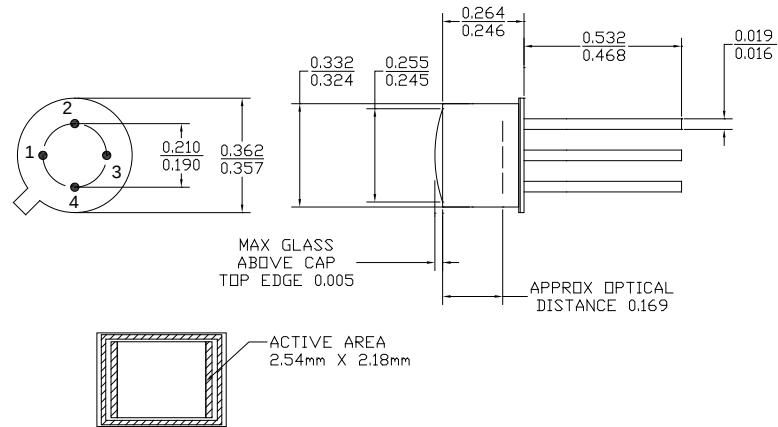




DESCRIPTION

The **SD 112-42-11-221** 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
- High Speed

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	$T_a = 23^{\circ}\text{C}$ UNLESS OTHERWISE NOTED
Power Dissipation	-	360	-	mW	-
Storage Temperature	-25	-	+100	$^{\circ}\text{C}$	-
Soldering Temperature*	-	+240	-	$^{\circ}\text{C}$	-

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

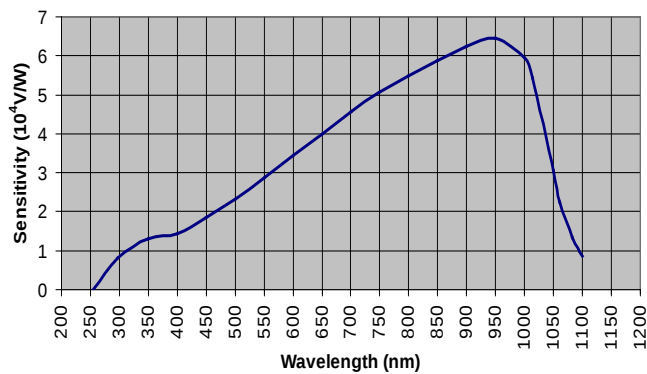
OPTO-ELECTRICAL PARAMETERS

$T_a = 23^\circ\text{C}$ UNLESS NOTED OTHERWISE

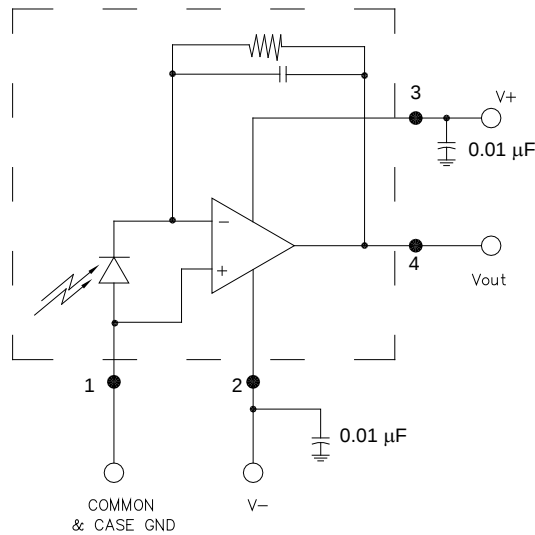
PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Cutoff Frequency	-	500	750	-	KHz
Transimpedance Gain	-	-	0.1	-	MΩ
Sensitivity	$\lambda = 940 \text{ nm}$	-	6.3×10^4	-	V/W
Output Offset Voltage	-	-	-	± 1	mV
Power Supply Voltage	-	-	6.2	7	mA
Broadband Noise	f-10Hz to cutoff	-	-	60	μV_{rms}

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.