

## Solderable Planar Photodiode

#### **Features**

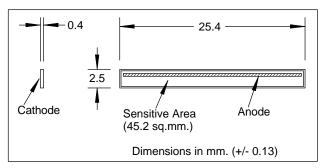
- Visible to IR spectral irradiance range
- High reliability
- Oxide passivation
- Low capacitance, high speed

### Description

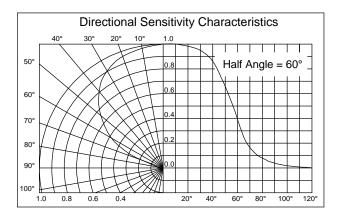
The Silonex series of silicon solderable planar photodiodes feature low cost, high reliability, and linear short circuit current over a wide range of illumination. These devices are widely used for light sensing and power generation because of their stability and high efficiency. They are particularly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

# **Absolute Maximum Ratings**

Storage Temperature  $-40^{\circ}$ C to  $+125^{\circ}$ C Operating Temperature  $-40^{\circ}$ C to  $+125^{\circ}$ C



Also available with leads as part number SLSD-71N4



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

<b>Symbol</b>	Parameter	Min	Тур	Max	Units	Test Conditions
I <sub>SC</sub>	Short Circuit Current	1.4	2.3		mA	$V_R=0V$ , Ee=25mW/cm <sup>2</sup> (1)
V <sub>oc</sub>	Open Circuit Voltage		0.40		٧	Ee=25mw/cm <sup>2</sup> (1)
$I_D$	Reverse Dark Current			5	μΑ	V <sub>R</sub> =5V, Ee=0
$C_{J}$	Junction Capacitance		1.5		nF	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	(off center-line)

Specifications subject to change without notice

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

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