

**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.

**FEATURES**

- Low Noise
- Red Enhanced
- Feedback Circuit

**RELIABILITY**

Contact Luna for recommendations on specific test conditions and procedures.

**APPLICATIONS**

- Instrumentation
- Medical
- Industrial



**ABSOLUTE MAXIMUM RATINGS**

SYMBOL	MIN	TYPE	MAX	UNITS	
Voltage Supplies	±5	-	±15	V	T <sub>a</sub> = 23°C UNLESS OTHERWISE NOTED
Power Dissipation	-	360	-	mW	-
Storage Temperature	-25	-	+100	°C	-
Soldering Temperature*	-	+240	-	°C	-

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

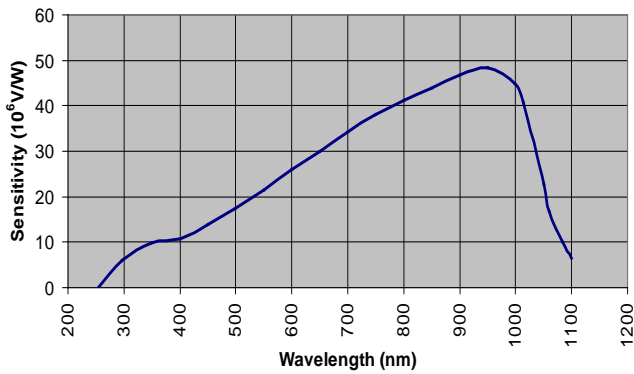
**OPTO-ELECTRICAL PARAMETERS**

T<sub>a</sub> = 23°C UNLESS NOTED OTHERWISE

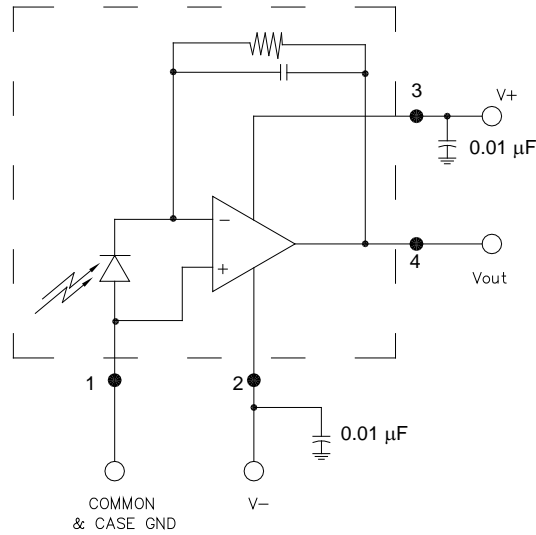
PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Cutoff Frequency	-	0.9	1	-	KHz
Transimpedance Gain	-	-	75	-	MΩ
Sensitivity	λ = 940 nm	-	4.9x10 <sup>7</sup>	-	V/W
Output Offset Voltage	-	-	-	±3	mV
Power Supply Voltage	-	-	6.2	7	mA
Broadband Noise	f-10Hz to cutoff	-	20	-	uV <sub>rms</sub>

**TYPICAL PERFORMANCE**

**SPECTRAL RESPONSE**



**SCHEMATIC AND CONNECTION DIAGRAM**



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