

TOSHIBA LED Lamp InGaAlP Pure Green Light Emission

# TLPGE160

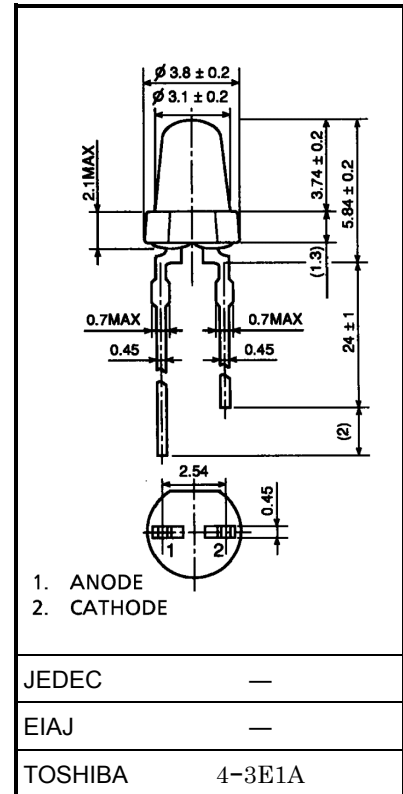
## Panel Circuit Indicator

- 3mm diameter(T1)
- InGaAlP pure green LED
- All plastic mold type.
- Colorless clear lens
- Low drive current, high intensity pure green light emission  
Recommended forward current:  $I_F = 15\sim 20\text{mA}$  (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 outdoor message signboard, safety equipment, etc.

## Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Forward current (DC)	$I_F$	50	mA
Reverse voltage	$V_R$	4	V
Power dissipation	$P_D$	140	mW
Operating temperature range	$T_{opr}$	-30~85	°C
Storage temperature range	$T_{stg}$	-40~120	°C

Unit in mm



Weight: 0.14 g

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

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F$	$I_F = 20\text{mA}$	—	2.27	2.8	V
Reverse current	$I_R$	$V_R = 4\text{V}$	—	—	50	$\mu\text{A}$
Luminous intensity	$I_V$	$I_F = 20\text{mA}$ (Note)	272	450	—	mcd
Peak emission wavelength	$\lambda_p$	$I_F = 20\text{mA}$	—	562	—	nm
Spectral line half width	$\Delta\lambda$	$I_F = 20\text{mA}$	—	11	—	nm
Dominant wavelength	$\lambda_d$	$I_F = 20\text{mA}$	—	558	—	nm

