



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

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### Peak Emission Wavelength: 450nm

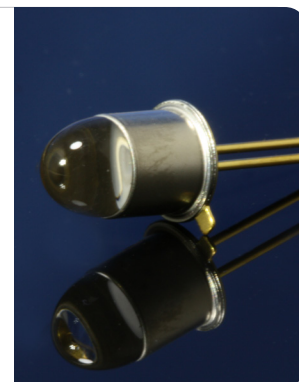
The 450nm visible emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.

#### FEATURES

- > TO-18 Metal Can Domed Package
- > High Output Power
- > High Reliability
- > Narrow Beam Angle
- > Using Cree EZ950 Series Die

#### APPLICATIONS

- > Industrial Equipment
- > Medical
- > Machine Vision
- > Currency Validation
- > Light Source For Emitters



### Absolute Maximum Ratings (Ta=25°C)



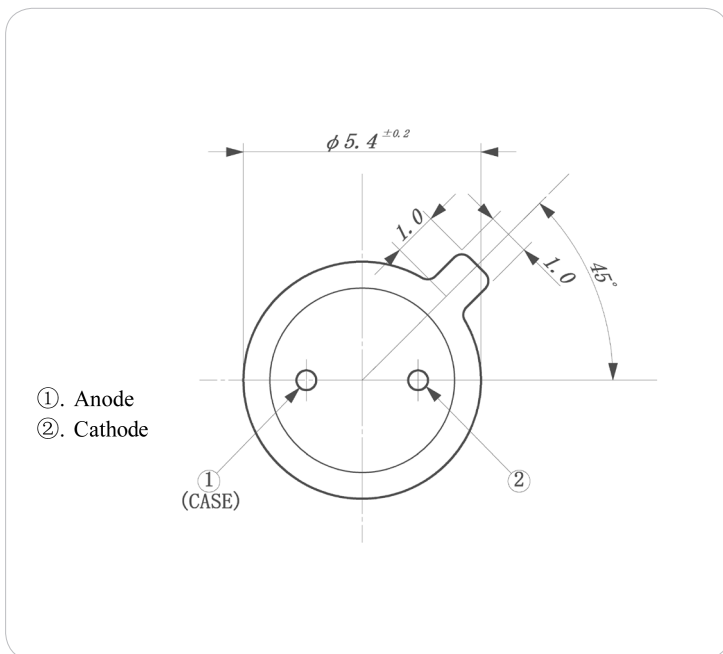
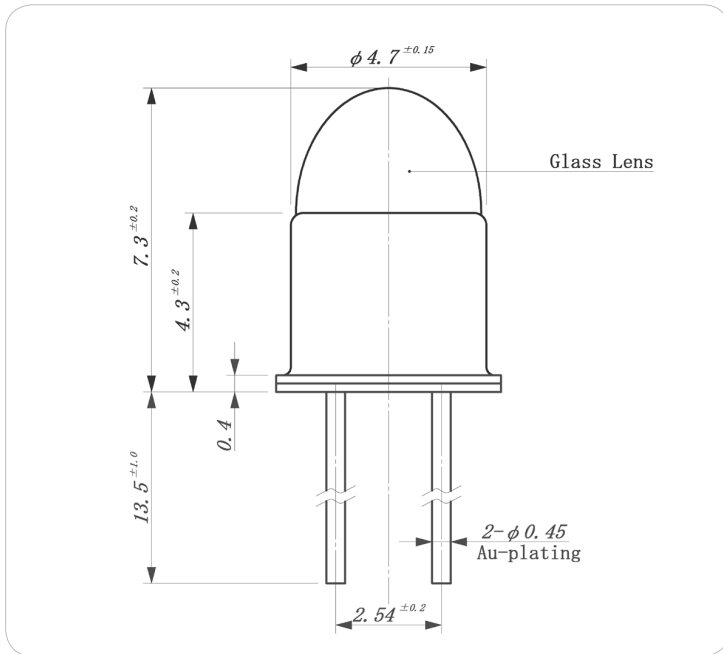
ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC) *3	IF	150	mA
Forward Current (Pulse) *1	IFP	--	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	480	mW
Operating Temperature Range	Topr-	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +120	°C
Junction Temperature	Tj	150	°C
Lead Soldering Temperature *2	Tls	260	°C

\*1: Tw=10usec, T=10msec; \*2: Time 5 Sec max, Position: Up to 3mm from the body \*3: Proper heat sink required.

### Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF= 50mA	--	38.9	--	mW
Forward Voltage	VF	IF= 50mA	--	2.8	--	V
Reverse Current	IR	IF= 50mA	--	2	--	μA
Peak Emission Wavelength	λp	IF= 50mA	--	447	--	nm
Dominant Emission Wavelength	λd	IF= 50mA	--	452	--	nm
Spectral Line Half Width	Δλ	IF= 50mA	--	20	--	nm
Half Intensity Beam Angle	Θ	IF= 50mA	--	±5	--	deg

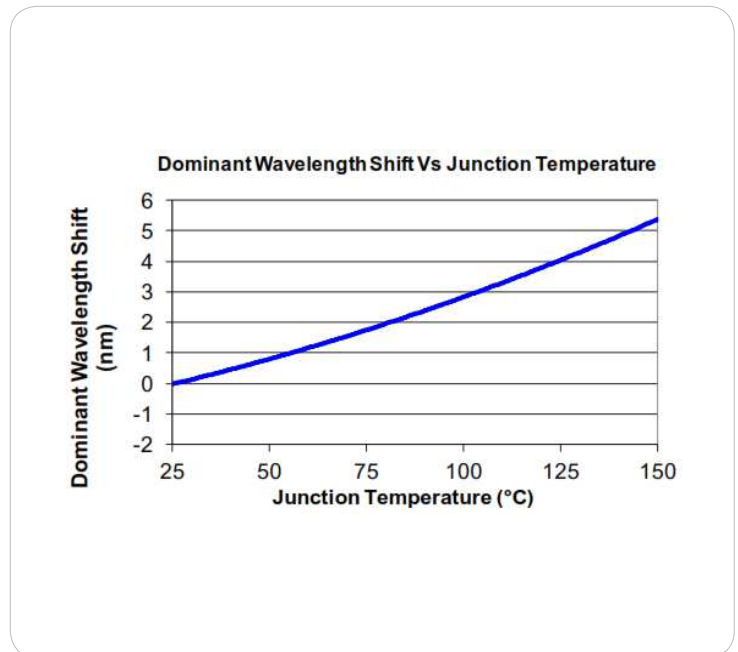
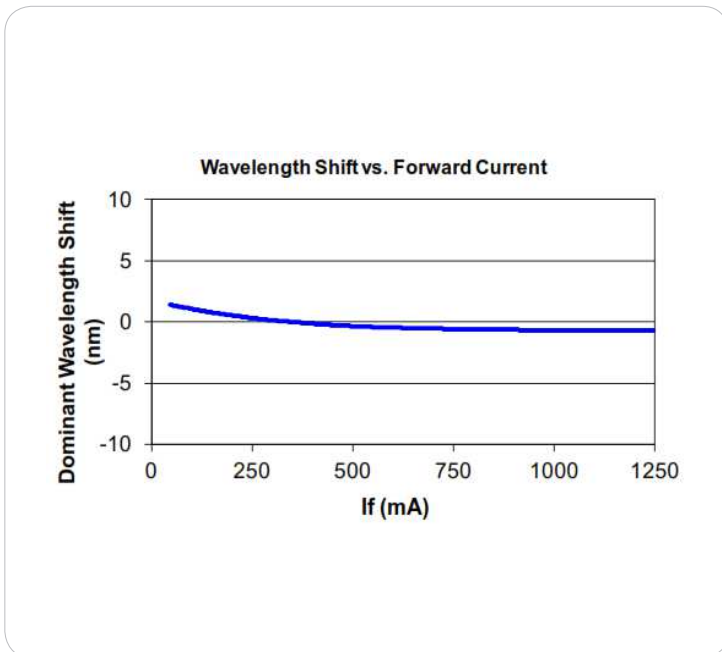
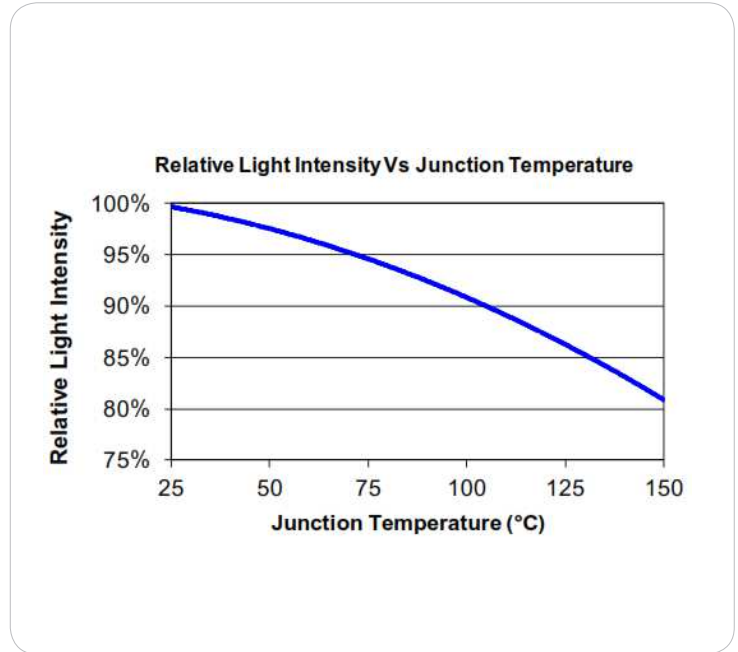
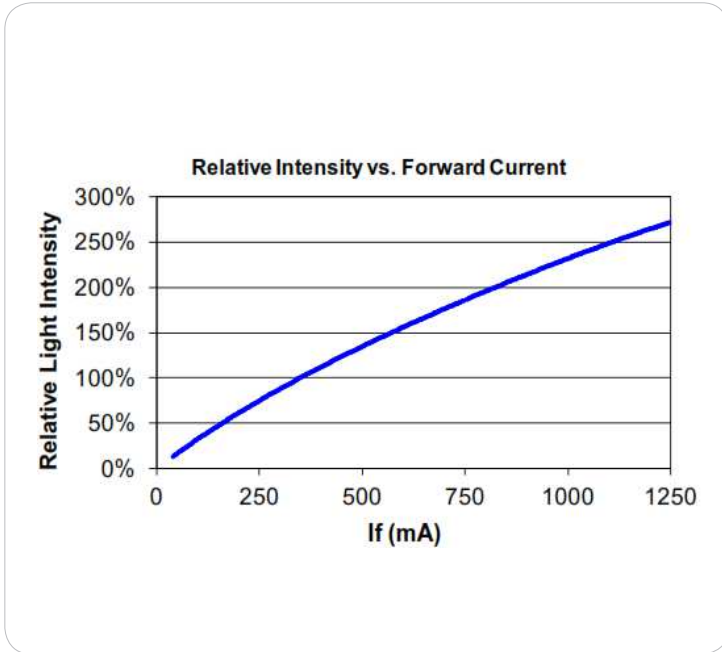
Package Dimensions



