

TENTATIVE

TOSHIBA InGaAlP LED

**TLOU156P, TLSU156P, TLYU156P**

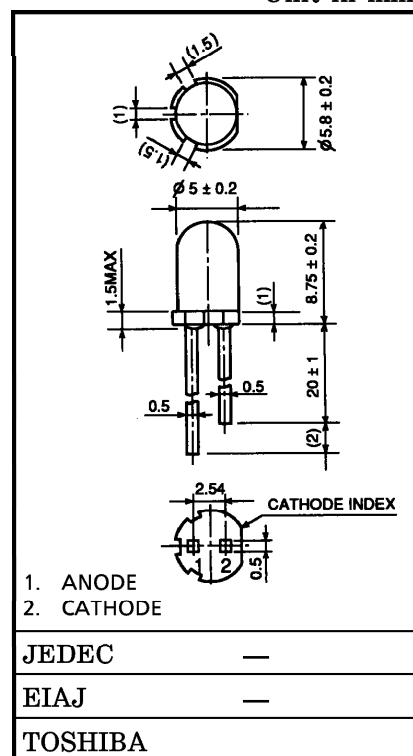
PANEL CIRCUIT INDICATOR

Unit in mm

- InGaAlP LED
- Without stand-offs
- All Plastic Mold Type
- Colorless Clear Lens
- Lineup : 3 Colors (Red, Orange, Yellow)
- Suitable for High-Brightness and Less Electricity Consumption.
- All Plastic Molded Lens, Provides an Excellent ON-OFF Contrast Ratio.
- Applications : Backlight, Light for Decoration, Switches, Various Indicator, Personal Equipment

## LINEUP

| PRODUCT  | COLOR  | MATERIAL |
|----------|--------|----------|
| TLOU156P | ORANGE | InGaAlP  |
| TLSU156P | RED    | InGaAlP  |
| TLYU156P | YELLOW | InGaAlP  |



Weight : 0.31 g

## MAXIMUM RATINGS (Ta = 25°C)

| PRODUCT  | FORWARD CURRENT<br>I <sub>F</sub> (mA) | REVERSE VOLTAGE<br>V <sub>R</sub> (V) | POWER DISSIPATION<br>P <sub>D</sub> (mW) | OPERATING TEMPERATURE<br>T <sub>opr</sub> (°C) | STORAGE TEMPERATURE<br>T <sub>stg</sub> (°C) |
|----------|----------------------------------------|---------------------------------------|------------------------------------------|------------------------------------------------|----------------------------------------------|
| TLOU156P | 30                                     | 4                                     | 72                                       | -30~85                                         | -40~120                                      |
| TLSU156P | 30                                     | 4                                     | 72                                       | -30~85                                         | -40~120                                      |
| TLYU156P | 30                                     | 4                                     | 75                                       | -30~85                                         | -40~120                                      |

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**ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta = 25°C)**

