TOSHIBA TLOE160A

## TOSHIBA LED LAMP InGaA&P ORANGE LIGHT EMISSION

# **TLOE160A**

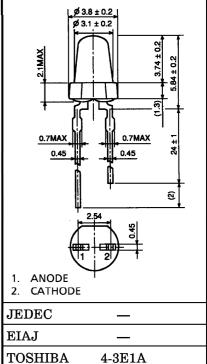
#### PANEL CIRCUIT INDICATOR

- 3.1 mm DIAMETER (T1)
- InGaAℓP ORANGE LED
- 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
- APPLICATIONS : Suitable for Safety equipment.
  Outdoor displays.

### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current (DC)	$\mathbf{I_F}$	50	mA
Reverse Voltage	$v_{R}$	4	V
Power Dissipation	$P_{\mathbf{D}}$	125	mW
Operating Temperature Range	$T_{ m opr}$	-30~85	°C
Storage Temperature Range	$ m T_{stg}$	-40~120	$^{\circ}\mathrm{C}$

Unit in mm



Weight: 0.14 g

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• Gallium arsenide (GaAs) is a substance used in the products described in this document. GaAs dust and fumes are toxic. Do not break, cut or pulverize the product, or use chemicals to dissolve them. When disposing of the products, follow the appropriate regulations. Do not dispose of the products with other industrial waste or with domestic garbage.

garbage.

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# ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARA	ACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Forward Vol	ltage	$ m V_{f F}$	$I_{ m F}=20{ m mA}$	_	1.95	2.4	V
Reverse Cur	rent	${ m I}_{ m R}$	$V_R = 4 V$	_	_	50	$\mu$ A
Luminous	TLOE160A	- I <sub>V</sub>	$I_{ m F}=20{ m mA}({ m Note})$	476	1500	_	mcd
Intensity	TLOE160A (ST)			850	_	4140	
Peak Emissi	on Wavelength	$\lambda_{\mathbf{p}}$	$I_{ m F}=20{ m mA}$	_	612	_	nm
Spectral Line Half Width $\Delta \lambda$		$I_{ m F}=20{ m mA}$	_	15	_	nm	
Dominant W	avelength	$^{\lambda}{ m d}$	$I_{ m F}=20{ m mA}$	_	605	_	nm

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

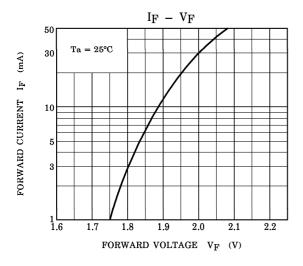
Measurement tolerance for each limit is  $\pm 15\%$ .

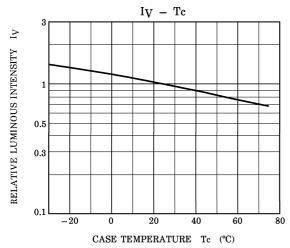
 $R:560-1120\, mcd,\ S:1000-2000\, mcd,\ T:1800-3600\, mcd.$ 

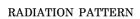
# **PRECAUTION**

Please be careful of the followings

- Soldering temperature: 260°C max Soldering time: 3 s 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 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.







 $Ta = 25^{\circ}C$ 

