

## 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-18
- > Emitting Window Diameter  $\Phi$  80 $\mu$ m
- > Gold Plated Flat Top Can
- > High Reliability / High Output Power

### APPLICATIONS

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



## Absolute Maximum Ratings (Ta=25°C)

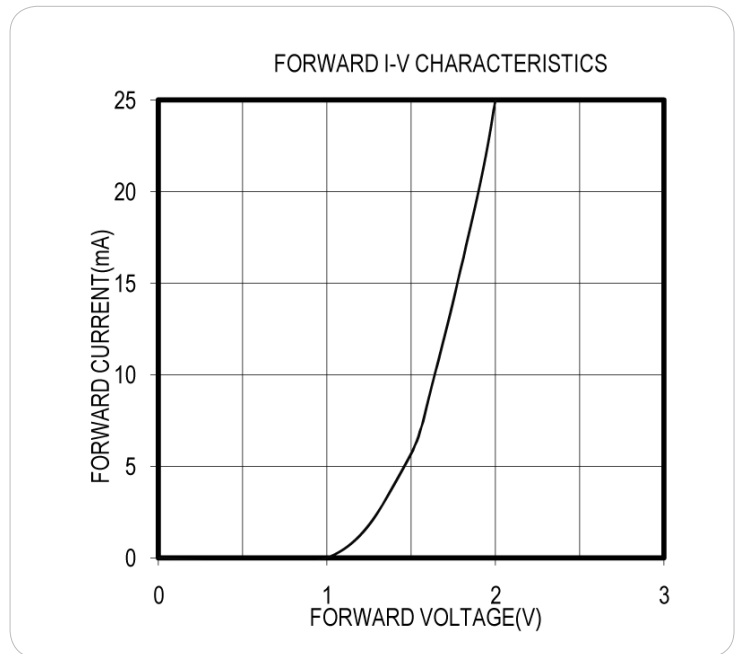
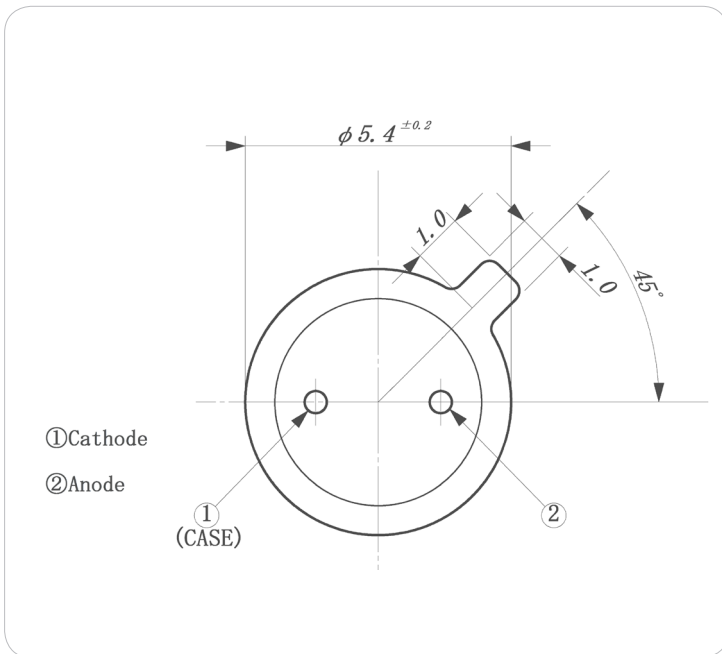
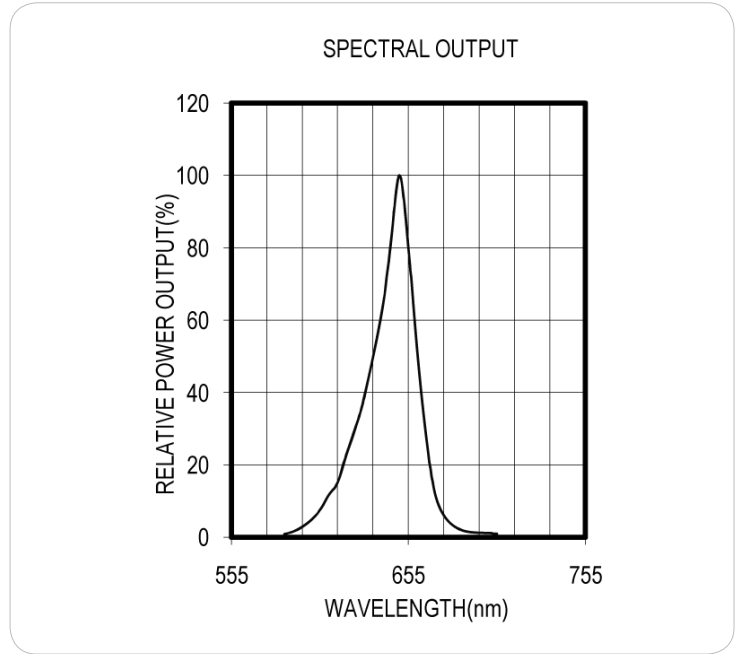
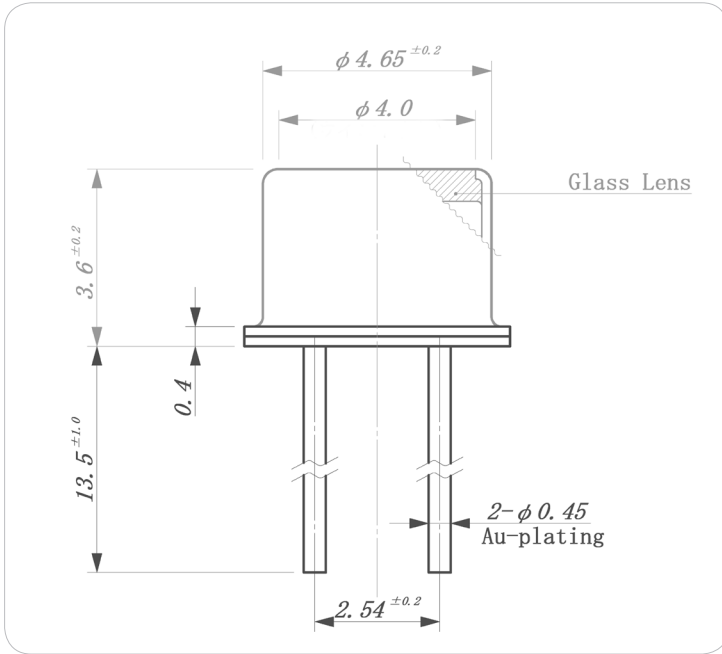


