



DESCRIPTION

The **SD 200-13-23-042** is a UV enhanced silicon PIN packaged in a hermetic TO-5 metal package.

FEATURES

- Low Noise
- UV Enhanced
- High Shunt Resistance
- High Response

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Instrumentation
- Industrial
- Medical

ABSOLUTE MAXIMUM RATINGS

| SYMBOL | MIN | MAX | UNITS | T _a = 23°C UNLESS OTHERWISE NOTED | |
|------------------------|-----|------|-------|--|---|
| Reverse Voltage | - | 75 | V | - | - |
| Storage Temperature | -55 | +150 | °C | - | - |
| Operating Temperature | -40 | +125 | °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 |
|----------------------------|----------------------------------|------|-----------------------|------|-------|
| Dark Current | V _R = 5V | - | 6.0 | 30 | nA |
| Shunt Resistance | V _R = 10 mV | 77 | - | - | MΩ |
| Junction Capacitance | V _R = 0V, f = 1 MHz | - | 345 | - | pF |
| | V _R = 5V, f = 1 MHz | - | 102 | - | |
| Spectral Application Range | Spot Scan | 250 | - | 1100 | nm |
| Responsivity | λ = 365nm V, V _R = 0V | 0.14 | 0.18 | - | A/W |
| Breakdown Voltage | I = 10 μA | - | 10 | - | V |
| Noise Equivalent Power | V _R = 0V @ λ = 365nm | - | 8.9x10 ⁻¹⁴ | - | W/√Hz |
| Response Time | RL = 50Ω, V _R = 0V | - | 190 | - | nS |
| | RL = 50Ω, V _R = 10V | - | 13 | - | |

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

