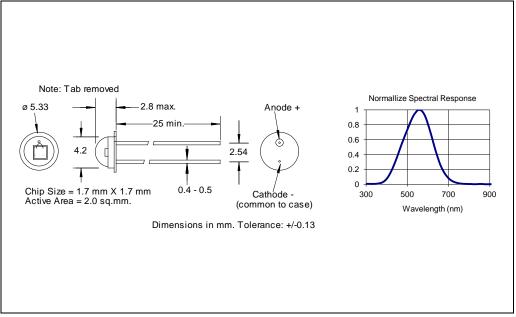


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DESCRIPTION

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.

RELIABILITY

This API high-reliability detector is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test.

Contact API for recommendations on specific test conditions and procedures.

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

APPLICATIONS

Industrial sensing

ABSOLUTE MAXIMUM RATINGS

Operating Temperature	-20	to	+75	°C	non condensing
Storage Temperature	-20	to	+75	°C	
Soldering Temperature			+260	°C	>0.08" from case for <5 sec.

- (1) Ee = Light source @ 2854 °K.
- (2) Ee = light source @ λ = 560 nm



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OPTO-ELECTRICAL PARAMETERS

 $T_a = 23$ °C unless noted otherwise

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS	
Short Circuit Current	V _R =0V, Ee=25mW/cm2 (1)	7.5	11.0		μA	
Open Circuit Voltage	Ee=25mw/cm2 (1)				V	
Reverse Dark Current	VR= 5V, Ee=0			100	nA	
Maximum sensitivity wavelength	$V_R = 0V$		550		nm	
Sensitivity spectral range	$V_R = 0V$	400		700	nm	
Temp. Coef., I _{SC}	(1)		+0.2		%/°C	
Junction capacitance	V _R =0, Ee=0, f=1MHz		40		pF	
Rise Time	$V_R = 10V, R_L = 1K\Omega$ (2)		1.0		μs	
Fall Time	$V_R = 10V, R_L = 1K\Omega$ (2)		1.5		μs	
Reverse Breakdown Voltage	I _R =100μA		50		V	
Acceptance Half Angle	(off center-line)		40		deg	