TOSHIBA LED Lamp InGaAlP Red Light Emission

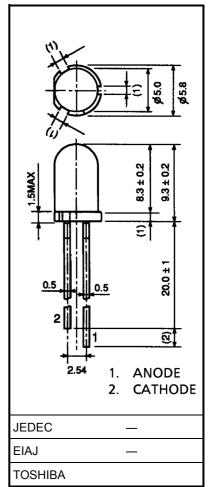
# TLSE157P

#### Panel Circuit Indicator

- 5mm diameter(T1-3/4)
- InGaAℓP red LED
- All plastic mold type.
- Colorless clear lens
- Low drive current, high intensity red light emission Recommended forward current: IF = 15~20mA(DC)
- All plastic mold lens, provides an excellent on-off contrast ratio
- Fast response time, capable of pulse operation.
- High power luminous intensity
- Without stand-offs
- Applications: Suitable for outdoor message signboard safety equipment, automotive use.

### Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Forward current (DC)	١ <sub>F</sub>	50	mA
Reverse voltage	V <sub>R</sub>	4	V
Power dissipation	PD	120	mW
Operating temperature range	T <sub>opr</sub>	-30~85	°C
Storage temperature range	T <sub>stg</sub>	-40~120	°C



Weight: 0.31g

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

Characteristic Symbol **Test Condition** Min Тур. Max Unit V Forward voltage  $V_{F}$  $I_F = 20 mA$ 1.95 2.4 Reverse current  $V_R = 4V$ 50 μA  $I_R$ \_ \_ Luminous intensity Ιv  $I_F = 20 mA$ 476 1900 \_\_\_\_ mcd Peak emission wavelength λP  $I_F = 20 mA$ 623 nm \_ Spectral line half width Δλ  $I_F = 20 mA$ 15 \_ \_ nm Dominant wavelength  $I_F = 20 mA$ 613  $\lambda_d$ nm

(Note): Lamps are classified into the following three ranks according to their luminous intensity. Measurement tolerance for each limit is ±15%.

R: 560–1120mcd,S: 1000–2000mcd,T: 1800–3600mcd.

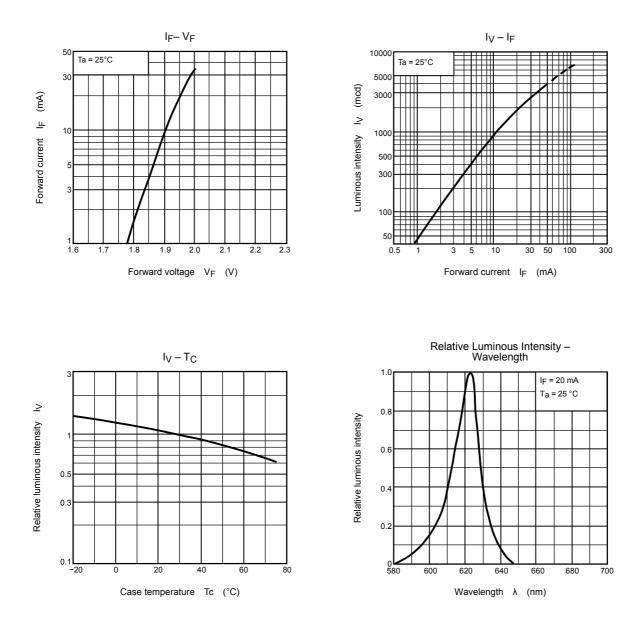
Unit in mm

## **TOSHIBA**

### Precaution

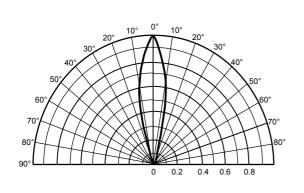
- Please be careful of the followings
- Soldering temperature: 260°C max Soldering time: 3s max (Soldering portion of lead: Up to 2mm from the body of the device)
- If the lead is formed, the lead should be formed up to 5mm from the body of the device without forming stress to the resin. Soldering should 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.

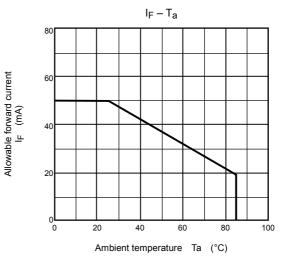
### **TOSHIBA**



Radiation Pattern

Ta = 25 °C





#### **RESTRICTIONS ON PRODUCT USE**

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