

SD112-43-11-221

Silicon Photodiode Closed-Looped Amplifier Hybrid


FEATURES

- Low Noise
- 75MΩ Gain
- 1KHz Bandwidth
- Feedback Circuit

DESCRIPTION

The **SD112-43-11-221** 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	350 to 1100	±5 to ±15	-25 to +100	-55 to +125	TO-5

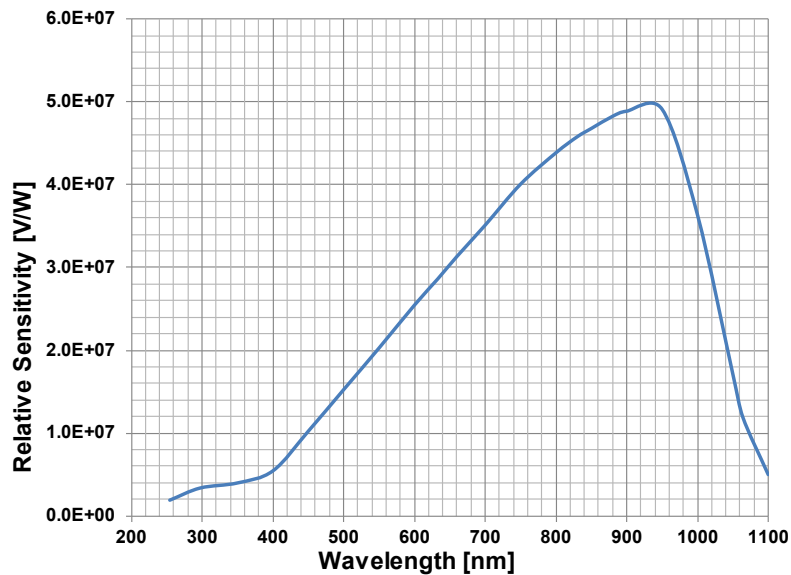
> Electrical and Optical Characteristics

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

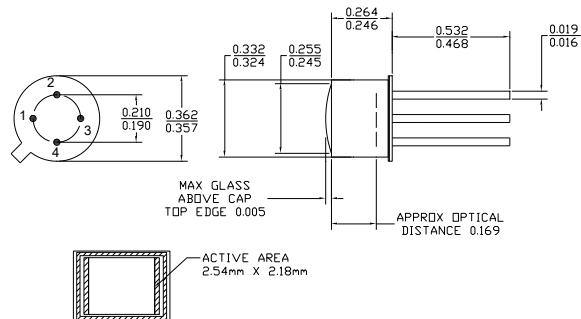
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> Spectral Response



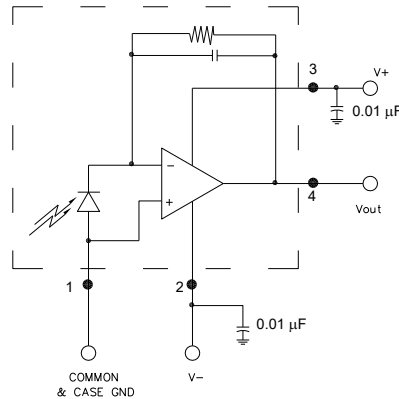
> Package Dimensions



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> 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

This product is free of conflict minerals and meets REACH compliance. Please see website for reports.

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