

TOSHIBA LED LAMP InGaAlP YELLOW LIGHT EMISSION

TLYA180AP

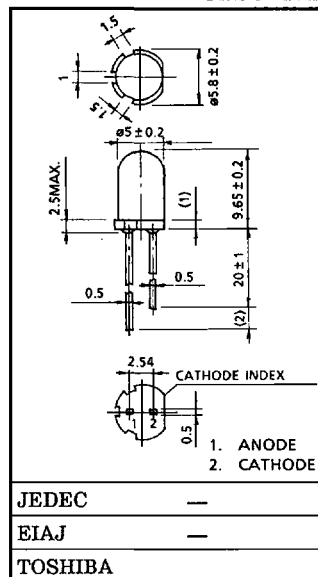
PANEL CIRCUIT INDICATOR

- 5mm DIAMETER (T1-3/4)
- New Emission Material (InGaAlP) Yellow LED
- Peak Wavelength : $\lambda_p = 590\text{nm}$
- All Plastic Mold Type Colorless Clear Lens
- Low Drive Current, High Intensity Yellow 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 Suitable for Outdoor Message Signboards, Automotive Use.
- Without stand-offs
- High Reliability, $T_{stg} : -40 \sim 120^\circ\text{C}$

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



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ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage		V_F	$I_F = 20\text{mA}$	—	2.1	2.4	V
Reverse Current		I_R	$V_R = 4\text{V}$	—	—	50	μA
Luminous Intensity	TLYA180AP	I_V	$I_F = 20\text{mA}$ (Note)	850	2500	—	mcd
	TLYA180AP (ST)			850	—	4140	
	TLYA180AP (TU)			1530	—	7360	
Peak Emission Wave Length		λ_p	$I_F = 20\text{mA}$	—	590	—	nm
Spectral Line Half Width		$\Delta\lambda$	$I_F = 20\text{mA}$	—	13	—	nm

(Note) Rank selection carried out under next standard range respectively, although it needs $\pm 15\%$ additional for guaranteed limits.

S: 1000~2000mcd T: 1800~3600mcd U: 3200~6400mcd

Each rank products is classified by package unit, and (ST) includes S and T, (TU) includes T and U.

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.

