## TOSHIBA LED Lamp InGaAlP Yellow Light Emission

# **TLYH160**

### 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: IF =  $1\sim20$  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)	I <sub>F</sub>	50	mA	
Reverse voltage	$V_{R}$	4	V	
Power dissipation	P <sub>D</sub>	125	mW	
Operating temperature range	T <sub>opr</sub>	-30~85	°C	
Storage temperature range	T <sub>stg</sub>	−40 <b>~</b> 120	°C	

Weight: 0.14 g

## **Electrical And Optical Characteristics (Ta = 25°C)**

Characteristic		Symbol	Test Condition		Min	Тур.	Max	Unit
Forward voltage		V <sub>F</sub>	I <sub>F</sub> = 20 mA		_	2.1	2.5	V
Reverse current		I <sub>R</sub>	V <sub>R</sub> = 4 V		_	_	50	μΑ
Luminous	TLYH160	- I <sub>V</sub>	I <sub>F</sub> = 20 mA	(Note)	850	4300	_	mcd
intensity	TLYH160 (TU)				1530	_	7360	
Peak emission wavelength		λ <sub>P</sub>	I <sub>F</sub> = 20 mA		_	590	_	nm
Spectral line half width		Δλ	I <sub>F</sub> = 20 mA		_	13	_	nm
Dominant wavelength		λ <sub>d</sub>	I <sub>F</sub> = 20 mA		_	587	_	nm

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

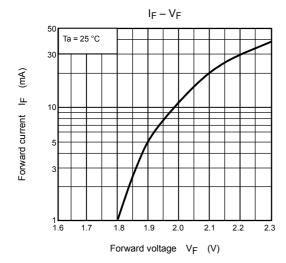
Measurement tolerance for each limit is ±15%.

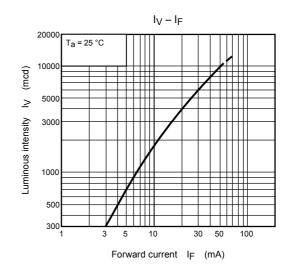
S: 1000-2000 mcd, T: 1800-3600 mcd, U: 3200-6400 mcd.

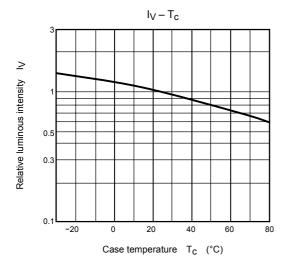
### **Precaution**

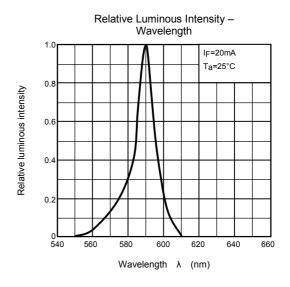
Please be careful of the followings

- 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.



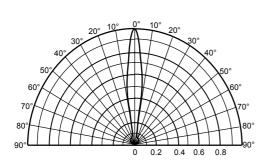


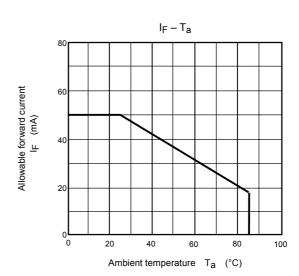




Radiation Pattern

Ta = 25 °C





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#### **RESTRICTIONS ON PRODUCT USE**

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