



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: 650nm

The 650nm Point Source Series is designed for applications requiring high accuracy and precision. Custom package solutions and sorting are available.

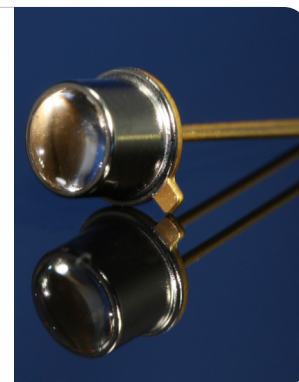
### FEATURES

- > Hermetically Sealed TO-46
- > Emitting Window Diameter  $\Phi$  150 $\mu$ m
- > Gold Plated Dome Lens
- > High Reliability / High Output Power

- > Extremely Narrow Radiation Pattern

### APPLICATIONS

- > Optical Sensing / Optical Instruments
- > Linear & Rotary Encoder
- > Machine Vision / CCD



## Absolute Maximum Ratings (Ta=25°C)

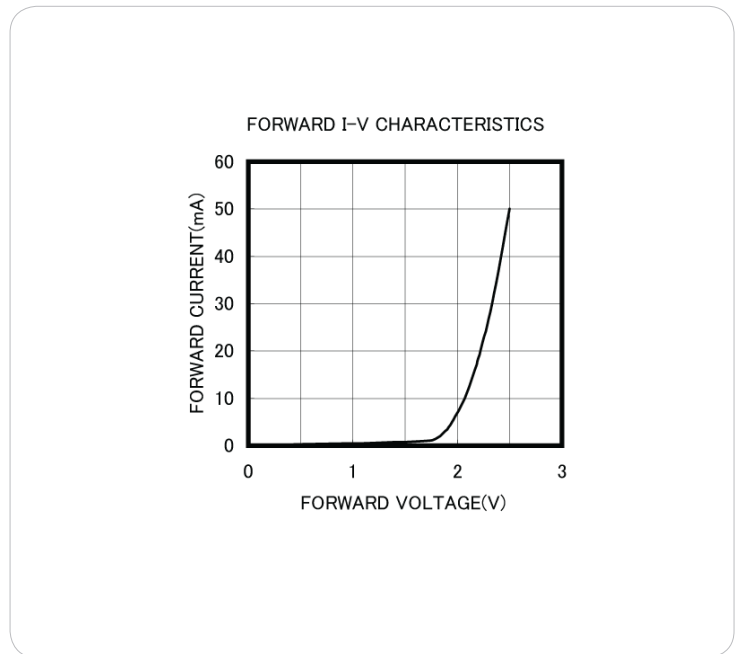
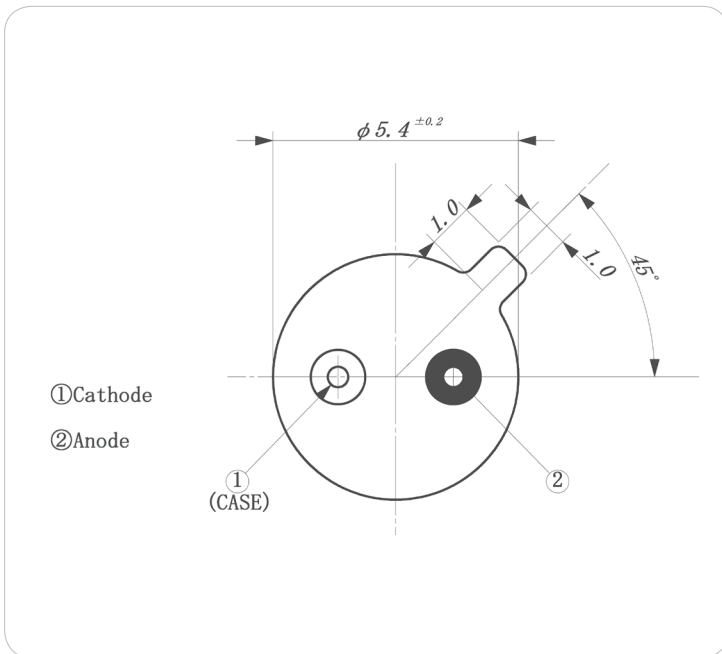
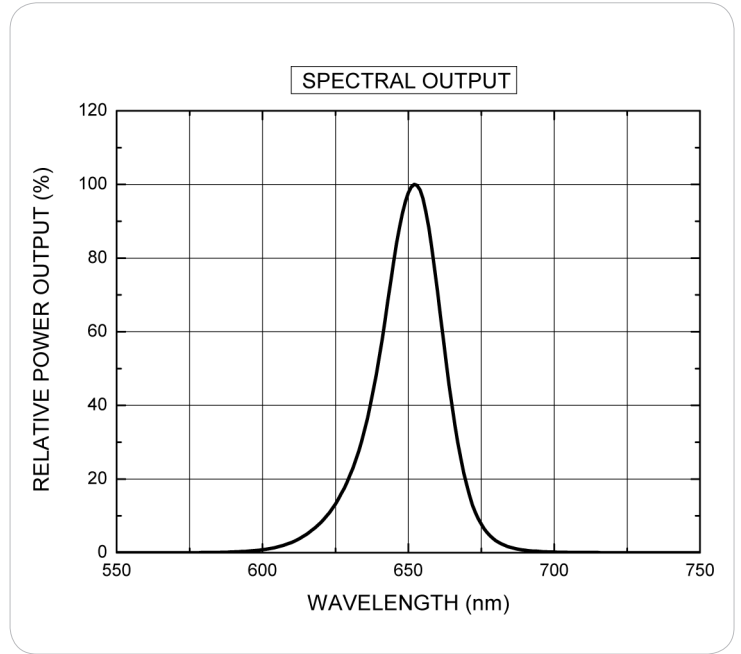
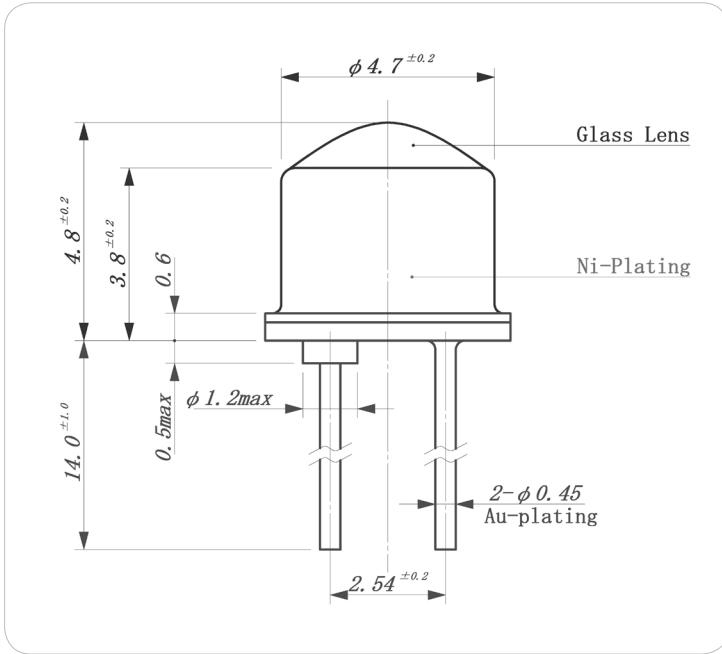


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	50	mA
Forward Current (Pulse)*1	IFP	0.3	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	125	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

\*1: Tw=10 $\mu$ sec, T=10msec; \*2: Time 5 Sec max, Position: Up to 3mm from the body.

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

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	0.2	0.4	--	mW
Forward Voltage	VF	IF=20mA	--	2.2	2.5	V
Reverse Current	IR	VR=5V	--	--	10	$\mu$ A
Peak Emission Wavelength	$\lambda_p$	IF=20mA	630	650	670	nm
Spectral Line Half Width	$\Delta\lambda$	IF=20mA	--	20	--	nm
Half Intensity Beam Angle	$\Theta$	IF=20mA	--	$\pm 5$	--	deg
Temperature Coefficient of PO	P/T	IF=10mA	--	-0.24	--	%/°C
Temperature Coefficient of VF	V/T	IF=10mA	--	-3.8	--	mV/°C
Rise Time	Tr	IFP=20mA	--	35	--	nS
Fall Time	Tf	IFP=20mA	--	30	--	nS



Unit: mm, Tolerance:  $\pm 0.2$

