

TENTATIVE

TOSHIBA InGaAlP LED

TLOU123, TLSU123, TLYU123

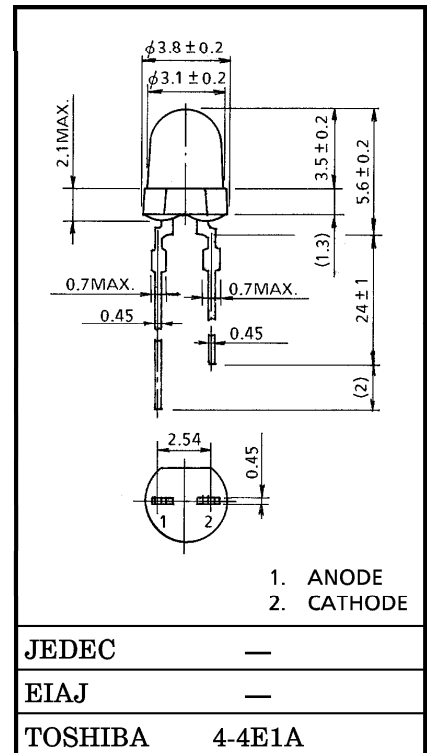
PANEL CIRCUIT INDICATOR

Unit in mm

- InGaAlP LED
- All Plastic Mold Type
- Colored Transparent 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 |
|---------|--------|----------|
| TLOU123 | ORANGE | InGaAlP |
| TLSU123 | RED | InGaAlP |
| TLYU123 | YELLOW | InGaAlP |



Weight : 0.14 g

MAXIMUM RATINGS (Ta = 25°C)

| PRODUCT | FORWARD CURRENT I _F (mA) | REVERSE VOLTAGE V _R (V) | POWER DISSIPATION P _D (mW) | OPERATING TEMPERATURE T _{opr} (°C) | STORAGE TEMPERATURE T _{stg} (°C) |
|---------|--|---------------------------------------|--|--|--|
| TLOU123 | 30 | 4 | 72 | -20~75 | -30~100 |
| TLSU123 | 30 | 4 | 72 | -20~75 | -30~100 |
| TLYU123 | 30 | 4 | 75 | -20~75 | -30~100 |



For part availability and ordering information please call Toll Free: 800.984.5337
Website: www.marktechopto.com | Email: info@marktechopto.com

ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta = 25°C)

| PRODUCT | TYP. EMISSION WAVELENGTH | | | LUMINOUS INTENSITY I _V | | | FORWARD VOLTAGE V _F | | | REVERSE CURRENT I _R | |
|---------|--------------------------|----|----------------|--------------------------------------|------|----------------|-----------------------------------|-----|----------------|-----------------------------------|----------------|
| | λ _p | Δλ | I _F | MIN | TYP. | I _F | TYP. | MAX | I _F | MAX | V _R |
| TLOU123 | 612 | 15 | 20 | 85 | 400 | 20 | 2.0 | 2.4 | 20 | 50 | 4 |
| TLSU123 | 636 | 17 | 20 | 85 | 270 | 20 | 2.0 | 2.4 | 20 | 50 | 4 |
| TLYU123 | 590 | 13 | 20 | 85 | 220 | 20 | 2.1 | 2.5 | 20 | 50 | 4 |
| UNIT | nm | | mA | mcd | | mA | V | | mA | μA | V |

