

Non-Cooled Large Area Blue Silicon Avalanche Photodiode SD 630-70-74-500

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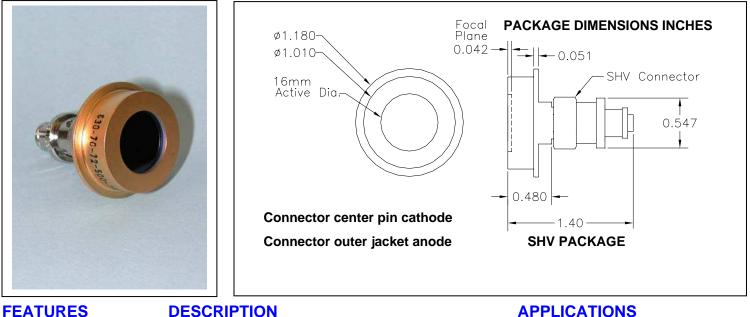
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Responsivity (A/W) 60



- Low noise
- High gain
- High Speed

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.

• Instrumentation

SPECTRAL RESPONSE M = 200

QE

Medical

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
М	Gain		250	
T _{STG}	Storage Temperature	-55	+70	ĉ
To	Operating Temperature	-55	+40	ĉ
Ts	Soldering Temperature*		+240	C

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

0 250 300 350 400 450 500 550 600 650 700 750 800 850 900 Wavelength (nm)

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _D	Dark Current			280	600	nA
CJ	Junction Capacitance	f = 1 MHz		130		pF
I _N	Noise Current Spectral Density	f = 100 kHz		2.5	5.5	pA/√Hz
λ range	Spectral Application Range	Spot Scan	300		1000	nm
R	Responsivity	λ = 500 nm, V _R = 0 V		70		A/W
Vop	Operating voltage		1700		2000	V
T _{VBR}	Temp. Coeff. Breakdown voltage	Constant Gain = 200		2		V
t _r	Response Time*	$RL = 50 \Omega$, $\lambda = 675 nm$		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. © 2007 Advanced Photonix, Inc. All rights reserved. Specifications and output data subject to change without notice.

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