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current	IF	25	mA
Forward Current (Pulse)*1	IFP	300	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	65	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Lead Soldering Temp.*2	Tls	260	°C

\*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)

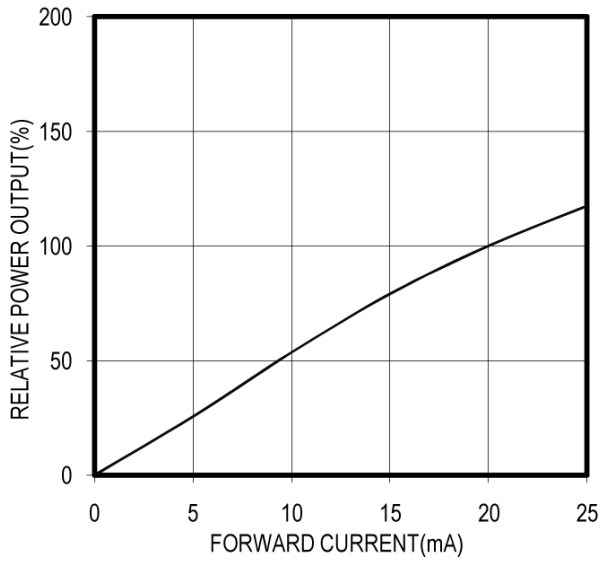
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	Po	IF=20mA	--	1.0	--	mW
Forward Voltage	VF	IF=20mA	--	2.0	2.4	V
Reverse Current	IR	VR=5V	--	--	100	$\mu$ A
Peak Wavelength	$\lambda_p$	IF=20mA	--	650	--	nm
Spectral Line Half Width	$\Delta\lambda$	IF=20mA	--	25	--	nm
Half Intensity Beam Angle	$\Theta$	IF=20mA	--	$\pm 45$	--	deg



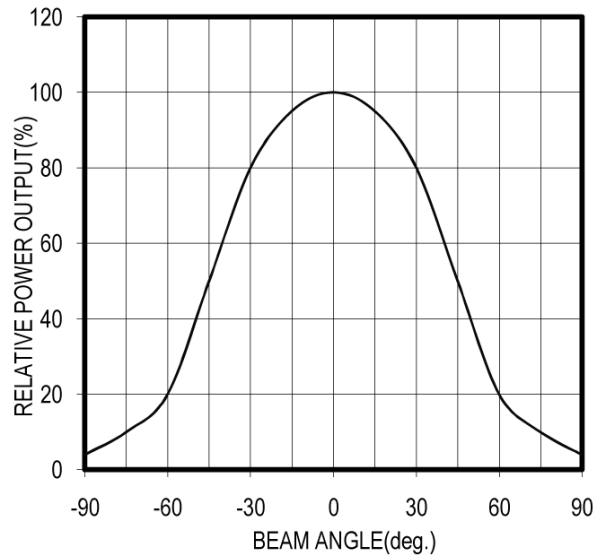
Unit: mm, Tolerance:  $\pm 0.2$

2011-05-23

RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN



THERMAL DERATING CURVE