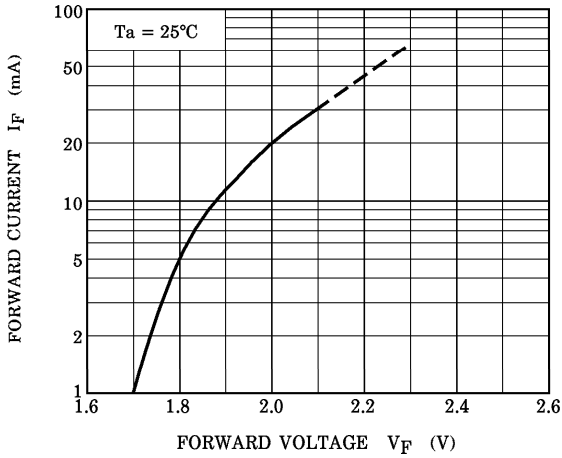
PRECAUTION

Please be careful of the followings

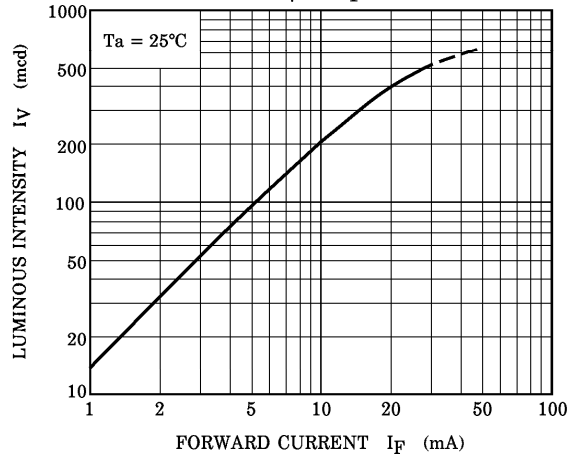
- Soldering temperature : 260°C max Soldering time : 3 s max
(Soldering portion of lead : up to 2 mm from the body of the device)
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.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

