

## Peak Emission Wavelength: 640nm

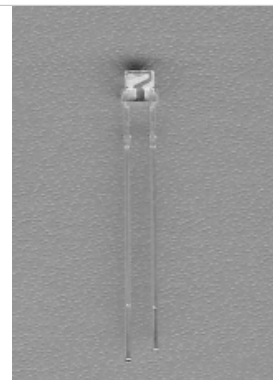
The 640nm Visible Red Emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.

### FEATURES

- > High Output Power
- > High Reliability

### APPLICATIONS

- > Optical Switches
- > Optical Sensor



## Absolute Maximum Ratings (Ta=25°C)

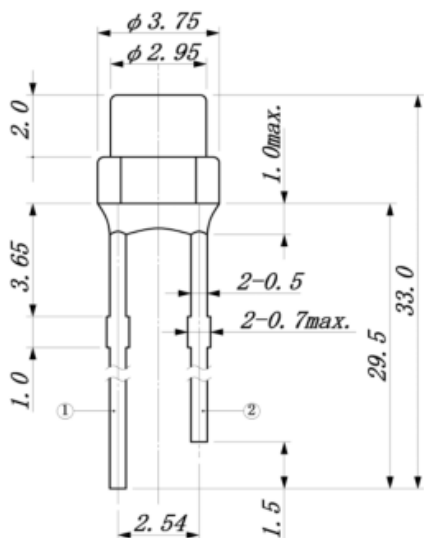


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current	IF	50	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	130	mW
Operating Temperature Range	Topr	-20 ~ +80	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

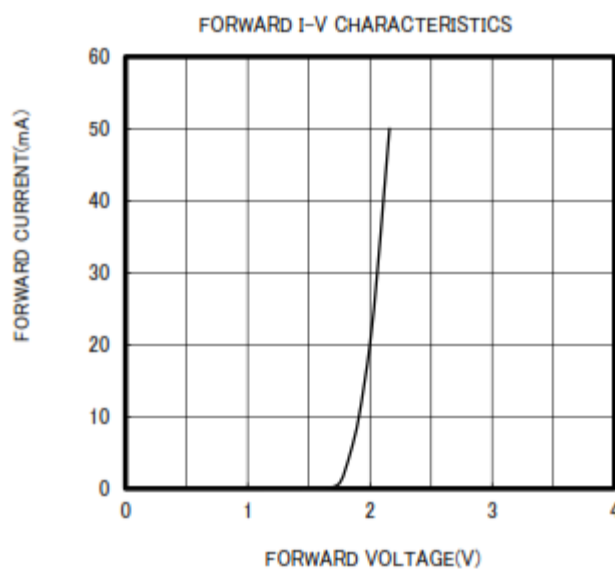
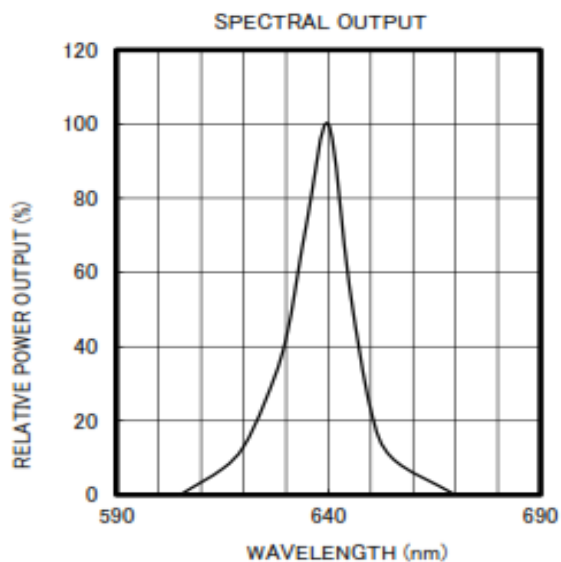
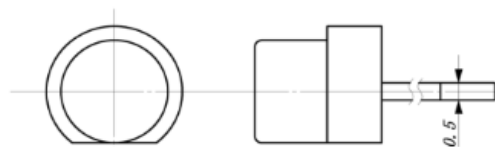
\*1: Tw=10μsec, T=1msec; \*2: Time 5 Sec max, Position: Up to 3mm from the body.

