

SLSD -71N1 SLSD -71N1 / #

Solderable Planar Photodiode

Features

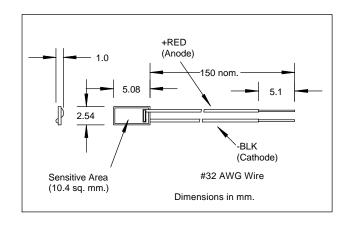
- Visible and IR spectral response
- High reliability
- Oxide passivation
- Linear short circuit current
- Low capacitance, high speed
- Protective coating
- Available in arrays where # indicates number of elements (maximum of 9 elements)

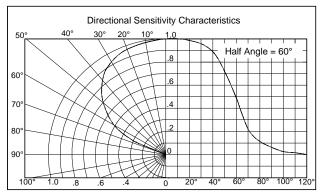
Description

The Silonex series of silicon solderable planar photodiodes feature low cost, high reliability, and linear short circuit current over a wide range of illumination. These devices are widely used for light sensing and power generation because of their stability and high efficiency. They are particularly suited to power conversion applications due to their low internal impedance, relatively high shunt impedance, and stability. The photodiodes have a protective coating that protects them from humidity effects. The electrical characteristics below are per element. In the multielement arrays the cathodes are common to a single cathode wire.

Absolute Maximum Ratings

Storage Temperature -40°C to +105°C Operating Temperature -40°C to +105°C





Electrical Characteristics (T_A=25°C unless otherwise noted)

| Symbol | Parameter | MIN | TYP | MAX | UNITS | TEST CONDITIONS |
|------------------|--------------------------------|-----|------|------|-------|---|
| I _{SC} | Short Circuit Current | 0.4 | 0.5 | | mA | V _R =0V, Ee=25mW/cm ² |
| | | | | | | (1) |
| Voc | Open Circuit Voltage | | 0.40 | | V | Ee=25mw/cm ² (1) |
| I _D | Reverse Dark Current | | | 1.7 | μΑ | $V_R=5V$, Ee=0 |
| CJ | Junction Capacitance | | 0.4 | | nF | V _R =0V, Ee=0, f=1MHz |
| S_{λ} | Spectral Sensitivity | | 0.55 | | A/W | λ=940nm |
| V_{BR} | Reverse Breakdown Voltage | 20 | | | V | I _R =100μA |
| λ_{P} | Maximum Sensitivity Wavelength | | 930 | | nm | |
| λ_{R} | Sensitivity Spectral Range | 400 | | 1100 | nm | |
| θ _{1/2} | Acceptance Half Angle | | 60 | | deg | (off center-line) |

Notes: (1) Ee = light source @ 2854 °K

Specifications subject to change without notice

2 Cogan Ave, Plattsburgh NY. 12901. USA

Tel: 518-561-3160 Fax: 514-747-3906

Northwich, Cheshire CW9 7TN, United Kingdom Tel: 01606-41999

Fax: 01606-49706

2150 Ward, Montreal Que, H4M 1T7, Canada Tel: 514-744-5507

Fax: 514-747-3906