



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!



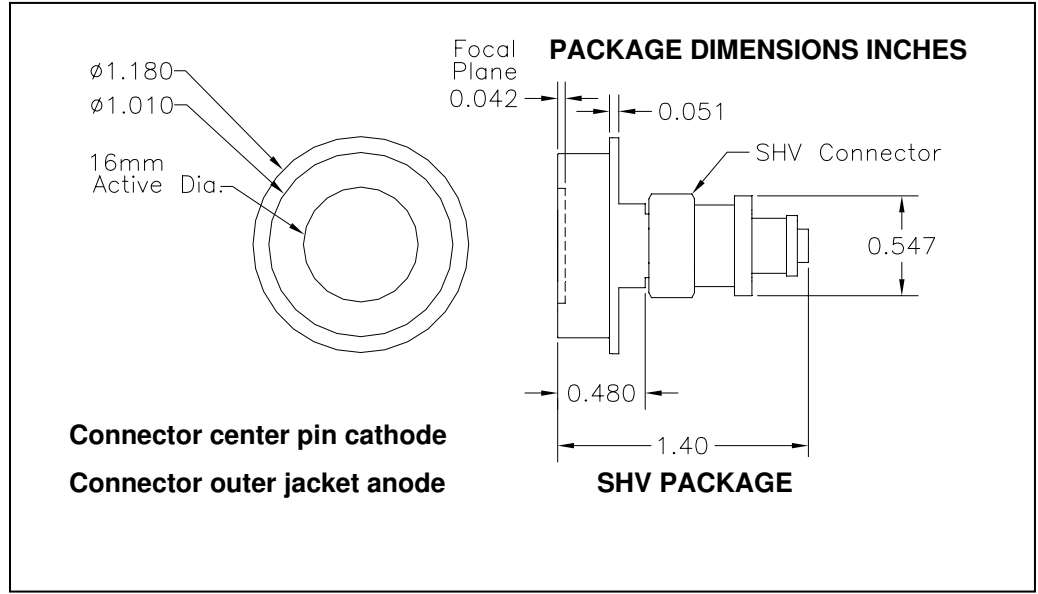
## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





### FEATURES

- Low noise
- High gain
- High Speed

### DESCRIPTION

The **SD 630-70-74-500** is a non-cooled large area Blue enhanced silicon avalanche photodiode (APD) with high gain and low noise in a SHV package.

### APPLICATIONS

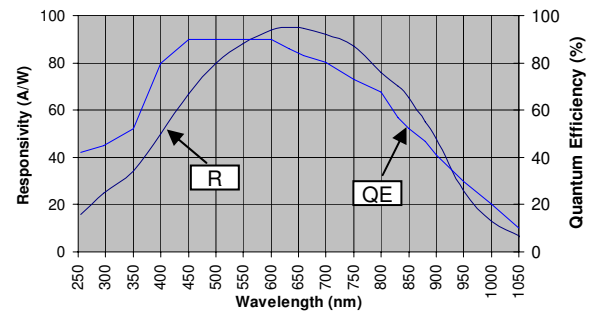
- Instrumentation
- Medical

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
M	Gain		250	
T <sub>STG</sub>	Storage Temperature	-55	+70	°C
T <sub>O</sub>	Operating Temperature	-55	+40	°C
T <sub>S</sub>	Soldering Temperature*		+240	°C

\* 1/16 inch from case for 3 seconds max.

### SPECTRAL RESPONSE M = 200



### ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C and Gain of 200 UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>D</sub>	Dark Current			280	600	nA
C <sub>J</sub>	Junction Capacitance	f = 1 MHz		130		pF
I <sub>N</sub>	Noise Current Spectral Density	f = 100 kHz		2.5	5.5	pA/√Hz
λ range	Spectral Application Range	Spot Scan	350		1050	nm
R	Responsivity	λ = 350 nm, V <sub>R</sub> = 0 V		70		A/W
V <sub>op</sub>	Operating voltage		1700		2000	V
T <sub>VBR</sub>	Temp. Coeff. Breakdown voltage	Constant Gain = 200		2		V
t <sub>r</sub>	Response Time*	RL = 50 Ω, λ = 675nm		15	22	nS

\*Response time of 10% to 90% is specified at 675nm wavelength light.  
Each part is supplied with gain bias voltages and dark current data.

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.