

TOSHIBA LED Lamp InGaAlP Orange Light Emission

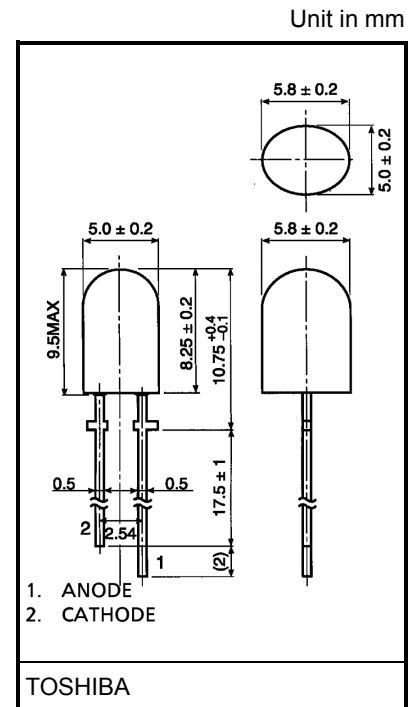
# TLOE248

## Panel Circuit Indicator

- InGaAlP orange LED
- Elliptical lens: Colored transparent lens
- Wide radiation
- Low drive current, high intensity orange light emission
- Plastic molded colored transparent lens provides for high contrast of on-off ratio.
- Fast response time, capable of pulse operation.
- Applications: Suitable for outdoor message signboard, full color panel, backlight.

## Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Forward current	$I_F$	50	mA
Reverse voltage	$V_R$	4	V
Power dissipation	$P_D$	125	mW
Operating temperature range	$T_{opr}$	-30~85	°C
Storage temperature range	$T_{stg}$	-40~120	°C



Weight: 0.3 g

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

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F$	$I_F = 20 \text{ mA}$	—	1.95	2.4	V
Reverse current	$I_R$	$V_R = 4 \text{ V}$	—	—	50	$\mu\text{A}$
Luminous intensity	$I_V$	$I_F = 20 \text{ mA}$ (Note)	153	370	—	mcd
Peak emission wavelength	$\lambda_P$	$I_F = 20 \text{ mA}$	—	612	—	nm
Spectral line half width	$\Delta\lambda$	$I_F = 20 \text{ mA}$	—	15	—	nm
Dominant wavelength	$\lambda_d$	$I_F = 20 \text{ mA}$	—	605	—	nm

(Note): Lamps are classified into the following ranks according to their luminous intensity.

