

Peak Emission Wavelength: 650nm

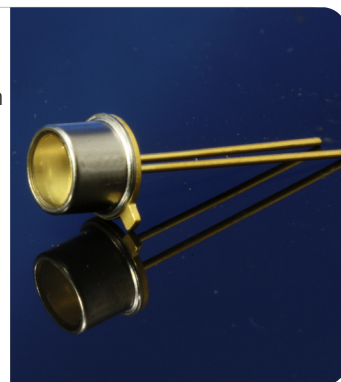
The 650nm Point Source Series is designed for applications requiring high accuracy and precision. Custom package solutions and sorting are available.

FEATURES

- > Hermetically Sealed TO-18
- > Emitting Window Diameter Φ 150 μ 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)

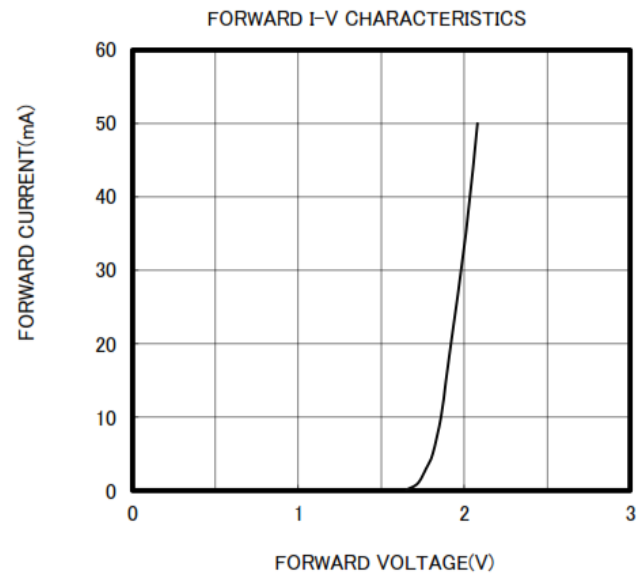
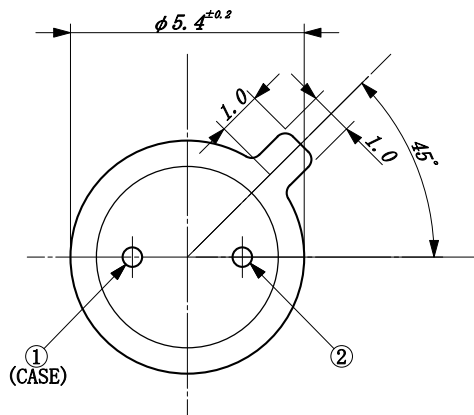
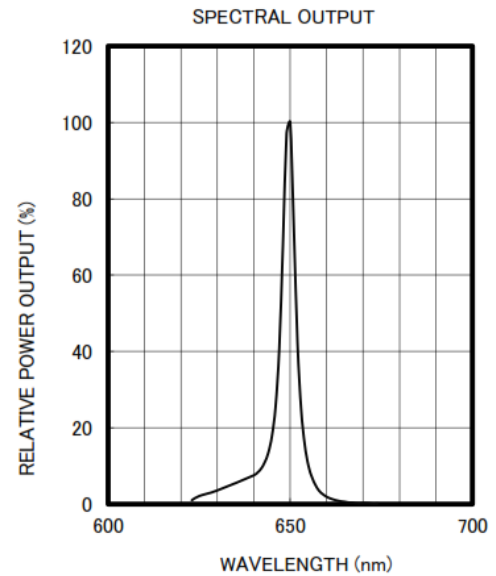
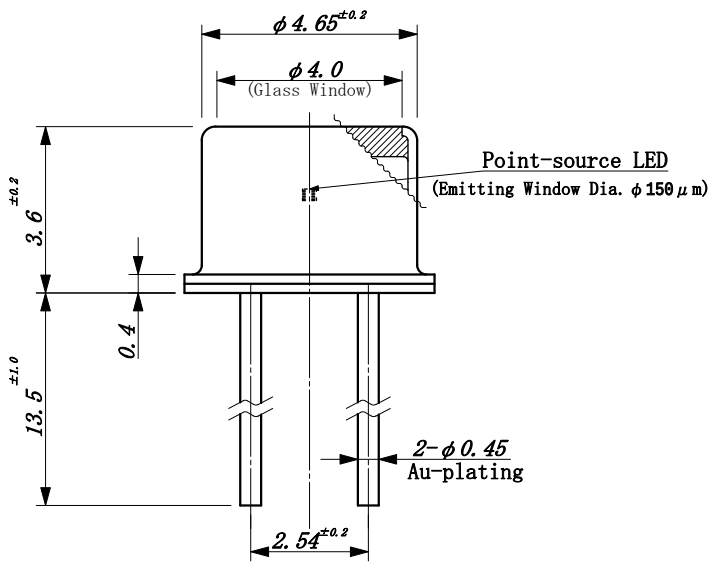


