

TOSHIBA LED Lamp InGaAlP Yellow Light Emission

TLYH190P

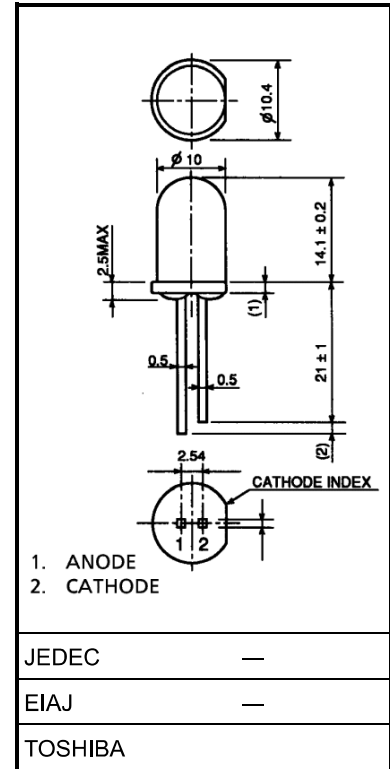
Panel Circuit Indicator

- 10 mm diameter
- InGaAlP yellow LED
- All plastic mold type.
- Colorless clear lens
- Low drive current, high intensity yellow light emission
Recommended forward current : $I_F = 1 \sim 20$ mA (DC)
- All plastic molded lens, provides an excellent on-off contrast ratio.
- Fast response time, capable of pulse operation.
- High power luminous intensity
- Without stand-offs
- Applications: Suitable for outdoor message signboard, safety equipment.

Maximum Ratings ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Forward current (DC)	I_F	50	mA
Reverse voltage	V_R	4	V
Power dissipation	P_D	125	mW
Operating temperature range	T_{opr}	$-30 \sim 85$	$^\circ\text{C}$
Storage temperature range	T_{stg}	$-40 \sim 120$	$^\circ\text{C}$

Unit in mm



Weight: 1.0 g

Electrical And Optical Characteristics (Ta = 25°C)

Characteristic		Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage		V_F	$I_F = 20\text{mA}$	—	2.1	2.5	V
Reverse current		I_R	$V_R = 4\text{V}$	—	—	50	μA
Luminous intensity	TLYH190P	I_V	$I_F = 20\text{mA}$ (Note)	8500	30000	—	mcd
	TLYH190P (XY)			15300	—	73600	
Peak emission wavelength		λ_P	$I_F = 20\text{mA}$	—	590	—	nm
Spectral line half width		$\Delta\lambda$	$I_F = 20\text{mA}$	—	13	—	nm
Dominant wavelength		λ_d	$I_F = 20\text{mA}$	—	587	—	nm

