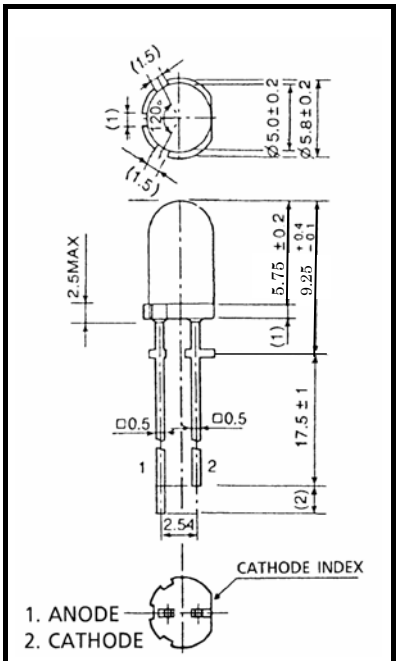
TOSHIBA LED Lamp InGaAℓP Yellow Light Emission

TLYK31T(F)

Panel Circuit Indicator

- Lead(Pb)-free products (lead: Sn-Ag-Cu)
- 5 mm package
- InGaAℓP technology
- Transparent lens
- Low drive current, high intensity yellow light emission
  Recommended forward current: I_F = 10~30 mA (DC)
- All plastic molded lens, provides an excellent on−off contrast ratio.
- Fast response time, capable of pulse operation.
- Applications: outdoor message signboards,Traffic signals, Safety equipment, HMSL,etc
- Straight lead type is also available TLYK31TP(F)

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	—

Weight: 0.28 g

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	130	mW
Operating temperature range	T_{opr}	−40~100	°C
Storage temperature range	T_{stg}	−40~120	°C

Marktech Optoelectronics
For part availability and ordering information please call Toll Free: 800.984.5337
Website: www.marktechopto.com | Email: info@marktechopto.com

Electrical And Optical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F	I_F = 20 mA	1.9	2.4	2.6	V
Reverse current	I_R	V_R = 4 V	—	—	50	μA
Luminous intensity	I_V	I_F = 20 mA (Note)	1530	4000	—	mcd
Peak emission wavelength	λ_P	I_F = 20 mA	—	(594)	—	nm
Spectral line half width	Δλ	I_F = 20 mA	—	13	—	nm
Dominant wavelength	λ_d	I_F = 20 mA (Note)	581	590	595	nm

(Note): Lamps are classified into the following ranks according to Iv and λd, and packed in boxes by each rank.

Iv-rank ⇒ T: 1530−4140mcd, U: 2720−7360mcd, V: 4760mcd−

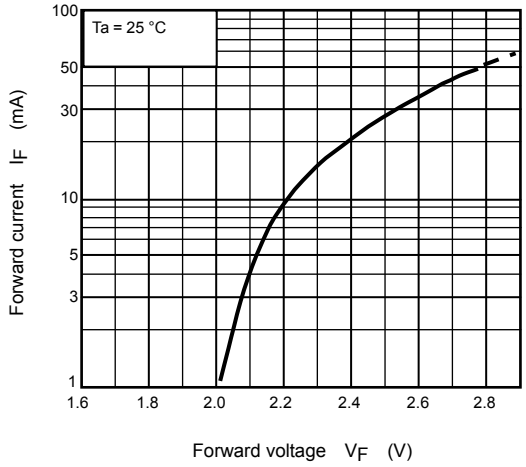
λd-rank ⇒ 1: 581−588nm, 2: 585−592nm, 3: 589−595nm

Precaution

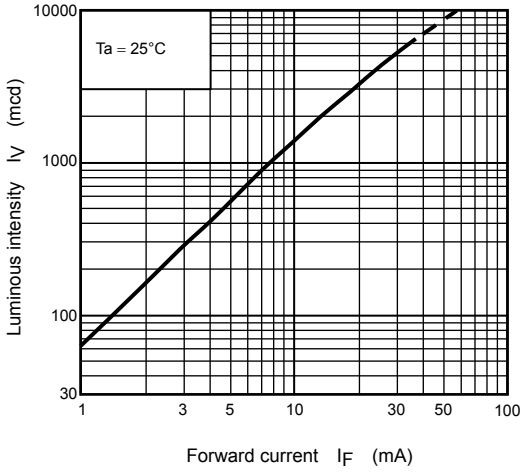
Please be careful of the followings

- Soldering temperature: 260°C max Soldering time: 3 s max
  (Soldering portion of lead: below the lead stopper of the device)
- If the lead is formed, the lead should be formed up to below the lead stopper 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.