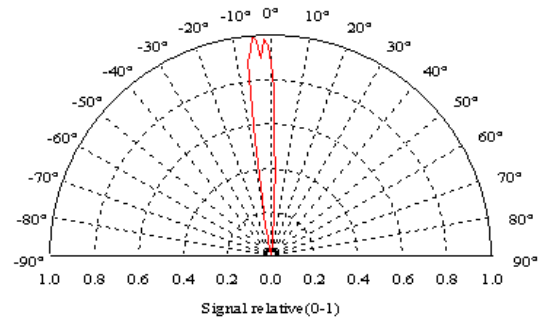
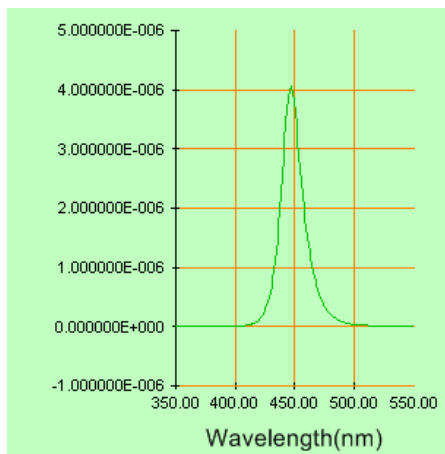
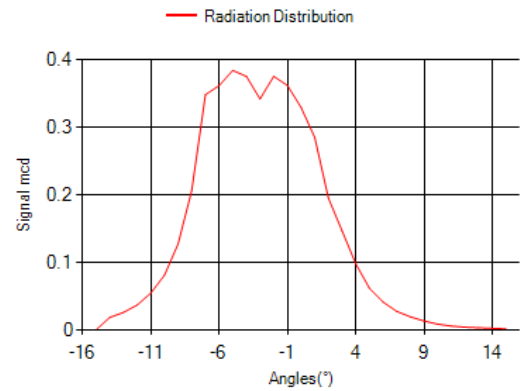
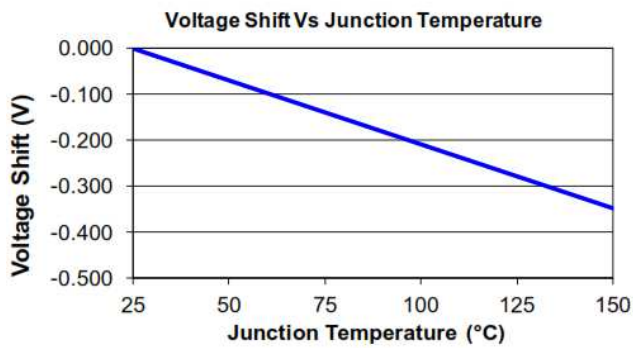
Unit: mm, Tolerance:  $\pm 0.2$



Characteristic Curves (Ta = 25°C)



Characteristic Curves (Ta = 25°C)



The information contained herein is subject to change without notice.

2016-09-01