

TOSHIBA LED Lamp InGaAlP Orange Light Emission

# TLOH157P

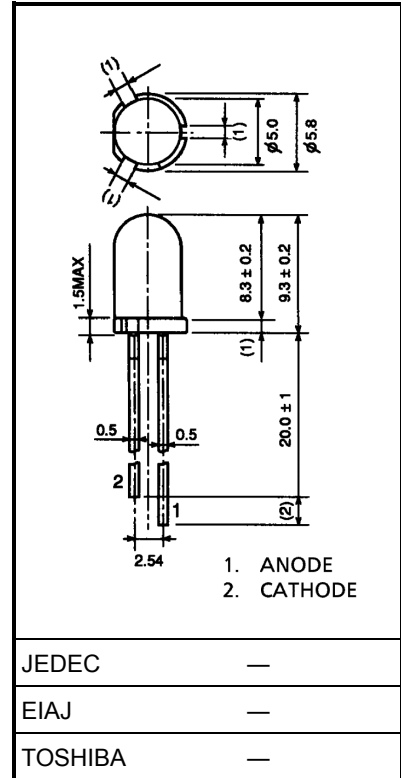
## Panel Circuit Indicator

- 5 mm diameter (T1-3 / 4)
- InGaAlP orange LED
- All plastic mold type.
- Colorless clear lens
- Low drive current, high intensity orange light emission  
Recommended forward current:  $I_F = 1\sim 20\text{mA (DC)}$
- All plastic molded 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 ( $T_a = 25^\circ\text{C}$ )

| Characteristic              | Symbol    | Rating  | Unit |
|-----------------------------|-----------|---------|------|
| Forward current (DC)        | $I_F$     | 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   |

Unit in mm



Weight: 0.31g

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

| Characteristic           |              | Symbol          | Test Condition        | Min | Typ.   | Max  | Unit          |      |     |
|--------------------------|--------------|-----------------|-----------------------|-----|--------|------|---------------|------|-----|
| Forward voltage          |              | $V_F$           | $I_F = 20 \text{ mA}$ | —   | 2.1    | 2.5  | V             |      |     |
| Reverse current          |              | $I_R$           | $V_R = 4 \text{ V}$   | —   | —      | 50   | $\mu\text{A}$ |      |     |
| Luminous intensity       | TLOH157P     | $I_V$           | $I_F = 20 \text{ mA}$ |     | (Note) | 850  | 2800          | —    | mcd |
|                          | TLOH157P(TU) |                 |                       |     |        | 1530 | —             | 7360 |     |
| 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.

