



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



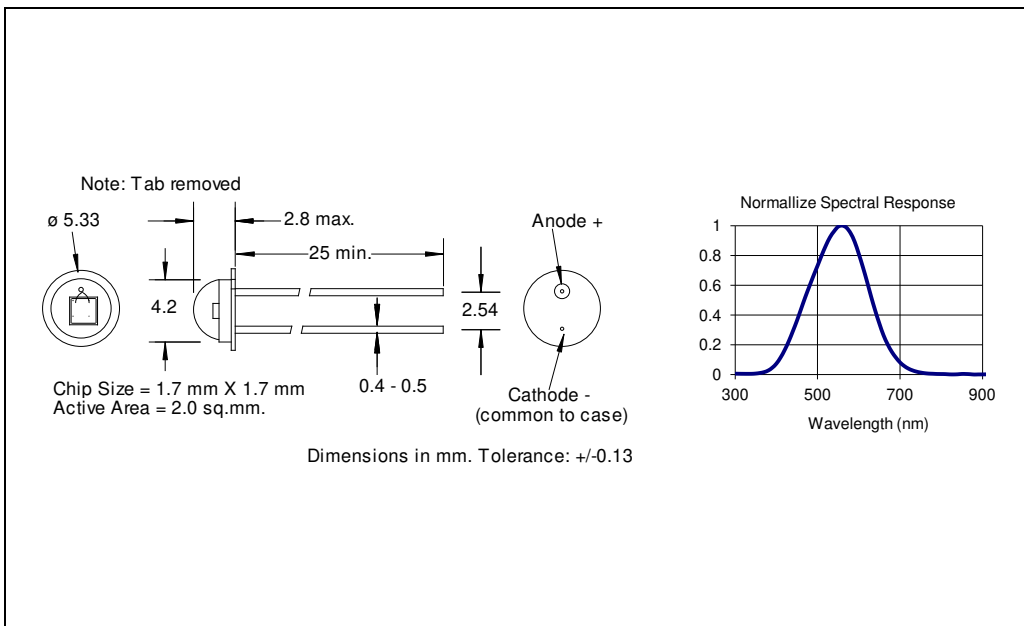
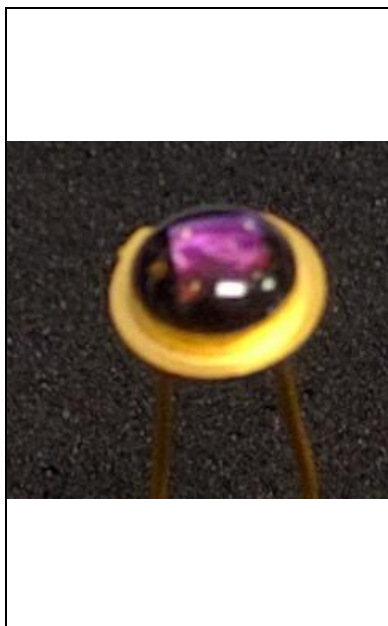
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DESCRIPTION

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.

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

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

OPTO-ELECTRICAL PARAMETERS

$T_a = 23^\circ\text{C}$ unless noted otherwise

| PARAMETER | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------------------------------|---|-----|------|-----|---------------------|
| Short Circuit Current | $V_R=0V, E_e=25\text{mW}/\text{cm}^2$ (1) | 7.5 | 11.0 | | μA |
| Open Circuit Voltage | $E_e=25\text{mw}/\text{cm}^2$ (1) | | | | V |
| Reverse Dark Current | $V_R= 5V, E_e=0$ | | | 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 | | $\%/^\circ\text{C}$ |
| Junction capacitance | $V_R=0, E_e=0, f=1\text{MHz}$ | | 40 | | pF |
| Rise Time | $V_R= 10V, R_L = 1\text{K}\Omega$ (2) | | 1.0 | | μs |
| Fall Time | $V_R= 10V, R_L = 1\text{K}\Omega$ (2) | | 1.5 | | μs |
| Reverse Breakdown Voltage | $I_R=100\mu\text{A}$ | | 50 | | V |
| Acceptance Half Angle | (off center-line) | | 40 | | deg |