SLD-68-026

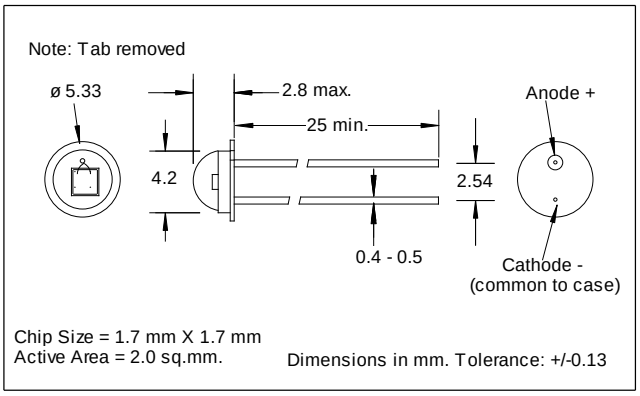
Planar Photodiode with BG-18 Filter

Features

- Planar photodiode with BG-18 filter
- Low capacitance
- Fast switching time
- Low leakage current
- Linear response vs irradiance
- TO-46 base with epoxy dome lens

Description

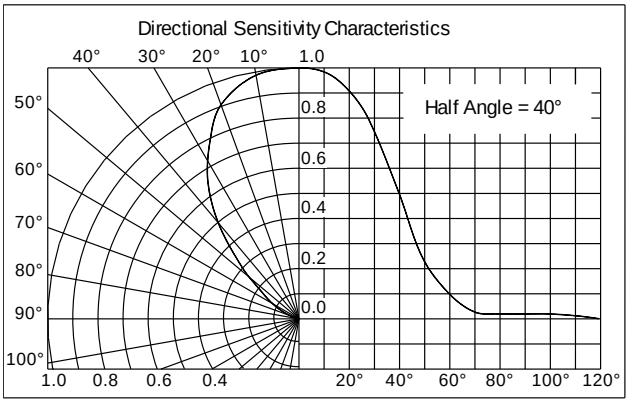
The SLD-68-026 Silicon planar photodiode with added BG-18 filter is designed for visible light detection, TO-46 package with epoxy dome lens allow wide angle of detection. The photodiode is suitable for photopic sensing applications such as: color sensing, analytics, safety equipment and special sensors for automation. Low dark current and low capacitance make it the ideal detector for visible light detection applications.

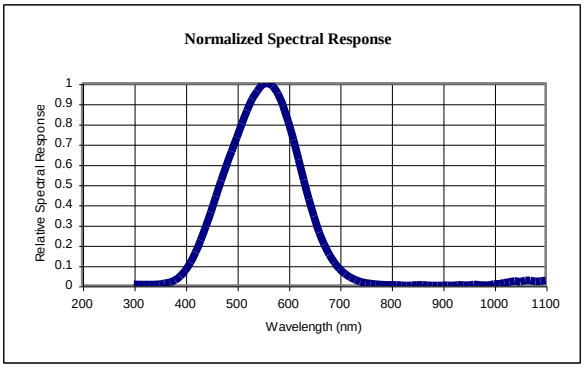


Absolute Maximum Ratings

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 @ λ = 560 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	7.5	11.0		µA	V_R=0V, Ee=25mW/cm^2 (1)
V_{OC}	Open Circuit Voltage		0.35		V	Ee=25mw/cm^2 (1)
I_D	Reverse Dark Current:			100	nA	V_R= 5V, Ee=0
C_J	Junction Capacitance		40		pF	V_R=0, Ee=0, f=1MHz
t_R	Rise Time		1.0		µs	V_R=10V, R_L=1kΩ (2)
t_F	Fall Time		1.5		µs	V_R=10V, R_L=1kΩ (2)
TC_I	Temp. Coef., I_{SC}		+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	
$\theta_{1/2}$	Acceptance Half Angle		40		deg	(off center-line)

Specifications subject to change without notice.

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