

TOSHIBA LED LAMP InGaAlP YELLOW LIGHT EMISSION

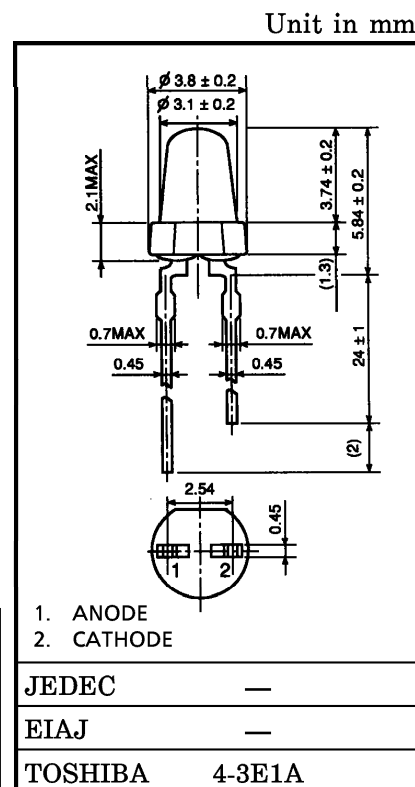
# TLYE160A

## PANEL CIRCUIT INDICATOR

- 3.1 mm DIAMETER (T1)
- InGaAlP YELLOW LED
- All Plastic Mold Type.
- Colorless Clear Lens
- Low Drive Current, High Intensity Yellow Light Emission  
Recommended Forward Current :  $I_F = 15 \sim 20$  mA (DC)
- All Plastic Molded Lens, Provides an Excellent ON-OFF Contrast Ratio.
- Fast Response Time, Capable of Pulse Operation.
- High Power Luminous Intensity
- APPLICATIONS : Suitable for Safety equipment.  
Outdoor displays.

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 | $T_{opr}$ | $-30 \sim 85$  | $^\circ\text{C}$ |
| Storage Temperature Range   | $T_{stg}$ | $-40 \sim 120$ | $^\circ\text{C}$ |



Weight : 0.14 g

## ELECTRICAL AND OPTICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

| CHARACTERISTIC           | SYMBOL          | TEST CONDITION       | MIN | TYP. | MAX  | UNIT          |
|--------------------------|-----------------|----------------------|-----|------|------|---------------|
| Forward Voltage          | $V_F$           | $I_F = 20$ mA        | —   | 2.1  | 2.5  | V             |
| Reverse Current          | $I_R$           | $V_R = 4$ V          | —   | —    | 50   | $\mu\text{A}$ |
| Luminous Intensity       | $I_V$           | $I_F = 20$ mA (Note) | 476 | 2300 | —    | mcd           |
|                          |                 |                      | 850 | —    | 4140 |               |
| Peak Emission Wavelength | $\lambda_p$     | $I_F = 20$ mA        | —   | 590  | —    | nm            |
| Spectral Line Half Width | $\Delta\lambda$ | $I_F = 20$ mA        | —   | 13   | —    | nm            |
| Dominant Wavelength      | $\lambda_d$     | $I_F = 20$ mA        | —   | 587  | —    | nm            |

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

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

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

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**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.

