## **LED Lamp**

# TLOE180P

Unit in mm

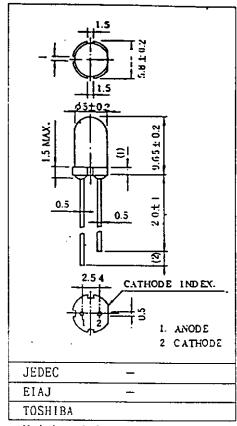
## InGaAIP Orange Light Emission

#### **Panel Circuit Indicator**

- 5 mm Diameter (T1-3/4)
- New Emission Material (InGaAIP) Orange LED
- Peak Wavelength:  $\lambda p = 612 \text{ nm}$
- All Plastic Mold Type
- Colorless Clear Lens
- Low Drive Current, High Intensity Orange Light Emission
- Recommended Forward Current: I<sub>F</sub> = 15 ~ 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
  - Suitable for Outdoor Message Signboard
  - Automotive use
- Straight Lead (no stand-off)
- High Reliability
  - T<sub>stq</sub>: -40 ~ 120°C

### Maximum Ratings ( $T_a = 25^{\circ}C$ )

Characteristic	Symbol	Rating	Unit
Forward Current (DC)	١ <sub>F</sub>	30	mA
Reverse Voltage	V <sub>R</sub>	4	V
Power Dissipation	PD	75	mA
Operating Temperature Range	T <sub>opr</sub>	-30 ~ 85	°C
Storage Temperature Range	T <sub>stg</sub>	-40 ~ 120	°C



Weight : 0.31g

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## Electro-Optical Characteristics (T<sub>a</sub> = $25^{\circ}$ C)

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20 mA	_	1.95	2.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 4 V	_	_	50	μΑ
	$I_V$	v   i	1530	3500	_	mcd
	(NOTE)		1900	_	6400	
Peak Emission Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 20 mA	_	612	_	nm
Spectral Line Half Width	Δλ	I <sub>F</sub> = 20 mA	_	15	_	nm

(NOTE) Rank classified products are available in a minimum two-rank selection. Please not that the upper and lower values of the luminous intenisty classification criteria include +/-15% tolerances.

T:1800-3600mcd, U:3200-6400mcd.

## Precaution

Please be careful of the following:

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

