



Solderable Planar Photodiode

Features

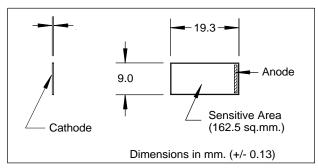
- Visible to IR spectral sensitivity range
- Oxide passivation
- Linear short circuit current vs irradiance
- Low capacitance, high speed

Description

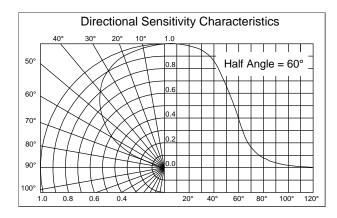
The Silonex series of silicon solderable planar photodiodes feature low cost, high reliability, and linear short circuit current over a wide range of illumination. They are particularly suited to power conversion applications due to their low internal impedance, relatively high shunt impedance, and stability.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

Absolute Maximum Ratings

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



Also available with leads as part number SLSD-71N7



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

Symbol	Parameter	Min	Тур	Max	Units	Test Conditions
I _{SC}	Short Circuit Current	5	8		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			5	μΑ	V _R =5V, Ee=0
C_{J}	Junction Capacitance		2.5		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)

Specifications subject to change without notice

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