

Features

- Visible to IR spectral irradiance range
- High reliability
- Oxide passivation
- Linear short circuit current
- Low capacitance, high speed
- 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. 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 multi-element arrays the cathodes are common to all elements.

Absolute Maximum Ratings

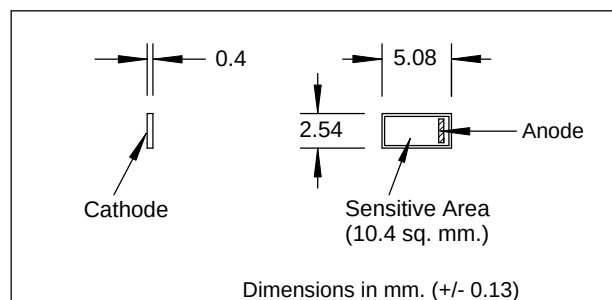
Storage Temperature	-40°C to +125°C
Operating Temperature	-40°C to +125°C

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

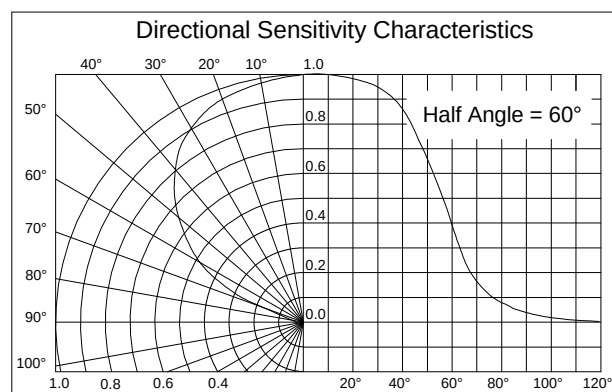
Symbol	Parameter	Min	Typ	Max	Units	Test Conditions
I _{SC}	Short Circuit Current	0.4	0.5		mA	V _R =0V, E _e =25mW/cm ² (1)
V _{OC}	Open Circuit Voltage		0.40		V	E _e =25mw/cm ² (1)
I _D	Reverse Dark Current			1.7	μA	V _R =5V, E _e =0
C _J	Junction Capacitance		0.4		nF	V _R =0V, E _e =0, f=1MHz
S _λ	Spectral 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	
θ _{1/2}	Acceptance Half Angle		60		deg	

Specifications subject to change without notice

104117 REV 0



Also available with leads as part number SLSD-71N1



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