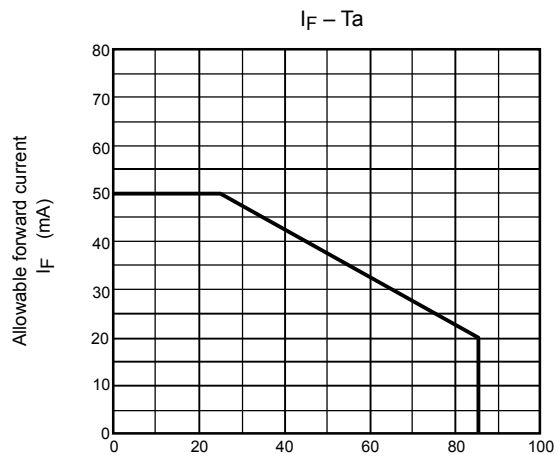
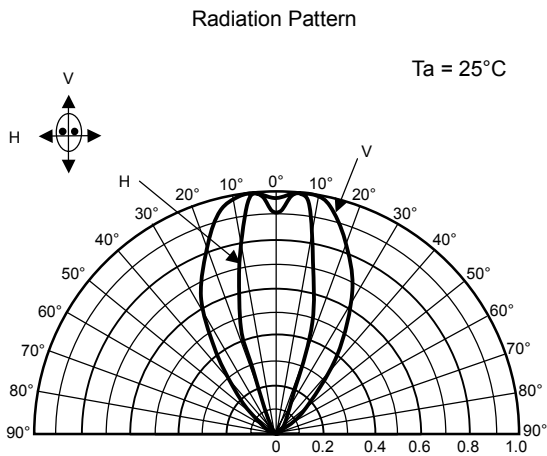
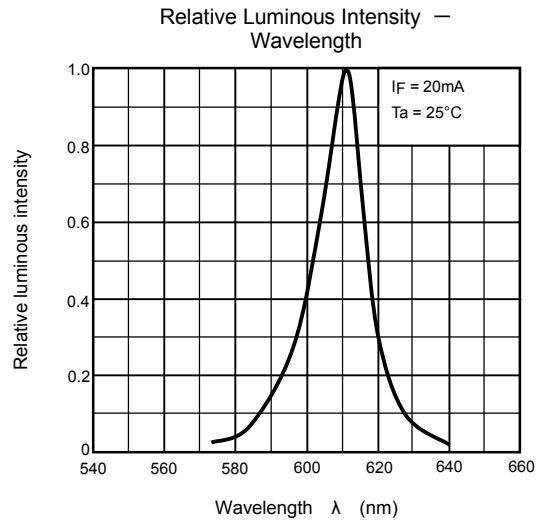
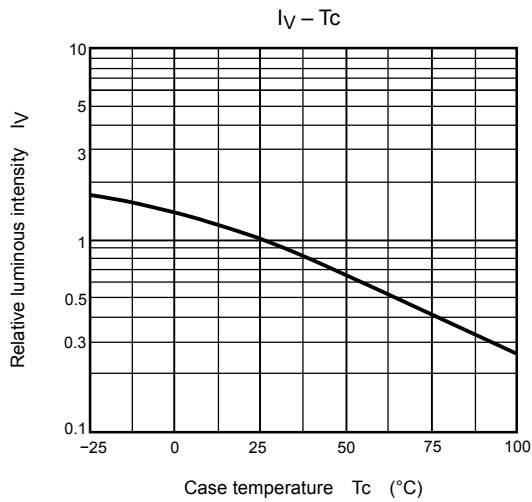
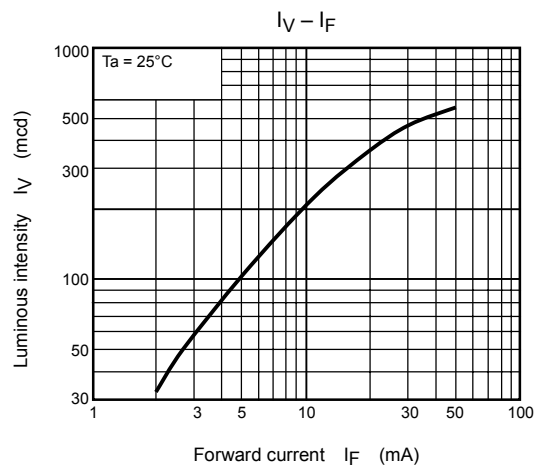
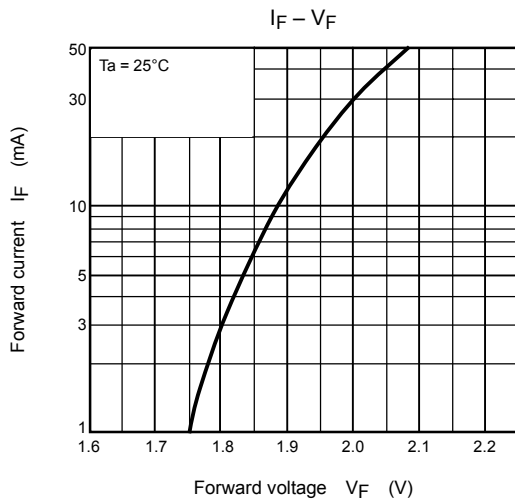
Measurement tolerance for each limit is  $\pm 15\%$ .

P: 180–360mcd, Q: 320–640mcd, R: 560–1120mcd

**Precaution**

Please be careful of the followings

- Soldering temperature: 260°C max      Soldering time: 3s max  
(Soldering portion of lead: Below the lead stopper)
- If the lead is formed, the lead should be formed up to 5mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible LED lamp also emits some IR light. If a photodetector is located near the LED lamp, please ensure that it will not be affected by this IR light.



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