

SLSD -71N1 SLSD -71N1 /

Solderable Planar Photodiode

Features

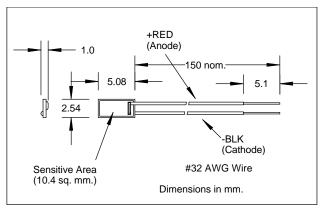
- Visible and IR spectral response
- High reliability
- Oxide passivation
- Linear short circuit current
- Low capacitance, high speed
- Protective coating
- Available in arrays where # indicates number of elements (maximum of 9 elements)

Description

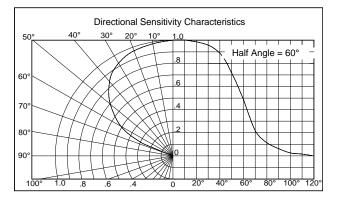
The Silonex series of silicon solderable planar photodiodes feature low cost, high reliability, and linear short circuit current over a wide range of illumination. These devices are widely used for light sensing and power generation because of their stability and high efficiency. They are particularly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



Also available without leads as part number SLCD-61N1



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

Symbol	Parameter	Min	Тур	Max	Units	Test Conditions
I _{SC}	Short Circuit Current	0.4	0.5		mA	$V_{R}=0V, Ee=25mW/cm^{2}$ (1)
V _{oc}	Open Circuit Voltage		0.40		V	$Ee=25mw/cm^2$ (1)
I _D	Reverse Dark Current			1.7	μA	$V_R=5V$, 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	
$\theta_{1/2}$	Acceptance Half Angle		60		deg	(off center-line)

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

Specifications subject to change without notice 101391 REV 8

5200 St. Patrick St., Montreal Que., H4E 4N9, Canada Tel: 514-768-8000 Fax: 514-768-8889 The Old Railway, Princes Street Ulverston, Cumbria, LA12 7NQ, UK Tel: 01 229 581 551 Fax: 01 229 581 554