



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



## Peak Emission Wavelength: 855nm

The 850nm Point Source Series is designed for applications requiring high accuracy and precision as well as uniform spectral emission. Custom package solutions and sorting are available.

### FEATURES

- > Ceramic Dome Surface Mount 3.5×2.2×1.91
- > Emitting Window Diameter  $\Phi$  50 $\mu$ m
- > Extremely Narrow Radiation Pattern
- > High Reliability / High Output Power

### APPLICATIONS

- > Optical Scanning
- > Linear & Rotary Encoder
- > Edge Sensing
- > Optical Sensors



## Absolute Maximum Ratings (Ta=25°C)

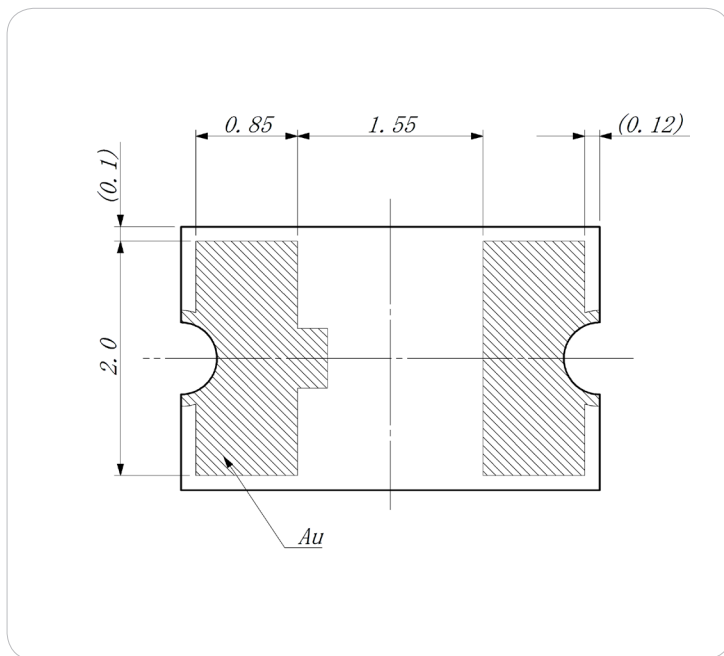
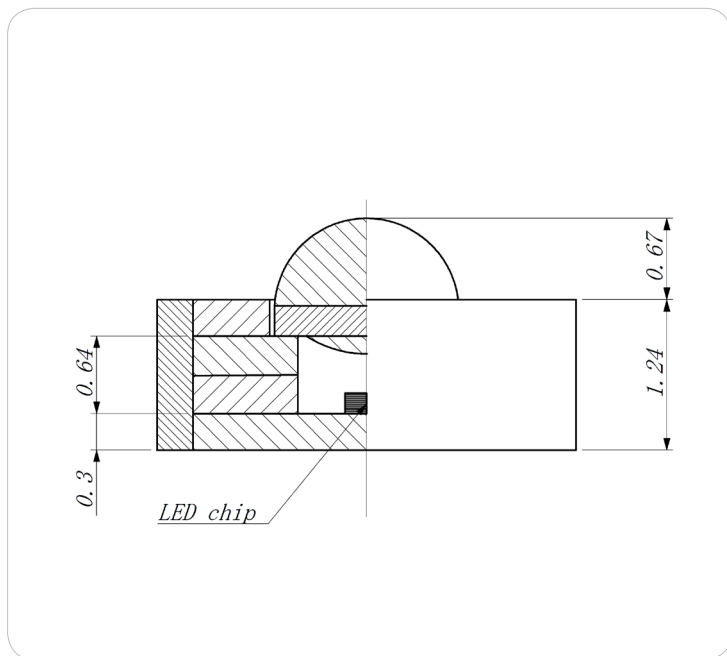
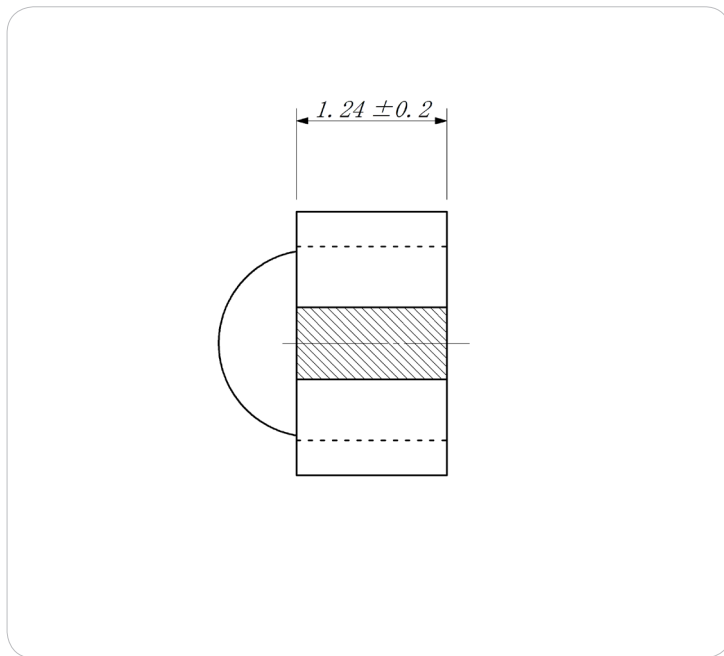
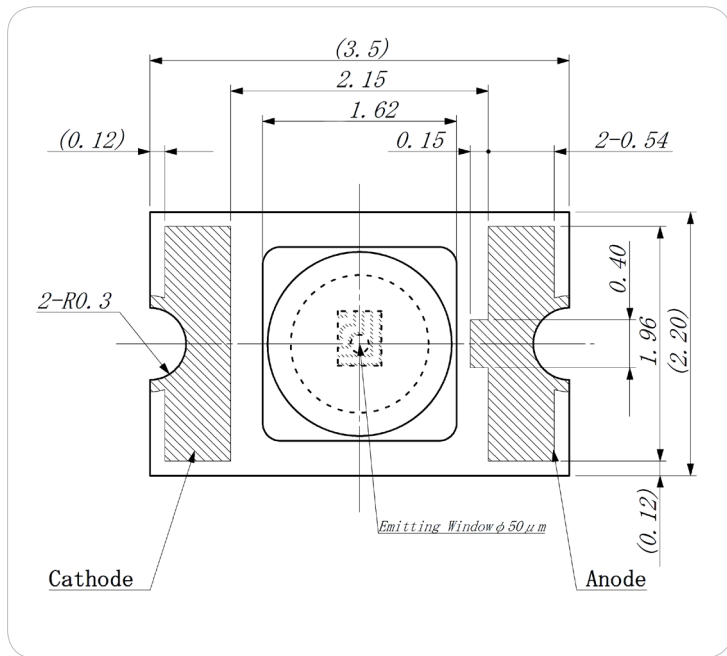


