

TENTATIVE

TOSHIBA LED LAMP InGaAlP RED LIGHT EMISSION

# TLSE157P

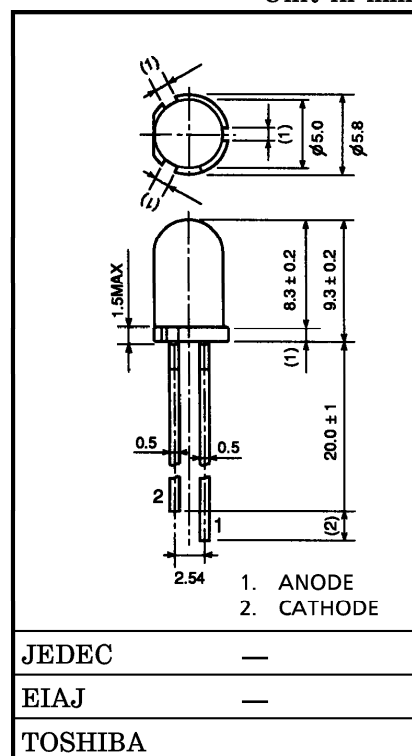
## PANEL CIRCUIT INDICATOR

Unit in mm

- 5 mm DIAMETER (T1-3 / 4)
- InGaAlP RED LED
- All Plastic Mold Type.
- Colorless Clear Lens
- Low Drive Current, High Intensity Red Light Emission  
Recommended Forward Current :  $I_F = 15 \sim 20$  mA (DC)
- All Plastic Mold 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	$P_D$	120	mW
Operating Temperature Range	$T_{opr}$	$-30 \sim 85$	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	$-40 \sim 120$	$^\circ\text{C}$



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Weight : 0.31 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	—	1.95	2.4	V
Reverse Current	$I_R$	$V_R = 4$ V	—	—	50	$\mu\text{A}$
Luminous Intensity	$I_V$	$I_F = 20$ mA	476	1900	—	mcd
Peak Emission Wavelength	$\lambda_p$	$I_F = 20$ mA	—	623	—	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 20$ mA	—	15	—	nm
Dominant Wavelength	$\lambda_d$	$I_F = 20$ mA	—	613	—	nm

(Note) : Lamps are classified into the following three 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.