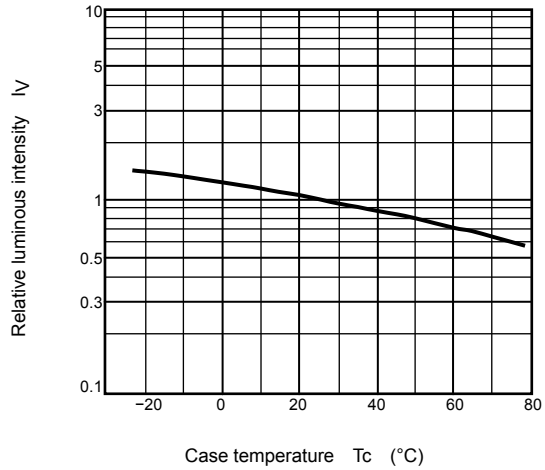
$I_F - V_F$



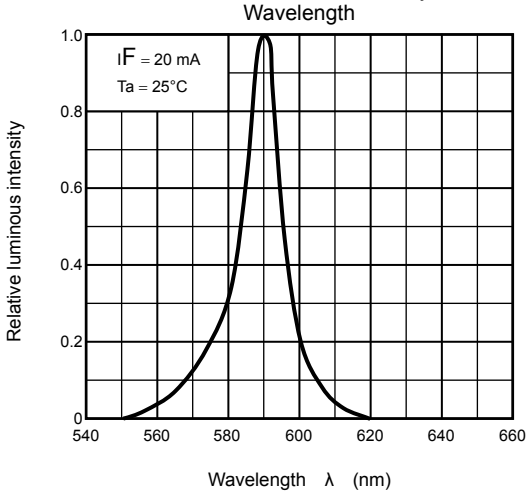
$I_V - I_F$



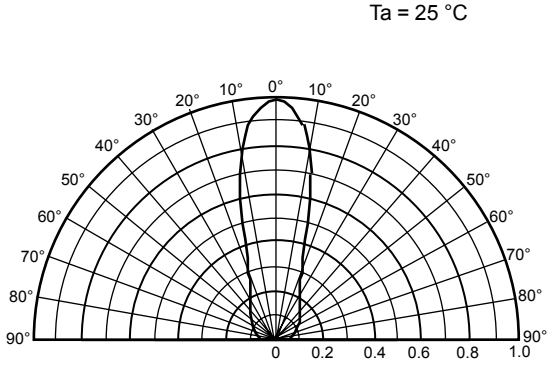
$I_V - Tc$



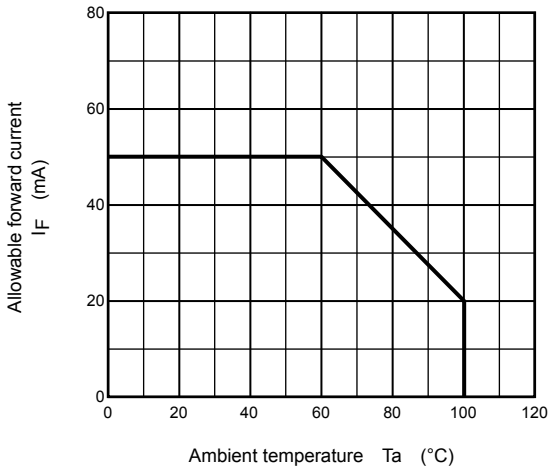
Relative Luminous Intensity
Wavelength



Radiation Pattern



$I_F - Ta$



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000707EAC

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