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	100	mA
Forward Current (Pulse)*1	IFP	0.8	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	190	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C

\*1: Tw=10 $\mu$ sec, T=10msec.

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

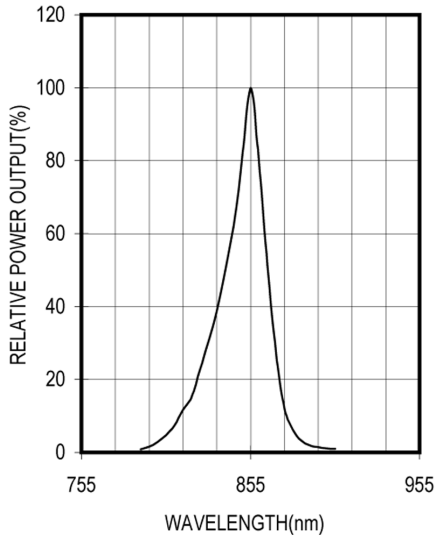
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	1.6	--	mW
Forward Voltage	VF	IF=20mA	--	1.7	2.2	V
Reverse Current	IR	VR=5V	--	--	100	$\mu$ A
Peak Emission Wavelength	$\lambda_p$	IF=20mA	--	855	--	nm
Spectral Line Half Width	$\Delta\lambda$	IF=20mA	--	40	--	nm
Half Intensity Beam Angle	$\Theta$	IF=20mA	--	$\pm 6$	--	deg



