

### Features

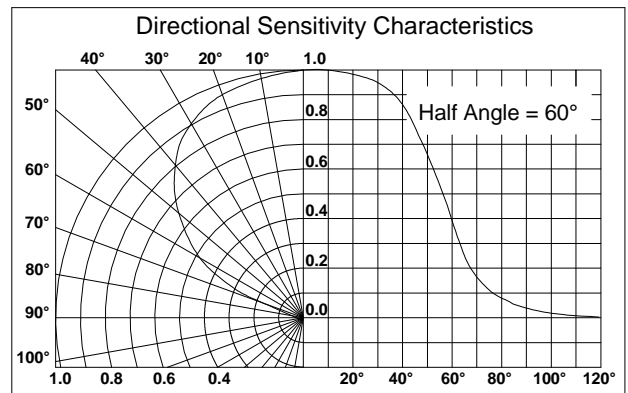
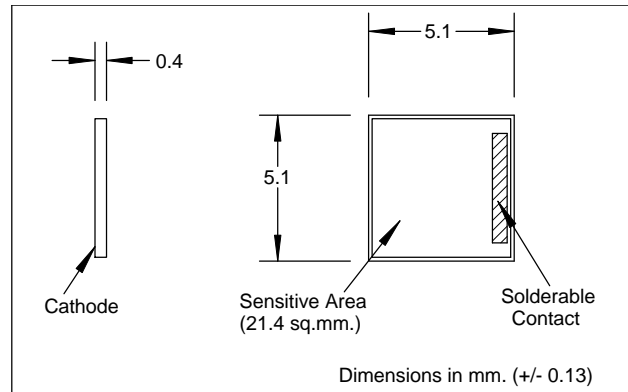
- Fast response
- High reliability, long life
- Ideal for moderate reverse bias voltage operation
- Linear short circuit current
- Low capacitance

### Description

The Silonex 5.1 x 5.1 solderable planar photodiodes chips 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 and inexpensive detector for instrumentation and light beam sensing applications.

### Absolute Maximum Ratings

Storage Temperature	-40°C to +125°C
Operating Temperature	-40°C to +105°C



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

Symbol	Parameter	Min	Typ	Max	Units	Test Conditions
I <sub>SC</sub>	Short Circuit Current	1.0	1.25		mA	V <sub>R</sub> =0V, Ee=25mW/cm <sup>2</sup> (1)
V <sub>OC</sub>	Open Circuit Voltage		0.40		V	Ee=25mW/cm <sup>2</sup> (1)
I <sub>D</sub>	Reverse Dark Current		1.0	10	μA	V <sub>R</sub> =5V, Ee=0
C <sub>J</sub>	Junction Capacitance		0.8		nF	V <sub>R</sub> =0V, Ee=0, f=1MHz
S <sub>λ</sub>	Spectral Sensitivity		0.55		A/W	λ=940nm
V <sub>BR</sub>	Reverse Breakdown Voltage	20			V	I <sub>R</sub> =100μA
λ <sub>P</sub>	Maximum Sensitivity Wavelength		930		nm	
λ <sub>R</sub>	Sensitivity Spectral Range	400		1100	nm	
θ <sub>1/2</sub>	Acceptance Half Angle		60		deg	(off center-line)

Notes: (1) Ee = source @ 2854 °K  
 Specifications subject to change without notice.

103226 REV 0