



# SLCD-61N3

## Solderable Planar Photodiode

### Features

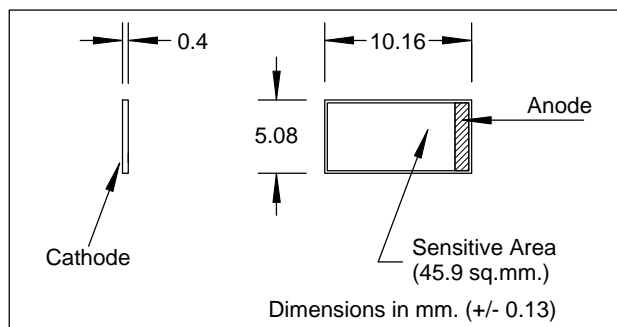
- Visible and IR spectral response
- High reliability
- Oxide passivation
- Linear short circuit current
- Low capacitance, high speed

### Description

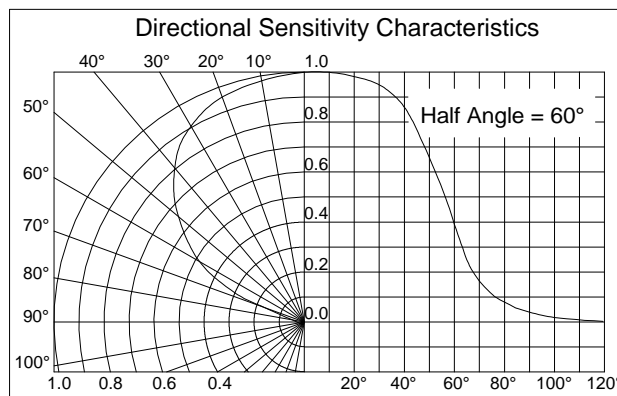
The Silonex series of silicon solderable planar photodiodes feature low cost, high reliability, and linear short circuit current over a wide range of illumination. These devices are widely used for light sensing and power generation because of their stability and high efficiency. They are particularly suited to power conversion applications due to their low internal impedance, relatively high shunt impedance, and stability. These devices also provide a reliable and inexpensive detector for instrumentation and light beam sensing applications.

### Absolute Maximum Ratings

Storage Temperature                                    -40°C to +125°C  
 Operating Temperature                                   -40°C to +125°C



Also available with leads as part number SLSD-71N3



### Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

| Symbol           | Parameter                      | Min | Typ  | Max  | Units | Test Conditions                                 |
|------------------|--------------------------------|-----|------|------|-------|-------------------------------------------------|
| I <sub>SC</sub>  | Short Circuit Current          | 1.3 | 2.1  |      | mA    | V <sub>R</sub> =0V, Ee=25mW/cm <sup>2</sup> (1) |
| V <sub>OC</sub>  | Open Circuit Voltage           |     | 0.40 |      | V     | Ee=25mw/cm <sup>2</sup> (1)                     |
| I <sub>D</sub>   | Reverse Dark Current           |     |      | 1.7  | μA    | V <sub>R</sub> =5V, Ee=0                        |
| C <sub>J</sub>   | Junction Capacitance           |     | 1.0  |      | nF    | V <sub>R</sub> =0V, Ee=0, f=1MHz                |
| S <sub>λ</sub>   | Spectral Sensitivity           |     | 0.55 |      | A/W   | λ=940nm                                         |
| V <sub>BR</sub>  | Reverse Breakdown Voltage      | 20  |      |      | V     | I <sub>R</sub> =100μA                           |
| λ <sub>P</sub>   | Maximum Sensitivity Wavelength |     | 930  |      | nm    |                                                 |
| λ <sub>R</sub>   | Sensitivity Spectral Range     | 400 |      | 1100 | nm    |                                                 |
| θ <sub>1/2</sub> | Acceptance Half Angle          |     | 60   |      | deg   | (off center-line)                               |

Specifications subject to change without notice

104112 REV 0

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