

# NIR/Red Enhanced 6 mm<sup>2</sup> Photodiode-Preamplifier



## **FEATURES**

- Large Active Area
- Low Noise
- High Sensitivity
- Custom Gains Available
- Hermetically Sealed TO-39

## **Electro-Optical Characteristics at 23°C**

Parameters	Test Conditions	Min	Тур	Max	Units
Active Area	3.30 mm x 1.78 mm		5.87		mm <sup>2</sup>
Dark Offset	V <sub>s</sub> = ±5 V		1	±2	mV
Dark Offset Noise	$V_s = \pm 5$ BW = 0.1 to 135 kHz		283	500	μV rms
Sensitivity	$V_s = \pm 5 \text{ V}$ $\lambda = 940 \text{ nm}$	275	315		V/µW
Frequency Response (-3 db)	V <sub>s</sub> = ±5 V	100	130		Hz
NEP	λ = 940 nm		1.2		fW/√Hz
Transimpedance Gain			500		ΜΩ
Supply Current			850	950	μΑ

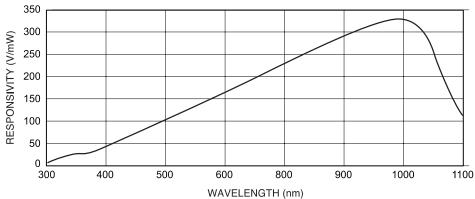
## **Absolute Ratings**

Parameters	Units		
Voltage Supply Range +V to –V*	5 to 15 V		
Power Dissipation	15 mW		
Storage and Operating Temperature	−25 to + 100°C		
Soldering Temperature (1/16" from case for 3 seconds max)	+260°C		

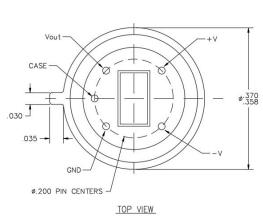
<sup>\*</sup>Voltage supply across the device requires a minimum of 5 V to a maximum of 15 V from +V to -V.

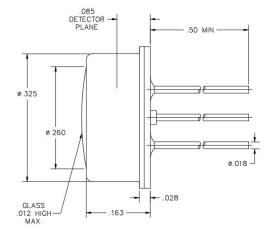
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## **Typical Spectral Response**



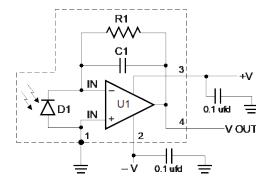
### **Package Information**





ALL DIMENSIONS ARE IN INCH UNITS

## Dimensions are in inch [metric] units.



Specifications are subject to change without prior notice.



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