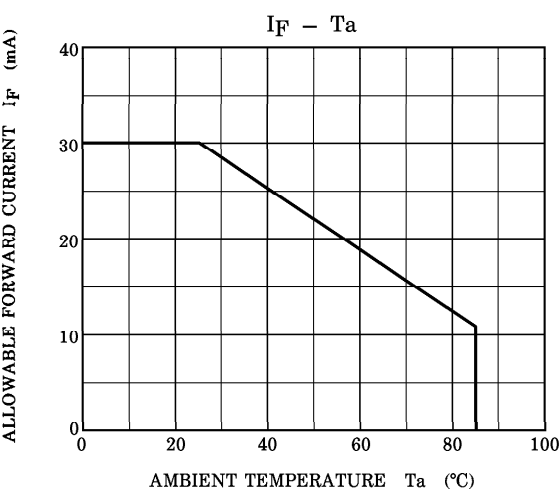
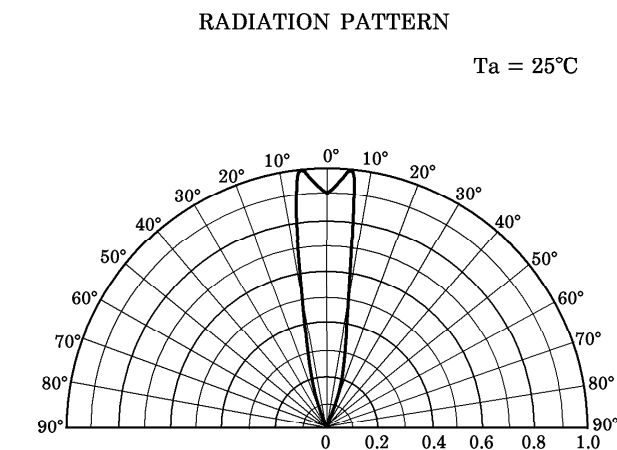
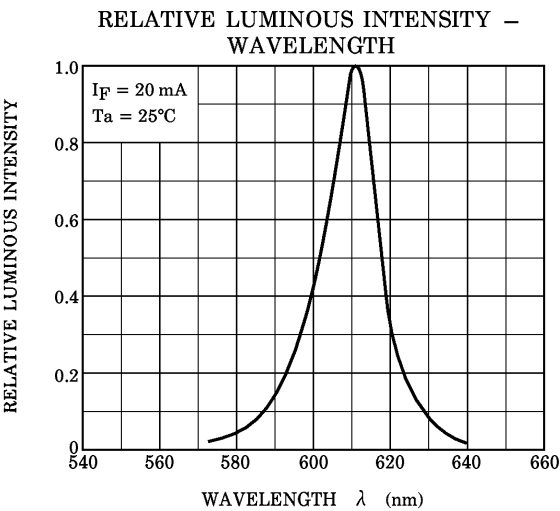
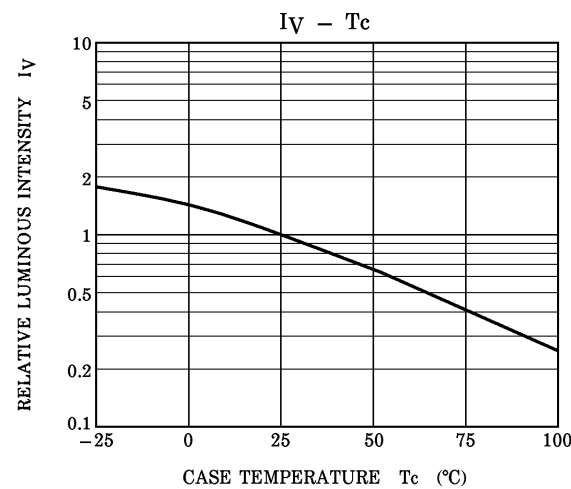
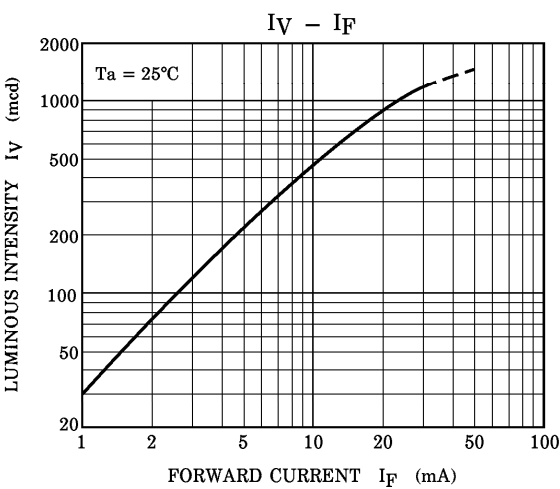
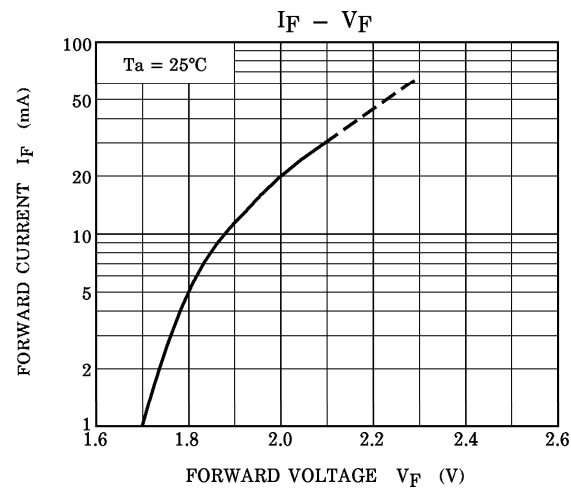
| PRODUCT  | TYP. EMISSION WAVELENGTH |    |                | LUMINOUS INTENSITY<br>I <sub>V</sub> |      |                | FORWARD VOLTAGE<br>V <sub>F</sub> |     |                | REVERSE CURRENT<br>I <sub>R</sub> |                |
|----------|--------------------------|----|----------------|--------------------------------------|------|----------------|-----------------------------------|-----|----------------|-----------------------------------|----------------|
|          | λ <sub>p</sub>           | Δλ | I <sub>F</sub> | MIN                                  | TYP. | I <sub>F</sub> | TYP.                              | MAX | I <sub>F</sub> | MAX                               | V <sub>R</sub> |
| TLOU156P | 612                      | 15 | 20             | 153                                  | 900  | 20             | 2.0                               | 2.4 | 20             | 50                                | 4              |
| TLSU156P | 636                      | 17 | 20             | 153                                  | 900  | 20             | 2.0                               | 2.4 | 20             | 50                                | 4              |
| TLYU156P | 590                      | 13 | 20             | 153                                  | 500  | 20             | 2.1                               | 2.5 | 20             | 50                                | 4              |
| UNIT     | nm                       |    | mA             | mcd                                  |      | mA             | V                                 |     | mA             | μA                                | V              |