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

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	7.0	--	mW
Forward Voltage	VF	IF=20mA	--	2.0	2.8	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	640	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	15	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±50	--	deg

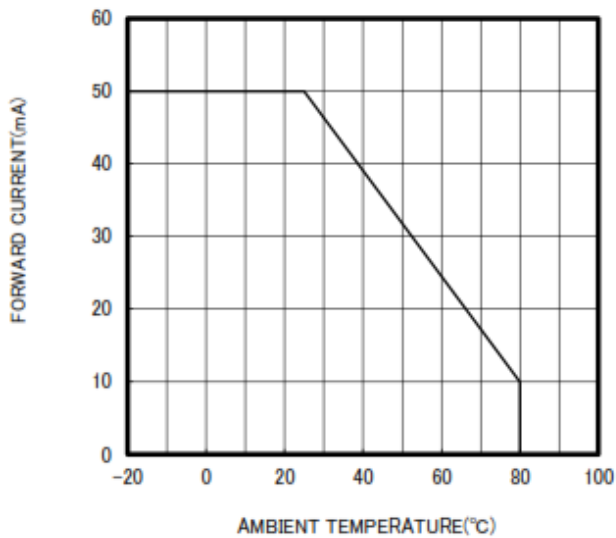


① Anode      ② Cathode

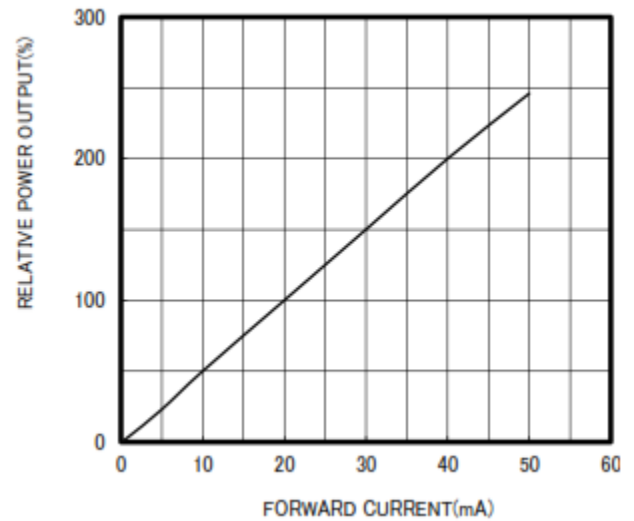


Unit: mm, Tolerance:  $\pm 0.2$

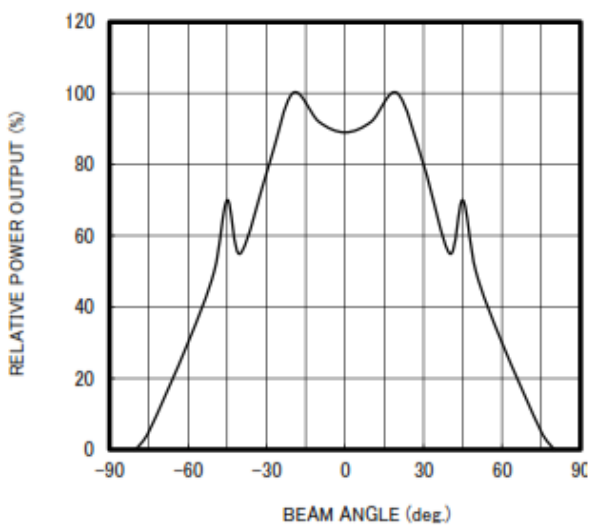
THERMAL DERATING CURVE



RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN



The information contained herein is subject to change without notice.

2016-10-13