



SLD-67HFBG1

Silicon Photodiode Integral Infrared Rejection Filter

Features

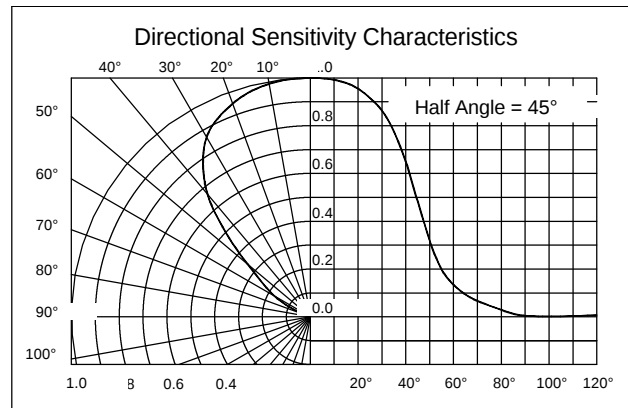
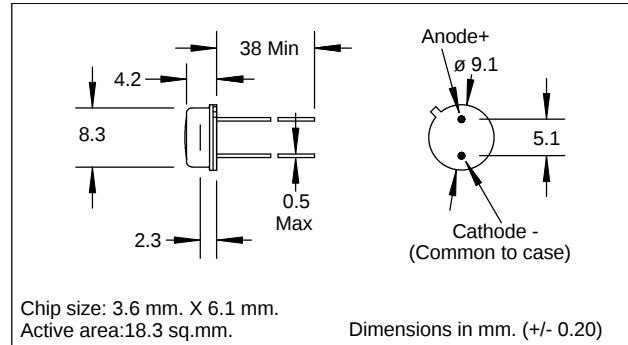
- Large Area Planar Photodiode
- Low capacitance, fast switching time
- High responsivity
- Low leakage current
- Linear response vs irradiance
- IR Blocking Filter
- TO-5 package
- Multiple dark current ranges available

Description

This flat window hermetically sealed TO-5, passivated silicon photodetector is designed to operate in either photovoltaic or reverse bias mode to provide low capacitance with fast switching speed and high responsivity. It provides excellent linearity in output signal versus light intensity. Low dark current and low capacitance makes it the ideal detector for fast rise time applications. The package incorporates an infrared rejection optical filter.

Absolute Maximum Ratings

Storage Temperature	-20°C to +110°C
Operating Temperature	-20°C to +110°C
Soldering Temperature (3)	260°C



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

Symbol	Parameter	MIN	TYP	MAX	UNITS	TEST CONDITIONS
I _{SC}	Short Circuit Current	70	125		μA	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:					
	SLD-67HFBG1A			100	nA	V _R = 0.1V, E _e = 0
	SLD-67HFBG1B			100	nA	V _R = 5V, E _e = 0
	SLD-67HFBG1C			20	nA	V _R = 5V, E _e = 0
	SLD-67HFBG1D			5	nA	V _R = 5V, E _e = 0
	SLD-67HFBG1E			1	nA	V _R = 5V, E _e = 0
C _J	Junction Capacitance		350		pF	V _R =0, E _e =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 = 100μA
λ _P	Maximum Sensitivity Wavelength		550		nm	
λ _R	Sensitivity Spectral Range	400		700	nm	
θ _{1/2}	Acceptance Half Angle		45		deg	(off center-line)

Notes: (1) E_e = source @ 2854 °K

(2) E_e = source @ λ = 580 nm

(3) >2 mm from case for <5 sec.

Specifications are subject to change without notice.

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