TOSHIBA

Unit in mm

#### TOSHIBA LED LAMP InGaA&P RED LIGHT EMISSION

## **TLSH157P**

#### PANEL CIRCUIT INDICATOR

5mm 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 : IF=1~20mA (DC)
- All Plastic Molded Lens, Provides an Excellent ON-OFF Contrast
- 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 (Ta = 25°C)

SYMBOL	RATING	UNIT
$I_{\mathbf{F}}$	50	mA
$V_{\mathbf{R}}$	4	V
$P_{\mathbf{D}}$	125	mW
$\mathrm{T}_{\mathrm{opr}}$	-30~85	°C
$\mathrm{T_{stg}}$	-40~120	°C
	$\begin{array}{c} I_{\mathbf{F}} \\ V_{\mathbf{R}} \\ P_{\mathbf{D}} \\ T_{\mathrm{opr}} \end{array}$	I <sub>F</sub> 50 V <sub>R</sub> 4 P <sub>D</sub> 125 T <sub>opr</sub> -30~85

# (2) **ANODE CATHODE**

JEDEC	_
EIAJ	_
TOSHIBA	

Weight: 0.31g

#### ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

CHAR	ACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage		$V_{\mathbf{F}}$	I <sub>F</sub> =20mA	_	2.1	2.5	V
Reverse Current		$I_{\mathbf{R}}$	$V_R=4V$	_	_	50	$\mu$ A
Luminous Intensity	TLSH157P	I <sub>V</sub>	I <sub>F</sub> =20mA (Note)	850	2300	_	
	TLSH157P (ST)			850	_	4140	mcd
	TLSH157P (TU)			1530	_	7360	
Peak Emission Wavelength		$\lambda_{\mathbf{p}}$	$I_F = 20 \text{mA}$		623		nm
Spectral Line Half Width		Δλ	$I_{\mathbf{F}} = 20 \text{mA}$	-	15	_	nm
Dominant Wavelength		$^{\lambda}\mathbf{d}$	I <sub>F</sub> =20mA	_	613	_	nm

(Note) Rank selection carried out under next range respectively, although it needs ±15% additionary for guaranteed limits.

S: 1000-2000mcd, T: 1800-3600mcd, U: 3200-6400mcd.

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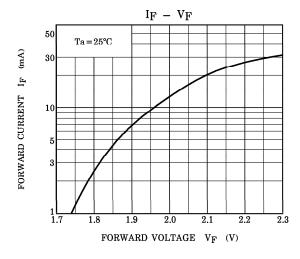
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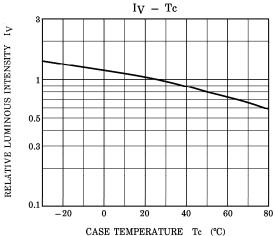
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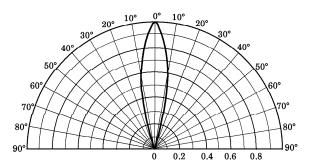
### **PRECAUTION**

Please be careful of the followings

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







RADIATION PATTERN

Ta = 25°C