**PRECAUTION**

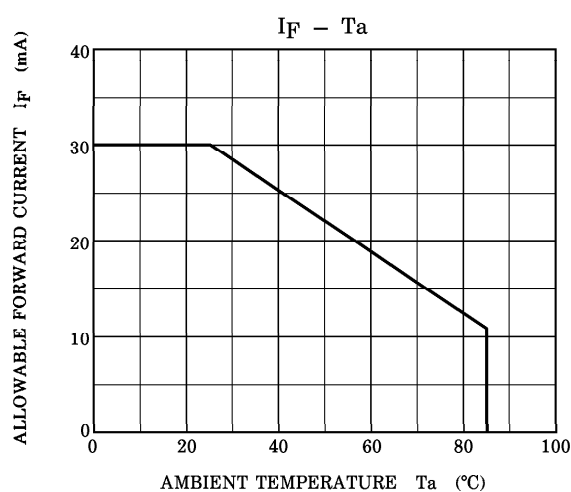
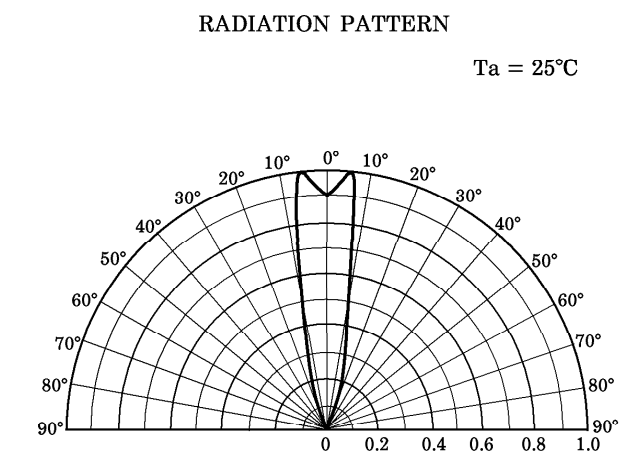
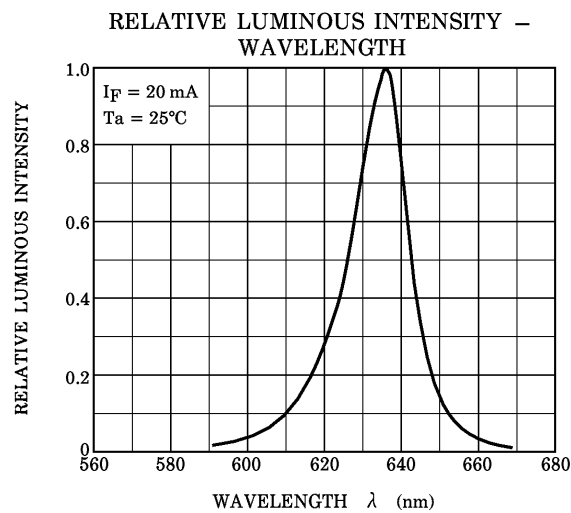
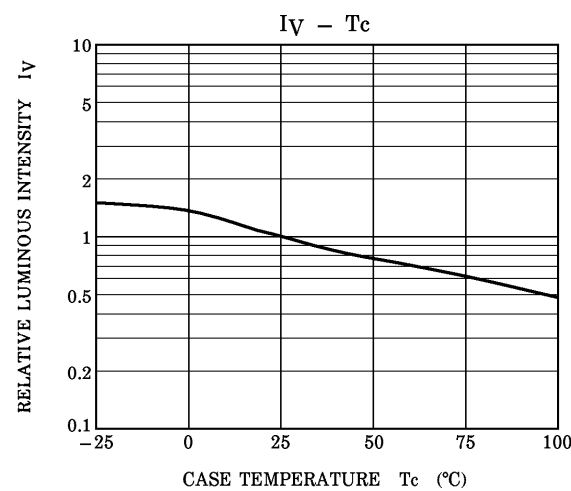
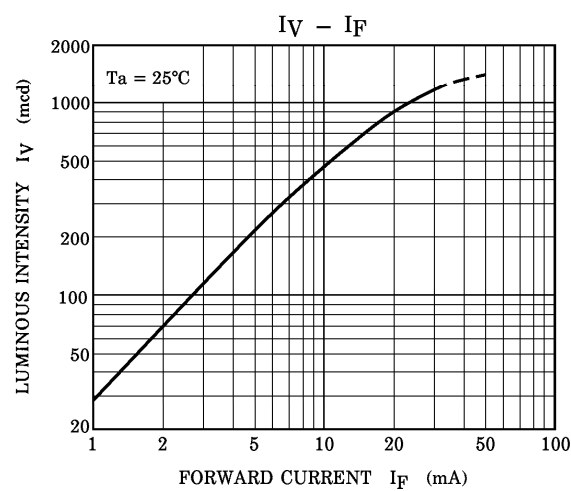
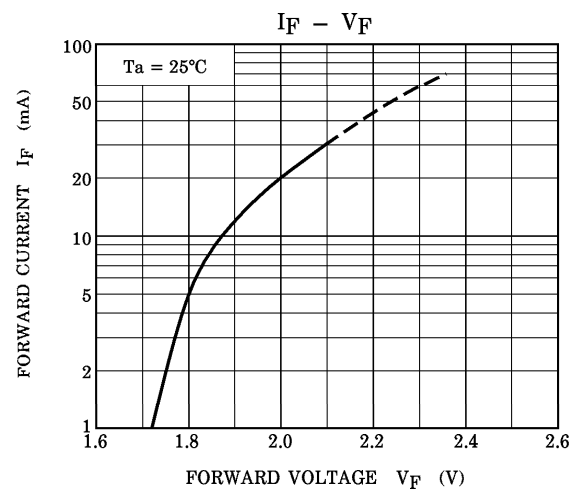
Please be careful of the followings

- 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.

TLOU156P



TLSU156P



TLYU156P

