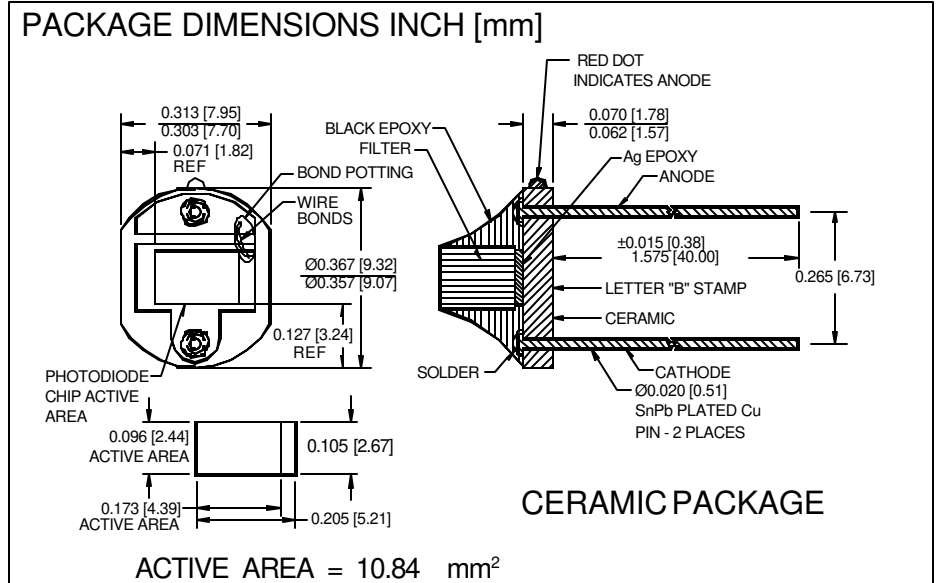
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# PHOTONIC DETECTORS INC.

## Silicon Photodiode, U.V. Enhanced Photovoltaic (center wavelength 320 nm) Type PDU-V402B



### FEATURES

- Built in filter
- U.V. enhanced
- I.R. blocking

### DESCRIPTION

The **PDU-V402B** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for low noise photovoltaic applications. The filter is a U.V. type B with a center wavelength of 320 nm, with  $10^{-3}$  I.R. blocking. Packaged in a two leaded ceramic base.

### APPLICATIONS

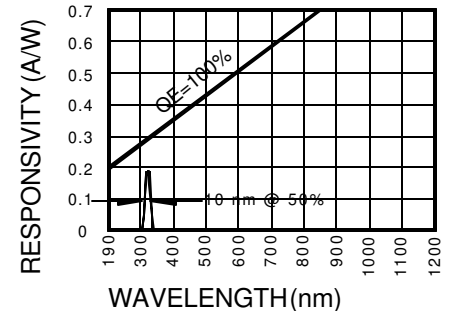
- U.V. detection
- U.V. A sensor
- U.V. radiometer

### ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>BR</sub>	Reverse Voltage		15	V
T <sub>STG</sub>	Storage Temperature	-55	+100	°C
T <sub>O</sub>	Operating Temperature Range	-40	+85	°C
T <sub>S</sub>	Soldering Temperature*		+260	°C
I <sub>L</sub>	Light Current		0.5	mA

\*1/16 inch from case for 3 secs max

### SPECTRAL RESPONSE



### ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>SC</sub>	Short Circuit Current	H = 100 fc, 2850 K	20	30		μA
I <sub>D</sub>	Dark Current	H = 0, V <sub>R</sub> = 10 mV		5	10	nA
R <sub>SH</sub>	Shunt Resistance	H = 0, V <sub>R</sub> = 10 mV	100	200		MΩ
TC R <sub>SH</sub>	RSH Temp. Coefficient	H = 0, V <sub>R</sub> = 10 mV		-8		% / °C
C <sub>J</sub>	Junction Capacitance	H = 0, V <sub>R</sub> = 0 V**		1250		pF
λ <sub>range</sub>	Spectral Application Range	Spot Scan	300	320	340	nm
R	Responsivity	V <sub>R</sub> = 0 V, λ = 320 nm		.08		A/W
V <sub>BR</sub>	Breakdown Voltage	I = 10 μA	15	30		V
NEP	Noise Equivalent Power	V <sub>R</sub> = 2 V @ Peak		1 × 10 <sup>-14</sup>		W / √Hz
t <sub>r</sub>	Response Time	R <sub>L</sub> = 1 KΩ V <sub>R</sub> = 0 V		1000		nS

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. \*\*f = 1 MHz

[FORMNO.100-PDU-V402B REV B]