

Features

- Planar Photodiode
- Wide receiving angle
- Large active area chip
- Fast switching time
- Low leakage current
- Linear response vs irradiance
- Multiple dark current ranges available

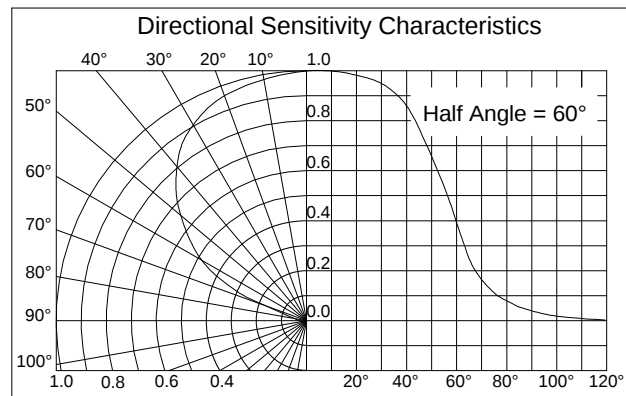
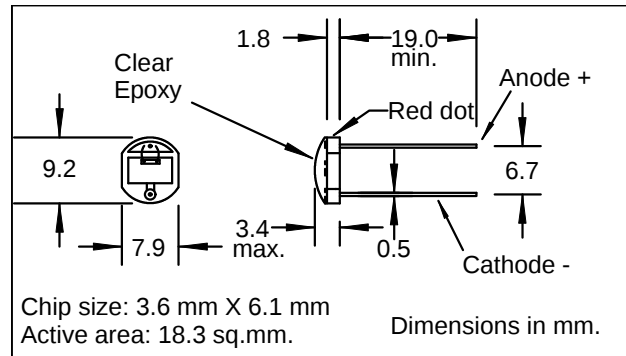
Description

The planar photodiode is designed to operate in either photovoltaic or photoconductive modes. High sensitivity and low dark current allow use in even low light applications. The large area silicon photodiode measures 3.6 mm X 6.1 mm (0.140" x 0.240"). The photodiode is supplied on a ceramic base with a clear epoxy dome window.

Absolute Maximum Ratings

Storage Temperature	-20°C to +75°C
Operating Temperature	-20°C to +75°C
Soldering Temperature (3)	260°C

Notes: (1) Ee = light source @ 2854 °K
 (2) Ee = light source @ $\lambda = 880$ nm
 (3) >2 mm from case for < 5 sec.



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

Symbol	Parameter	MIN	TYP	MAX	UNITS	TEST CONDITIONS
I _{SC}	Short Circuit Current	600	900		μA	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:					
	SLD-69C1A			100	nA	V _R = 0.1V, Ee = 0
	SLD-69C1B			100	nA	V _R = 5V, Ee = 0
	SLD-69C1C			20	nA	V _R = 5V, Ee = 0
	SLD-69C1D			5	nA	V _R = 5V, Ee = 0
	SLD-69C1E			1	nA	V _R = 5V, Ee = 0
C _J	Junction Capacitance		350		pF	V _R =0, Ee=0, f=1MHz
t _R	Rise Time		8		μs	V _R =10V, R _L =1kΩ (2)
t _F	Fall Time		10		μs	V _R =10V, R _L =1kΩ (2)
TC _I	I _{SC} Temp. Coef.		+0.2		%/°C	(1)
V _{BR}	Reverse Breakdown Voltage		50		V	I _R = 100 μA
λ _P	Maximum Sensitivity Wavelength		930		nm	
λ _R	Sensitivity Spectral Range	400		1100	nm	
θ _{1/2}	Acceptance Half Angle		60		deg	(off center-line)

Specifications are subject to change without notice.

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