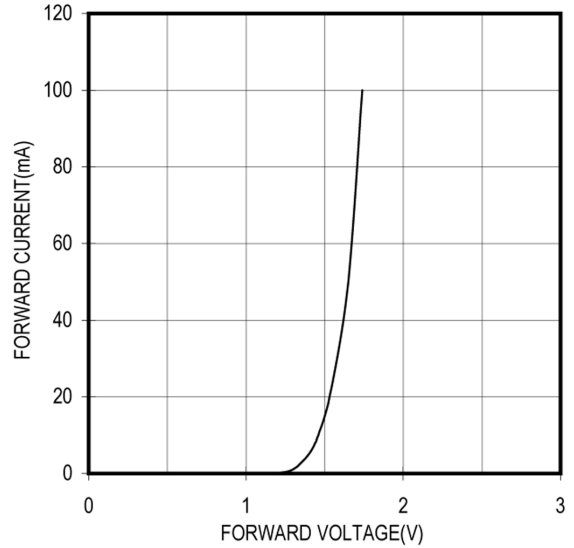
Unit: mm, Tolerance: ±0.2



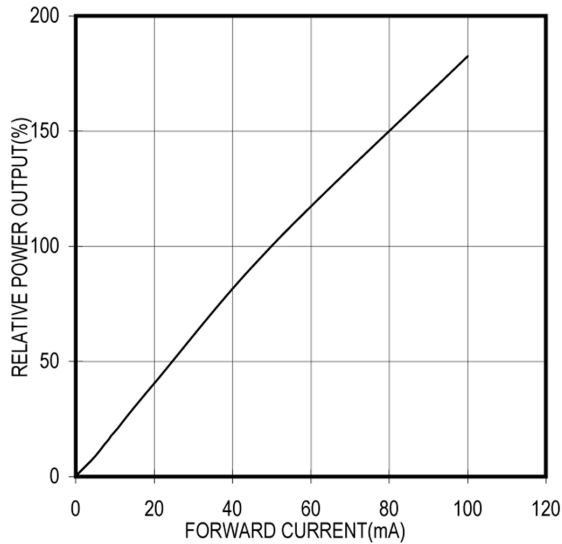
SPECTRAL OUTPUT



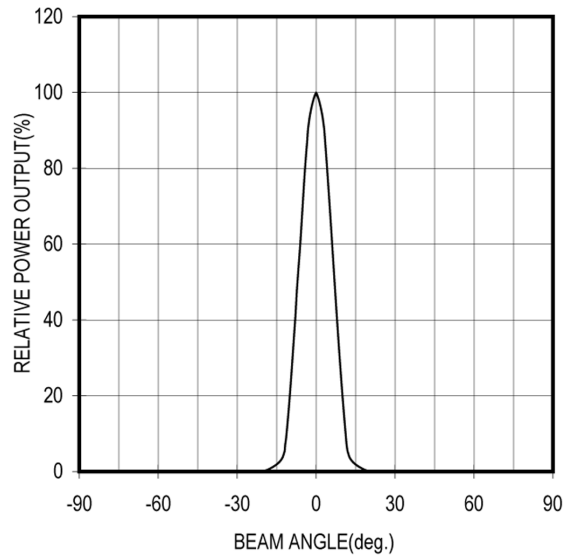
FORWARD I-V CHARACTERISTICS



RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN



THERMAL DERATING CURVE