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current	IF	50	mA
Forward Current (Pulse)*1	IFP	300	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	125	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Lead Soldering Temp.*2	Tls	260	°C

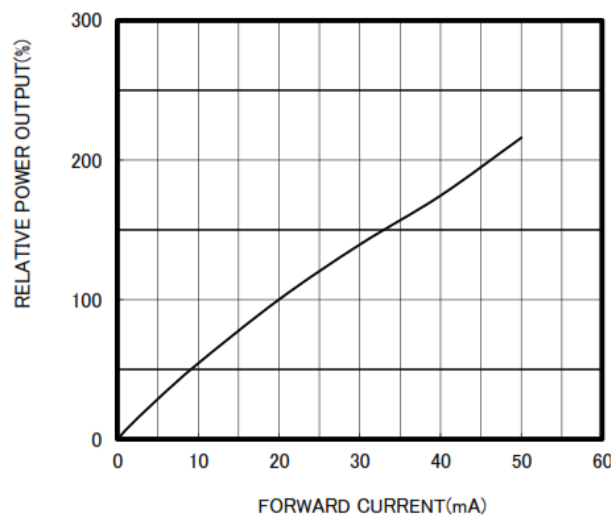
*1: Tw=10 μ sec, t=10msec. *2: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

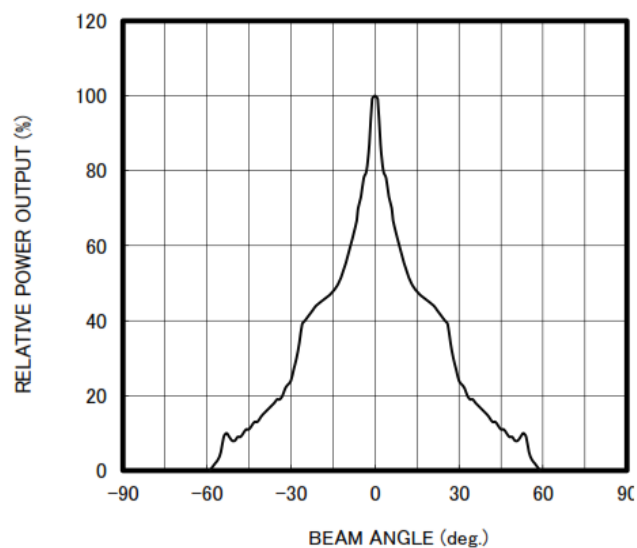
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	Po	IF=20mA	--	1.0	--	mW
Forward Voltage	VF	IF=20mA	--	1.9	2.4	V
Reverse Current	IR	VR=5V	--	--	10	μ A
Peak Wavelength	λ_p	IF=20mA	--	650	--	nm
Spectral Line Half Width	$\Delta\lambda$	IF=20mA	--	5	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	± 12	--	deg
Rise Time	Tr	IFP=20mA	--	15	--	nS
Fall Time	Tf	IFP=20mA	--	15	--	nS
Capacitance	Cj	V=0, 1MHz	--	45	--	pF



RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN



THERMAL DERATING CURVE

