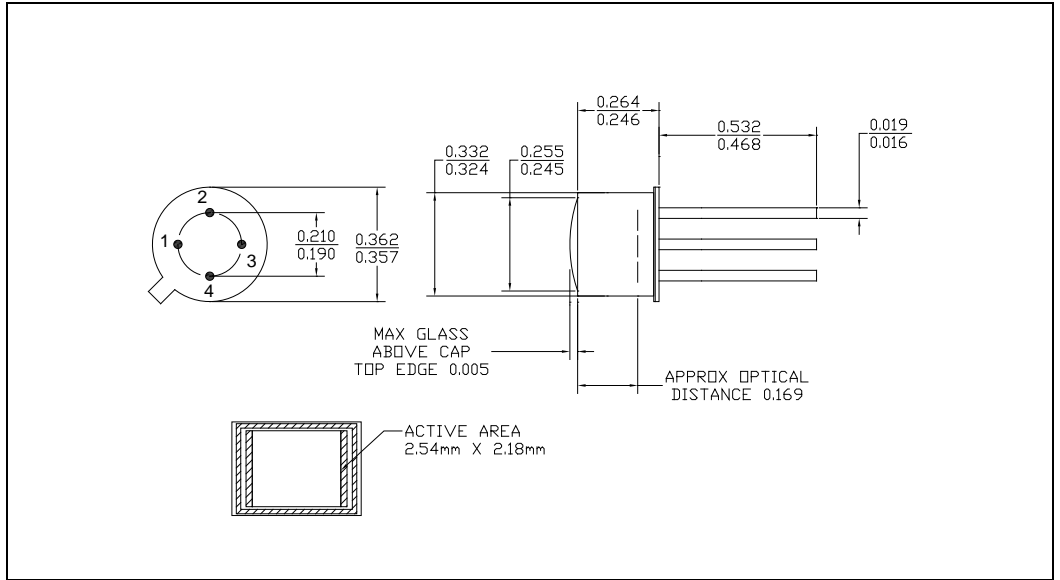




THE DATASHEET OF
SD112-42-11-221





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°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.

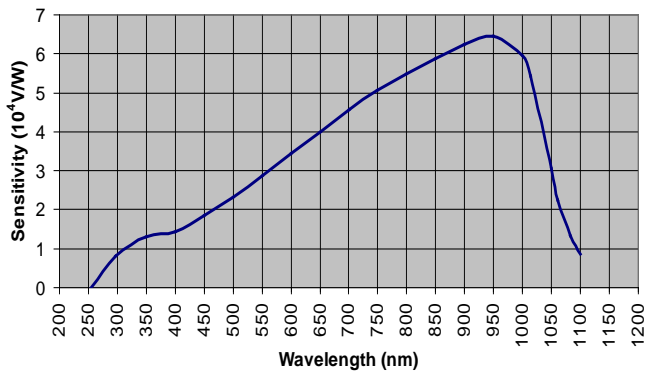
OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS NOTED OTHERWISE

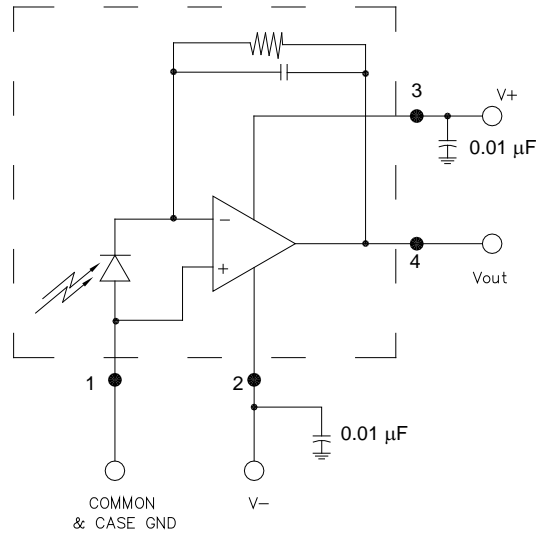
| PARAMETER | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|-----------------------|------------------|-----|---------------------|-----|-------------------|
| Cutoff Frequency | - | 500 | 750 | - | KHz |
| Transimpedance Gain | - | - | 0.1 | - | MΩ |
| Sensitivity | λ = 940 nm | - | 6.3x10 ⁴ | - | V/W |
| Output Offset Voltage | - | - | - | ±1 | mV |
| Power Supply Voltage | - | - | 6.2 | 7 | mA |
| Broadband Noise | f-10Hz to cutoff | - | - | 60 | uV _{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.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View SD112-42-11-221 on WIN SOURCE](#)

 [Luna Optoelectronics Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
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