



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

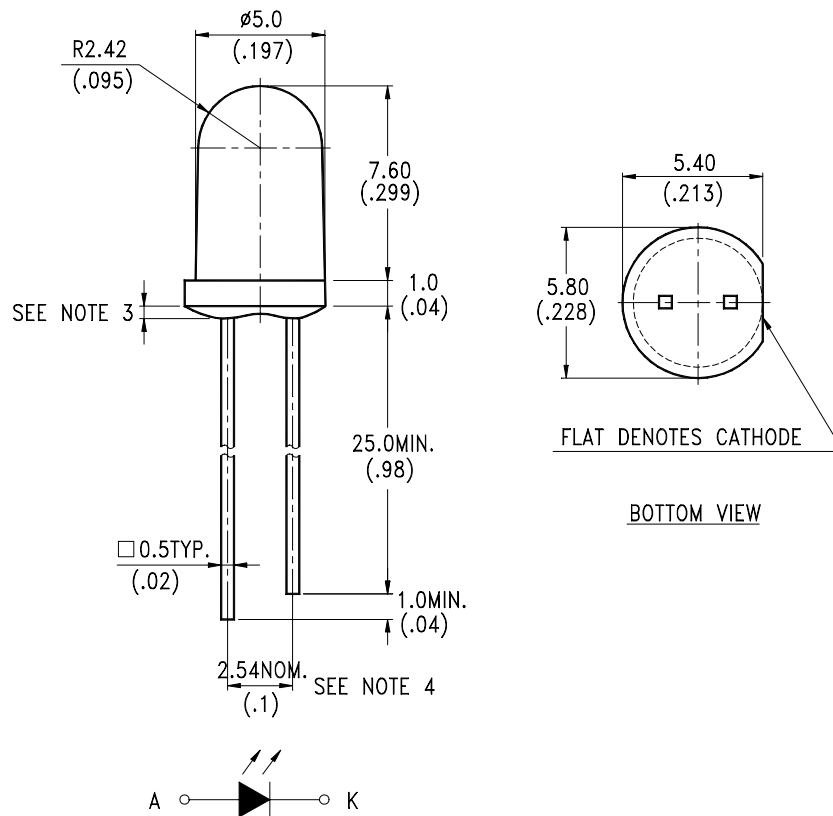
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## FEATURES

- \* SPECIAL FOR HIGH CURRENT AND LOW FORWARD VOLTAGE
- \* HIGH POWER
- \* AVAILABLE FOR PULSE OPERATING
- \* WIDE VIEWING ANGLE

## PACKAGE DIMENSIONS



### NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$  unless otherwise noted.
3. Protruded resin under flange is  $1.5\text{mm}(.059\text{'})$  max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.



**ABSOLUTE MAXIMUM RATINGS AT TA=25°C**

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	150	mW
Peak Forward Current (300pps, 10 $\mu$ s pulse)	2	A
Continuous Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to + 85°C	
Storage Temperature Range	-55°C to + 100°C	
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds	

**ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION	BIN NO.
Aperture Radiant Incidence	Ee	0.64		1.20	mW/cm <sup>2</sup>	I <sub>F</sub> = 20mA	BIN B
		0.80		1.68			BIN C
		1.12					BIN D
Radiant Intensity	I <sub>E</sub>	4.81		9.02	mW/sr	I <sub>F</sub> = 20mA	BIN B
		6.02		12.63			BIN C
		8.42					BIN D
Peak Emission Wavelength	$\lambda_{Peak}$		940		nm	I <sub>F</sub> = 20mA	
Spectral Line Half-Width	$\Delta \lambda$		50		nm	I <sub>F</sub> = 20mA	
Forward Voltage	V <sub>F</sub>		1.25	1.6	V	I <sub>F</sub> = 50mA	
Forward Voltage	V <sub>F</sub>		1.65	2.1	V	I <sub>F</sub> = 250mA	
Reverse Current	I <sub>R</sub>			100	$\mu$ A	V <sub>R</sub> = 5V	
Viewing Angle (See FIG.6)	2 $\theta_{1/2}$		50		deg.		

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

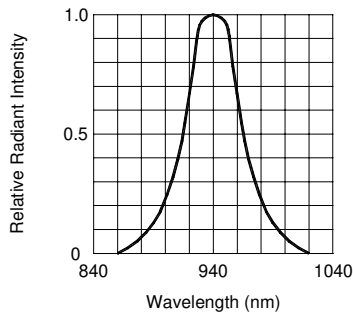


FIG.1 SPECTRAL DISTRIBUTION

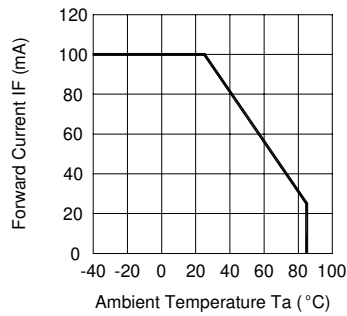


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

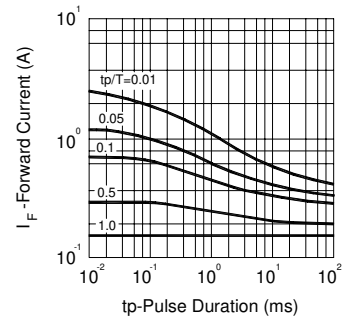


FIG.7 PULSE FORWARD CURRENT VS. PULSE DURATION

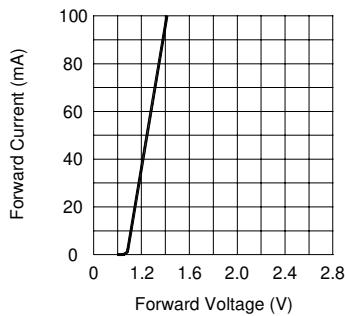


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

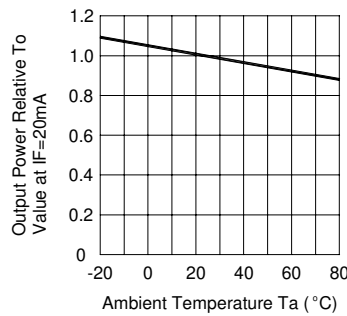


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

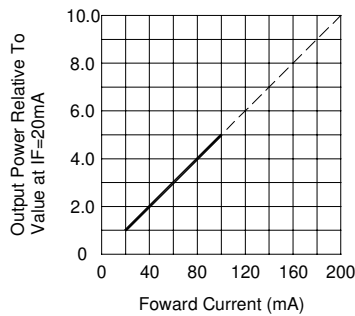


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

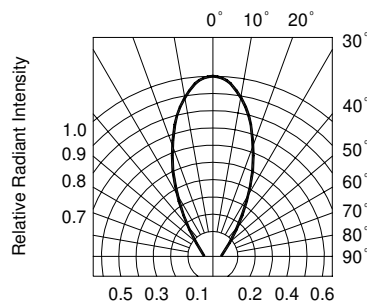


FIG.6 RADIATION DIAGRAM