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

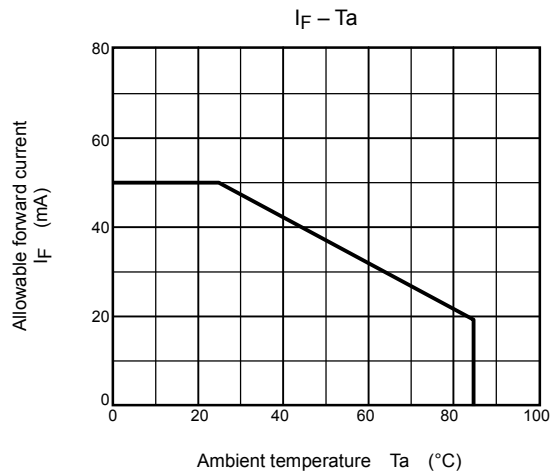
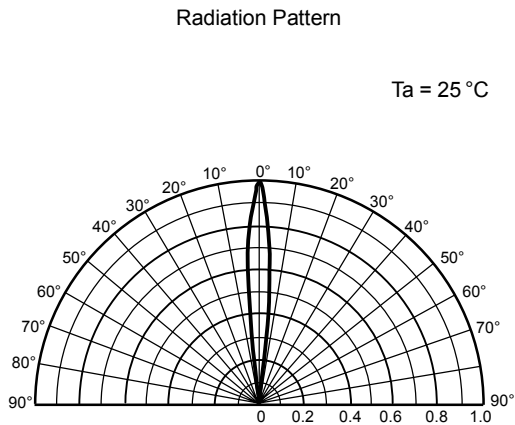
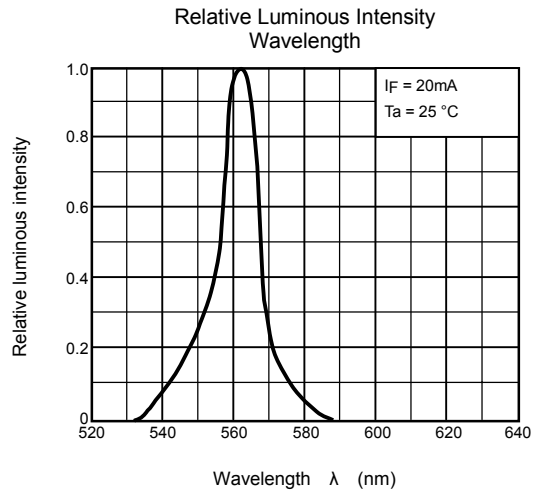
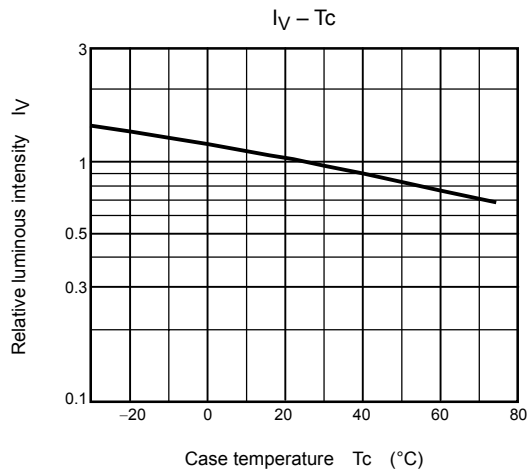
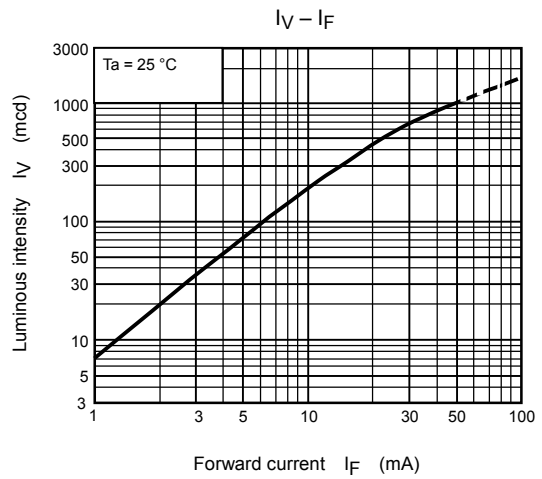
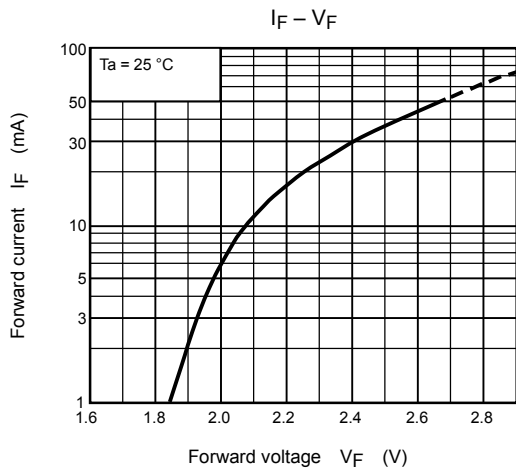
Measurement tolerance for each limit is  $\pm 15\%$ .

Q: 320–640mcd, R: 560–1120mcd, S: 1000–2000mcd

## 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.
- 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.



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