



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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Features

- Low capacitance, fast switching time
- Linear response vs irradiance
- IR blocking filter
- Multiple dark current ranges available

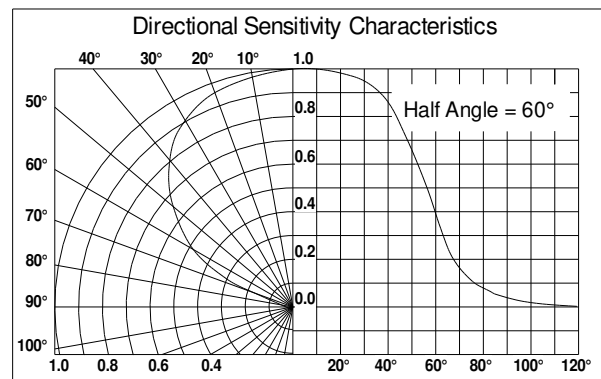
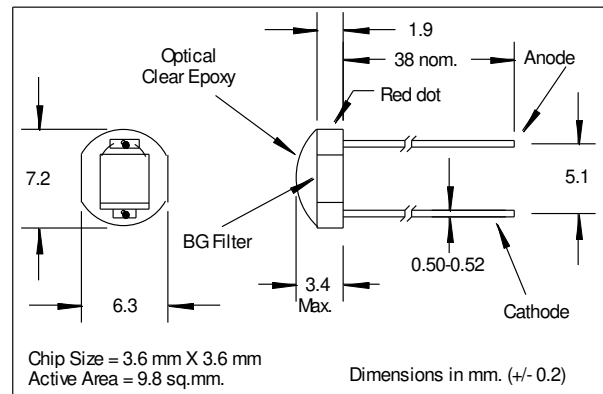
Description

The planar photodiode is designed to operate in either photoconductive or photovoltaic modes. This diode incorporates a BG filter that rejects infrared wavelengths and approximates the response of the human eye. High sensitivity and low dark current allow use in low irradiance applications. The photodiode measures 3.6 mm X 3.6 mm (0.140" X 0.140") and is supplied on a ceramic base with a clear epoxy dome package.

Absolute Maximum Ratings

| | |
|---------------------------|----------------|
| Storage Temperature | -20°C to +85°C |
| Operating Temperature | -20°C to +85°C |
| Soldering Temperature (1) | 260°C |

- Notes: (1) >2 mm from case for < 5 sec.
 (2) Ee = source @ 2854°K
 (3) Ee = source @ $\lambda = 580$ nm



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

| Symbol | Parameter | Min | Typ | Max | Units | Test Conditions |
|------------------|--------------------------------|-----|------|-----|-------|---|
| I _{SC} | Short Circuit Current | 40 | 55 | | μA | V _R =0V, Ee=25mW/cm ² (2) |
| V _{OC} | Open Circuit Voltage | | 0.40 | | V | Ee=25mw/cm ² (2) |
| I _D | Reverse Dark Current: | | | | | |
| | SLD-70BG2A | | 100 | | nA | V _R =100mV, Ee=0 |
| | SLD-70BG2B | | 100 | | nA | V _R =5V, Ee=0 |
| | SLD-70BG2C | | 20 | | nA | V _R =5V, Ee=0 |
| | SLD-70BG2D | | 5 | | nA | V _R =5V, Ee=0 |
| | SLD-70BG2E | | 1 | | nA | V _R =5V, Ee=0 |
| C _J | Junction Capacitance | | 180 | | pF | V _R =0V, Ee=0, f=1MHz |
| t _R | Rise Time | | 4 | | μs | V _R =5V, R _L =1kΩ (3) |
| t _F | Fall Time | | 6 | | μs | V _R =5V, R _L =1kΩ (3) |
| TC _I | Temp. Coef., I _{SC} | | +0.2 | | %/°C | (2) |
| 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 | | 60 | | deg | (off center-line) |

Specifications subject to change without notice.

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