TLOU123

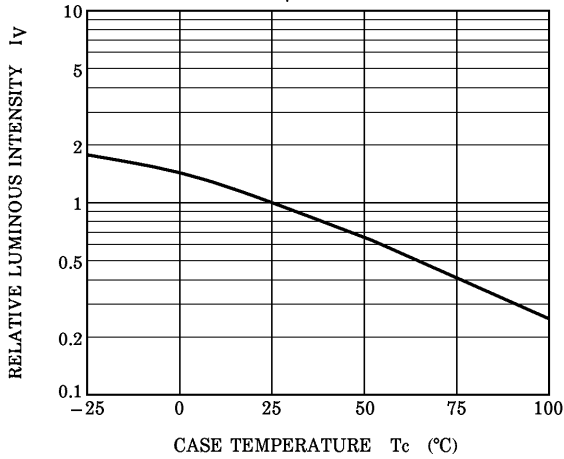
$I_F - V_F$



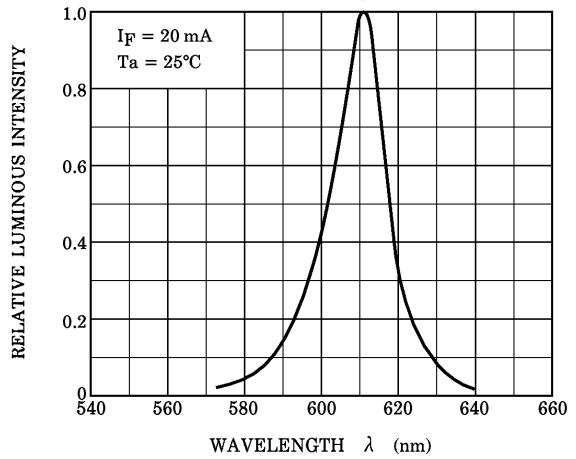
$I_V - I_F$



$I_V - T_c$

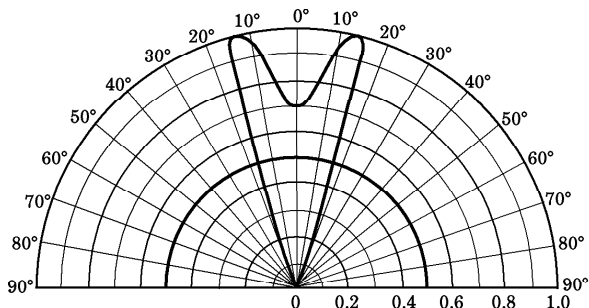


RELATIVE LUMINOUS INTENSITY - WAVELENGTH

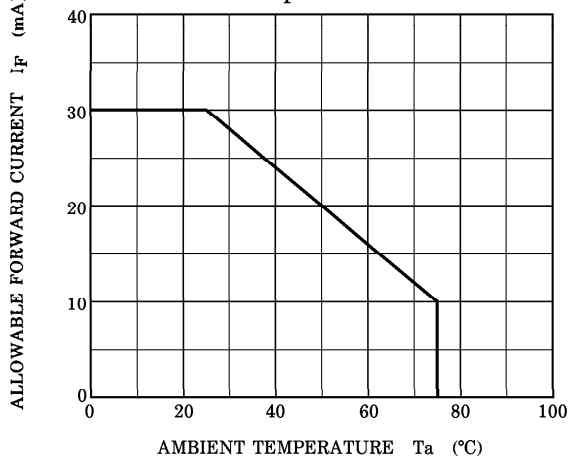


RADIATION PATTERN

$T_a = 25^\circ\text{C}$

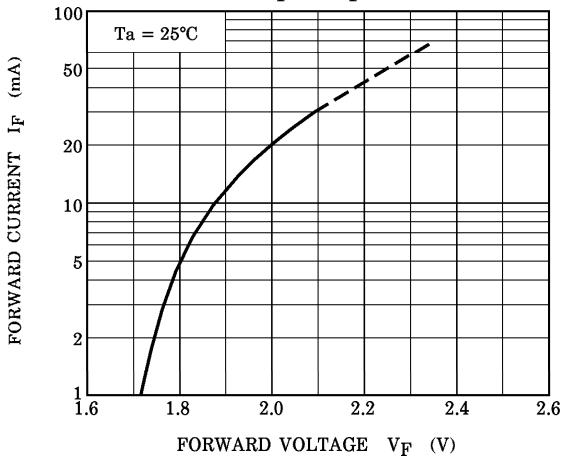


$I_F - T_a$

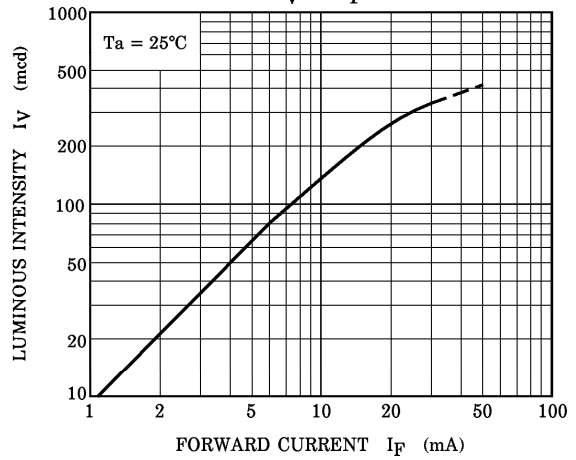


TLSU123

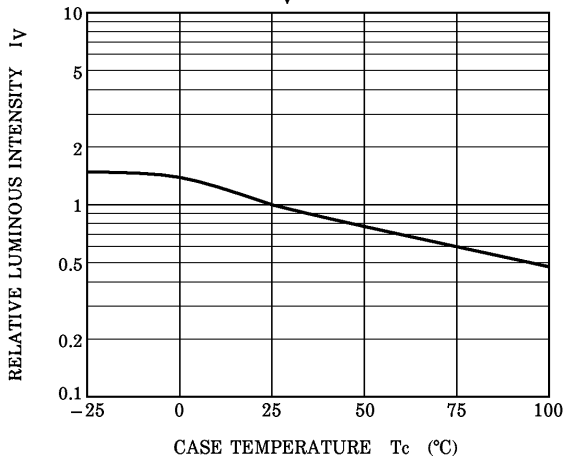
