

# SLSD-71N8 / #

# Solderable Planar Photodiode

150 nom-

4.8 — Nom.

#32 AWG Wire

+Red

-Blk

Dimensions in mm.

(Anode)

(Cathode)

0.8

Sensitive Area

(2.7 sq. mm.)

### **Features**

- Visible to IR spectral irradiance range
- · High reliability
- Oxide passivation
- Linear short circuit current
- · Low capacitance, high speed
- Protective coating
- Available in arrays where # indicates number of elements ( maximum of 8 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 and relatively high shunt impedance, stability, and humidity characteristics. These devices also provide a reliable, inexpensive detector for applications such as light beam sensing and instrumentation. The electrical characteristics below are per element. In the multielement arrays the cathodes are common to a single cathode wire.

# Directional Sensitivity Characteristics 40° 30° 20° 10° 1.0 50° 60° 70° 80° 90°

Also available without leads as part number SLCD-61N8

## **Absolute Maximum Ratings**

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

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

Symbol	Parameter	Min	Тур	Max	Units	Test Conditions
I <sub>SC</sub>	Short Circuit Current	100	170		μΑ	V <sub>R</sub> =0V, Ee=25mW/cm <sup>2</sup> (1)
$V_{OC}$	Open Circuit Voltage		0.40		V	Ee=25mw/cm <sup>2</sup> (1)
$I_D$	Reverse Dark Current			1.7	μΑ	V <sub>R</sub> =5V, Ee=0
$C_J$	Junction Capacitance		100		рF	V <sub>R</sub> =0V, Ee=0, f=1MHz
$S_\lambda$	Spectral Sensitivity		0.55		A/W	λ=940nm
$V_{BR}$	Reverse Breakdown Voltage	20			V	I <sub>R</sub> =100μA
$\lambda_{P}$	Maximum Sensitivity Wavelength		930		nm	
$\lambda_{R}$	Sensitivity Spectral Range	400		1100	nm	
$\theta_{1/2}$	Acceptance Half Angle		60		deg	

100°

0.8

Notes: (1) Ee = light source @  $2854 \,^{\circ}$ K

Specifications subject to change without notice
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