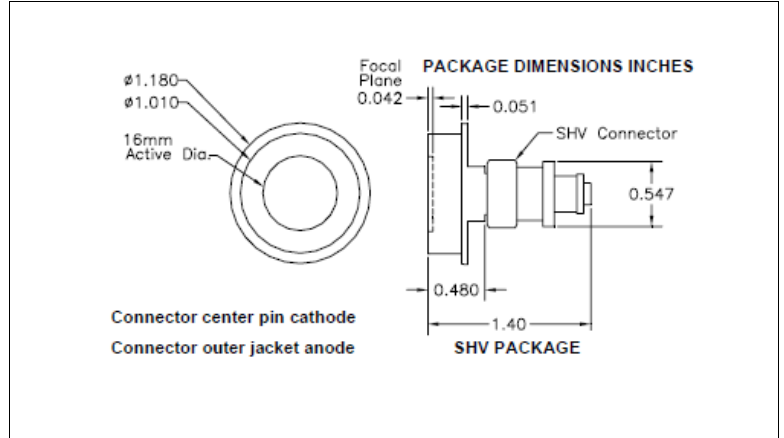


Non-Cooled Large Area Red Silicon Avalanche Photodiode

SD 630-70-72-500

Precision – Control – Results



DESCRIPTION

The **SD 630-70-72-500** is a non-cooled large area red enhanced silicon avalanche photodiode (APD) with high gain and low noise in a SHV package.

FEATURES

- Low Noise
- High Gain
- High Speed

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Instrumentation
- Medical

ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN	MAX	UNITS	
Gain	-	-	250	-
Storage Temperature	-55	to	+70	°C
Operating Temperature	-55	to	+40	°C
Soldering Temperature*	-	-	+240	°C

* 1/16 inch from case for 3 seconds max

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.

REV 01-04-16

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OPTO-ELECTRICAL PARAMETERS

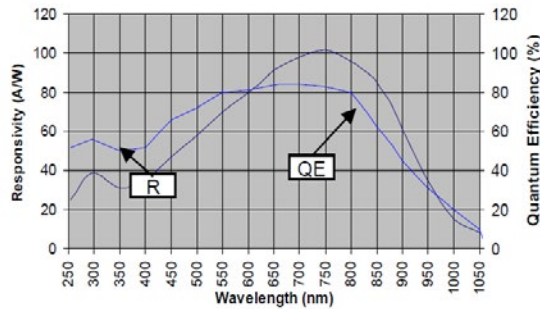
T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Current	-	-	280	600	nA
Junction Capacitance	f = 1 MHz	-	130	-	pF
Noise Current Spectral Density	f = 100 kHz	-	2.5	5.5	pA/√Hz
Spectral Application Range	Spot Scan	300	-	1000	nm
Responsivity	λ = 750 nm, V _R = 0 V	-	100	-	A/W
Operating Voltage	-	1700	-	2000	V
Temp. Coeff. Breakdown Voltage	Constant Gain = 200	-	2	-	V
Response Time**	RL = 50Ω, λ = 675nm	-	12	18	nS

**Response time of 10% to 90% is specified at 675nm wavelength light.

TYPICAL PERFORMANCE

DIRECTIONAL SENSITIVITY



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