$I_F - V_F$



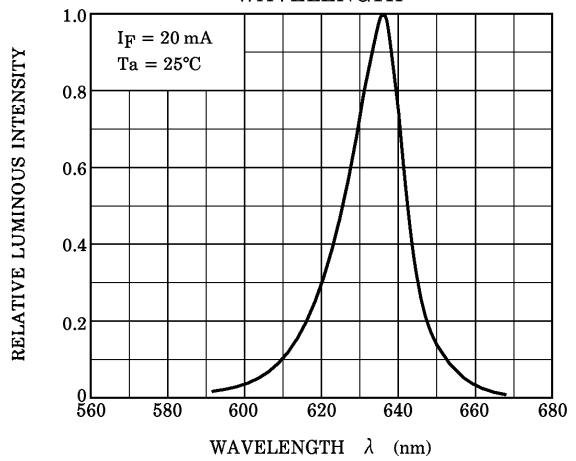
$I_V - I_F$



$I_V - T_c$

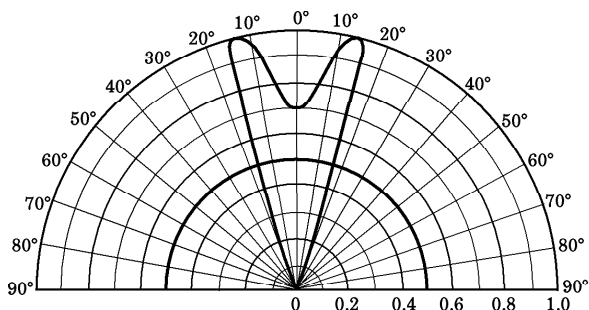


RELATIVE LUMINOUS INTENSITY - WAVELENGTH

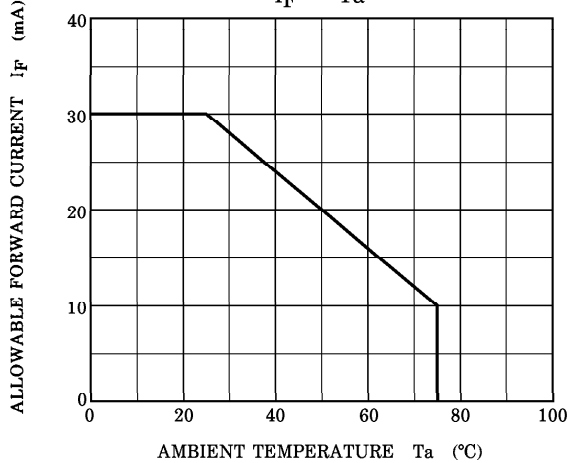


RADIATION PATTERN

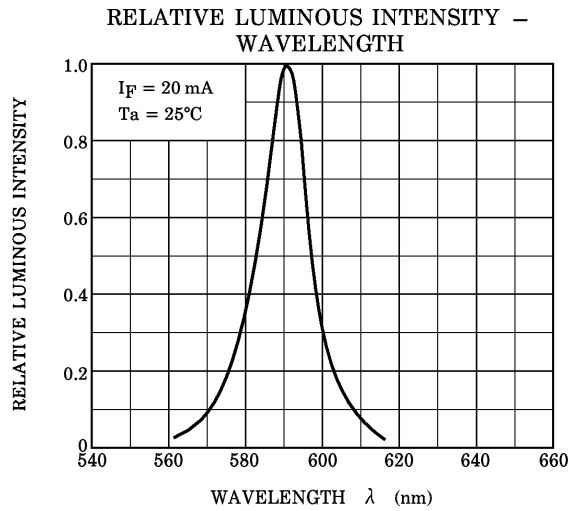
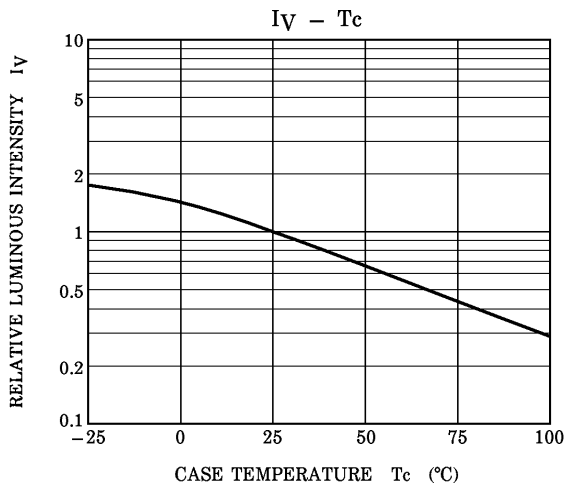
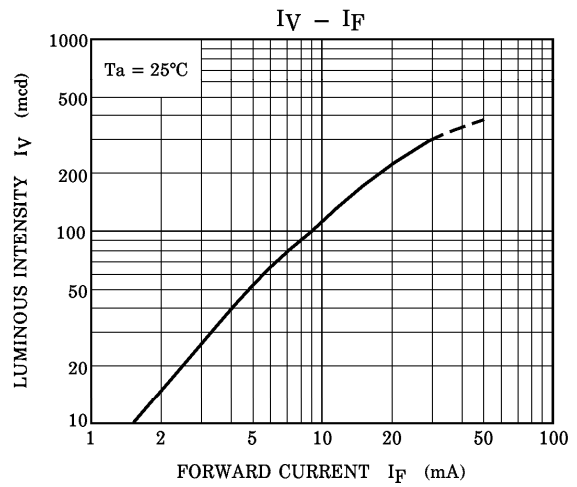
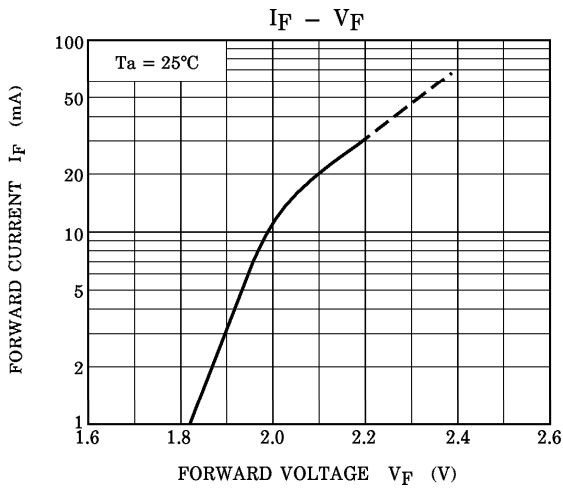
$T_a = 25^\circ\text{C}$



$I_F - T_a$



TLYU123



RADIATION PATTERN