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

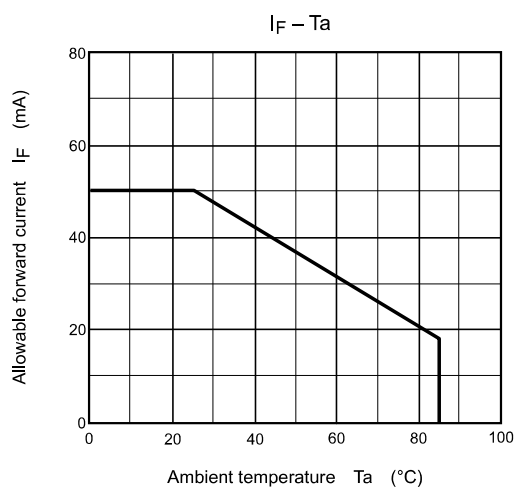
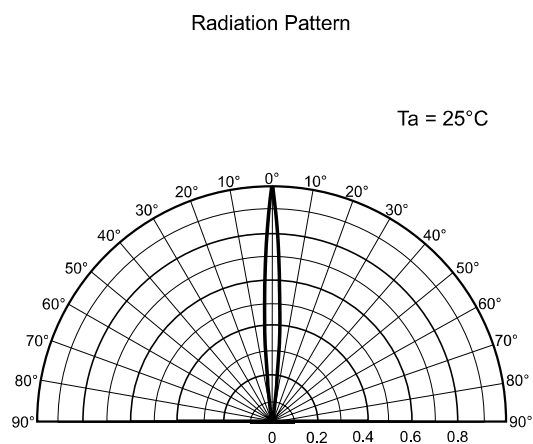
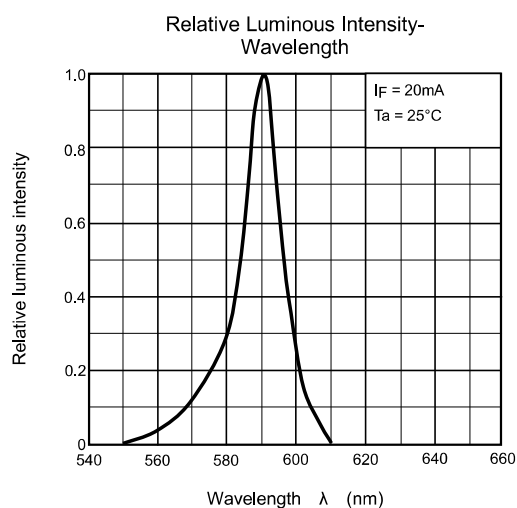
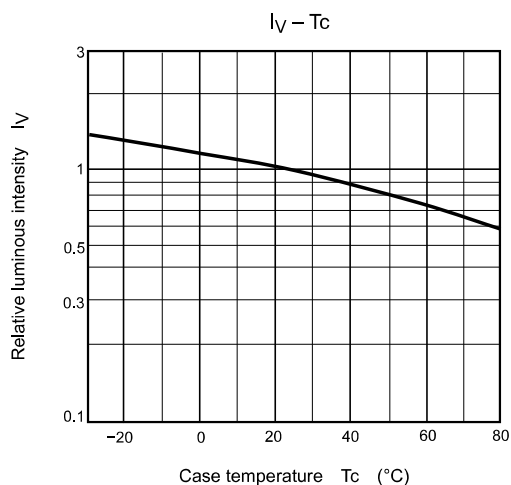
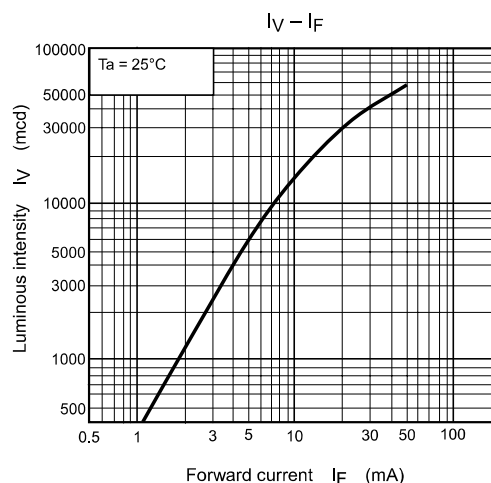
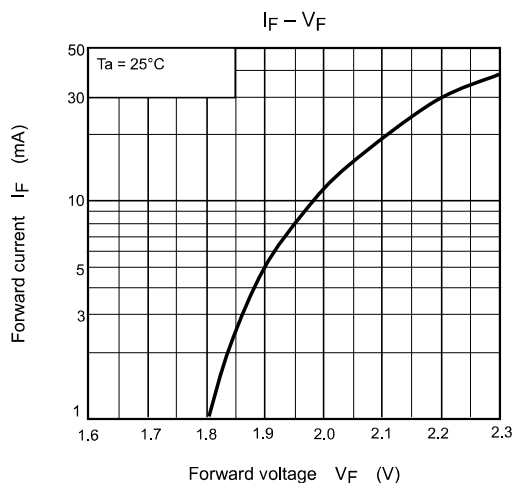
Measurement tolerance for each limit is $\pm 15\%$.

W: 10000–20000 mcd, X: 18000–36000 mcd, Y: 32000–64000 mcd.

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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