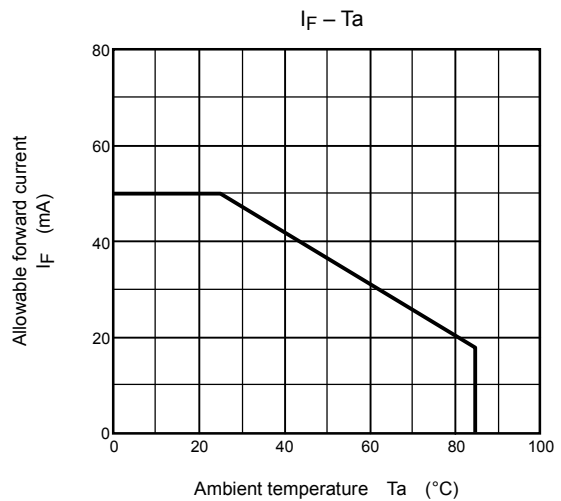
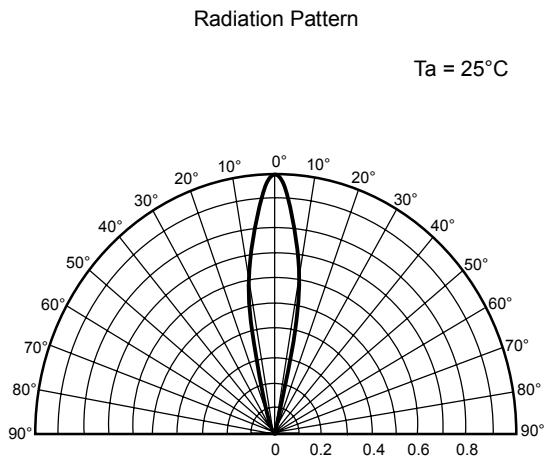
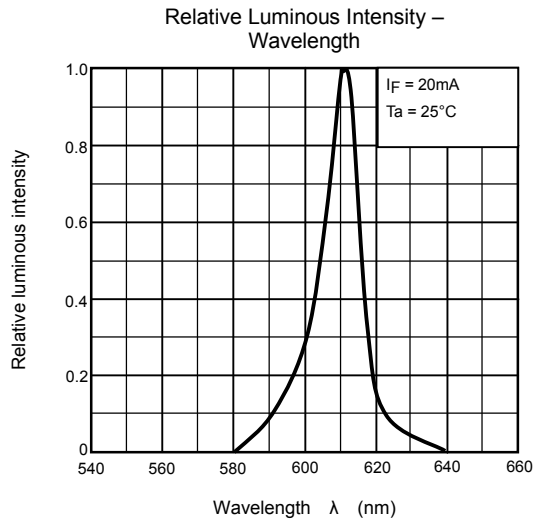
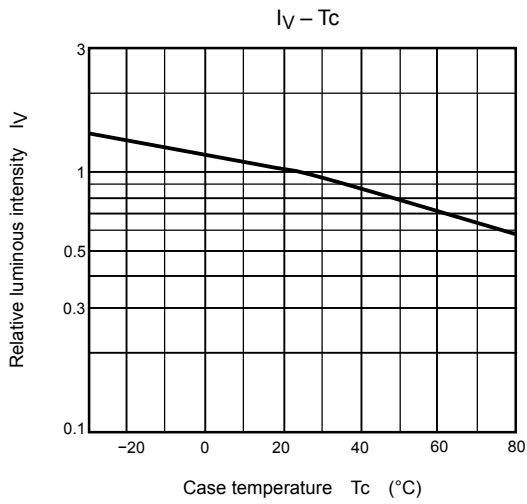
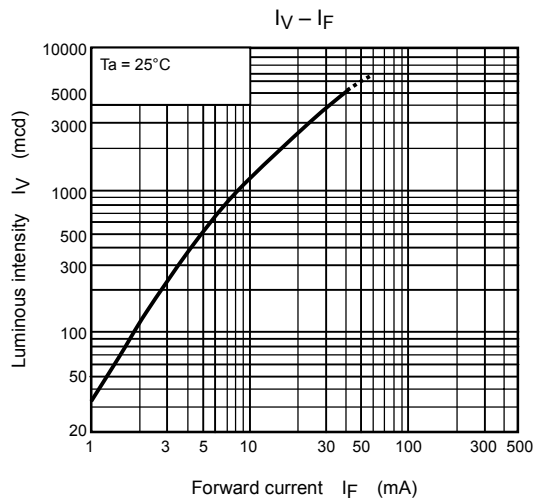
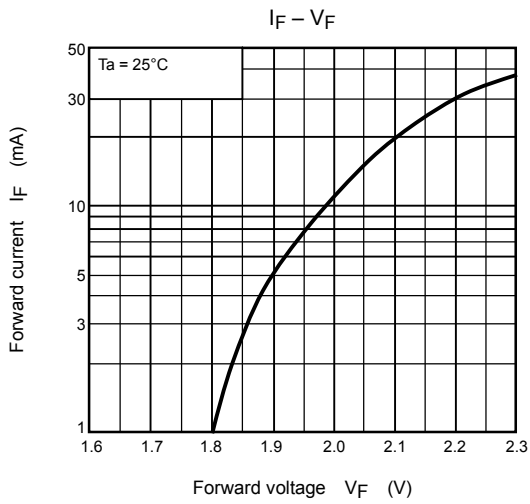
Measurement tolerance for each limit is  $\pm 15\%$ .

S: 1000–2000mcd, T: 1800–3600mcd, U: 3200–6400mcd

## Precaution

Please be careful of the followings

- Soldering temperature: 260°C max      Soldering time: 3 s max  
(Soldering portion of lead: Up to 2 mm from the body of the device)
- If the lead is formed, the lead should be formed up to 5 mm 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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