

## SD121-43-11-221



### FEATURES

- Low Noise
- Red Enhanced
- High Speed
- Feedback Circuit

### DESCRIPTION

The **SD 112-43-11-221** is a detector/amplifier hybrid that combines a silicon photodiode with an opamp with a feedback resistor and capacitor, available in a hermetic TO-5 metal can package.

### APPLICATIONS

- Military
- Industrial
- Medical

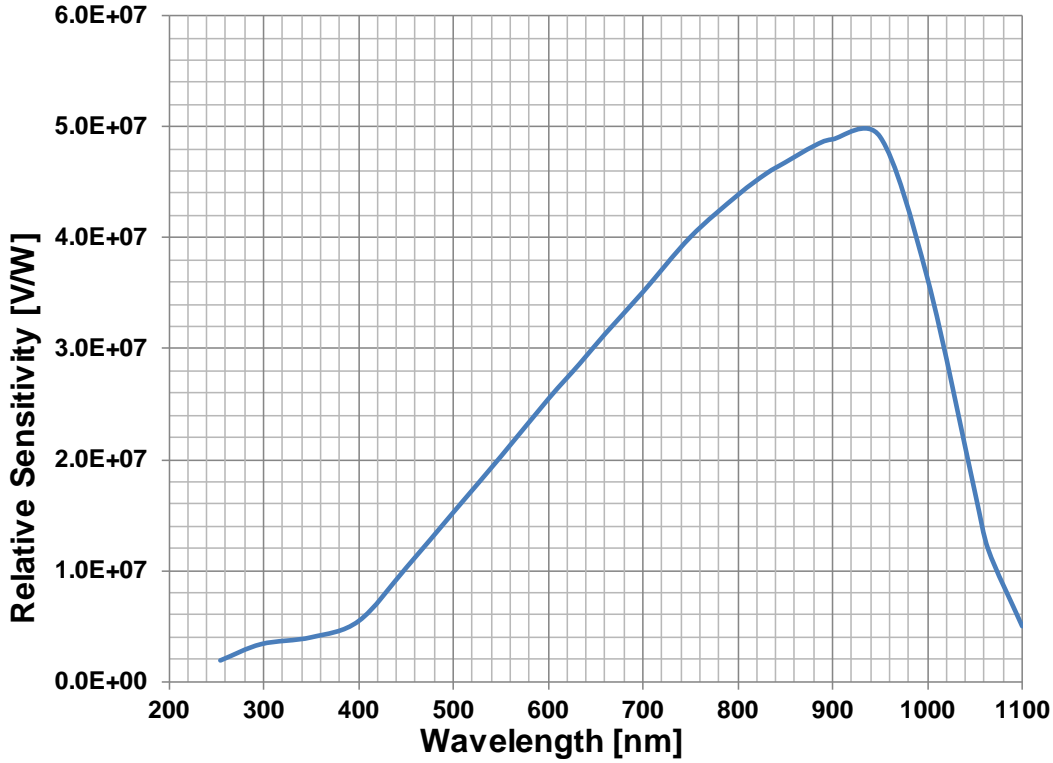
#### > Absolute Maximum Ratings

Part No.	Wavelength Range [nm]	Supply Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
SD112-43-11-221	300 to 1100	±5 to ±15	-25 to +100	-55 to +125	Lens Cap

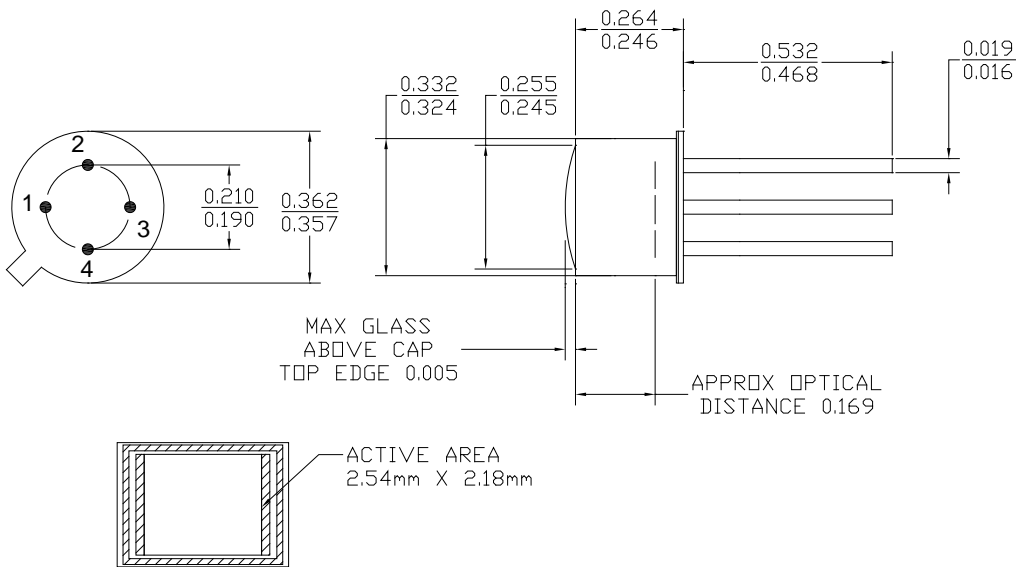
#### > Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Cutoff Frequency	-	F <sub>CO</sub>	0.9	1	-	KHz
Transimpedance Gain	-	G	-	75	-	MΩ
Sensitivity	λ= 940 nm	S	-	4.9x10 <sup>7</sup>	-	V/W
Output Offset Voltage	-	V <sub>OFF</sub>	-	-	±3	mV
Power Supply Current	-	I <sub>PS</sub>	-	6.2	7	mA
Broadband Noise	f-10Hz to cutoff	Noise	-	20	-	uV <sub>rms</sub>

> Spectral Response

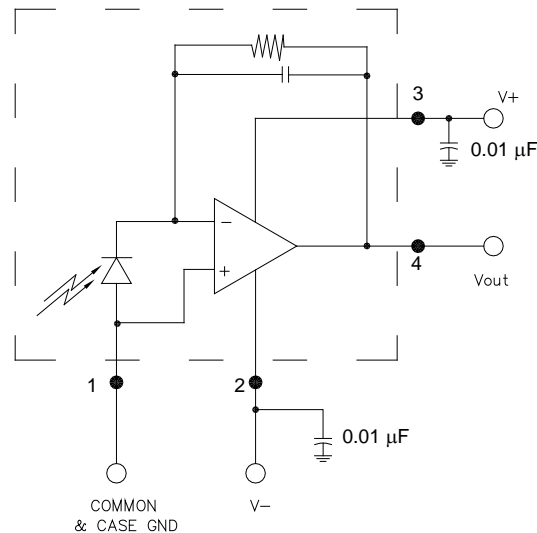


> Package Dimensions



> Soldering Conditions: 260°C 1/16 inch away from case for 3 seconds max.

## &gt; Circuit Schematic



**Note: Components shown outside the dashed area are external to the device, and must be supplied by the user.**

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**MATERIALS SAFETY**

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