TOSHIBA LED LAMP GaP GREEN LIGHT EMISSION

TLGD189

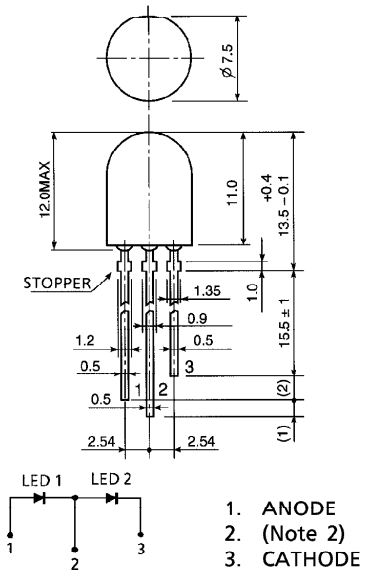
PANEL CIRCUIT INDICATOR

Unit in mm

- 7.5mm DIAMETER
- 2 Chip Series Connection
- All Plastic Mold Type Colorless Clear Lens
- Low Drive Current, High Intensity Green Light Emission

  Recommended Forward Current : I_F=15~20mA (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 Massage Signboards.



1. ANODE
2. (Note 2)
3. CATHODE

JEDEC	—
EIAJ	—
TOSHIBA	

Weight : 0.67g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current (DC)	I_F	30	mA
Reverse Voltage	V_R	8	V
Power Dissipation	P_D	150	mW
Operating Temperature Range	T_{opr}	−30~85	°C
Storage Temperature Range	T_{stg}	−40~100	°C

961001EAA2

ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage		V_F	I_F = 20mA	—	4.3	5.4	V
Reverse Current		I_R	V_R = 8V	—	—	5	μA
Luminous Intensity	TLGD189	I_V	I_F = 20mA (Note 1)	85.0	200	—	mcd
	TLGD189 (NP)			85.0	—	414	
Peak Emission Wave Length		λ_p	I_F = 20mA	—	567	—	nm
Spectral Line Half Width		$\Delta\lambda$	I_F = 20mA	—	25	—	nm

(Note 1) Rank selection carried out under next standard range respectively, although it needs ±15% additionary for guaranteed limits.
N : 100-200mcd P : 180-360mcd
Each rank products is classified by package unit, and (NP) includes N and P.

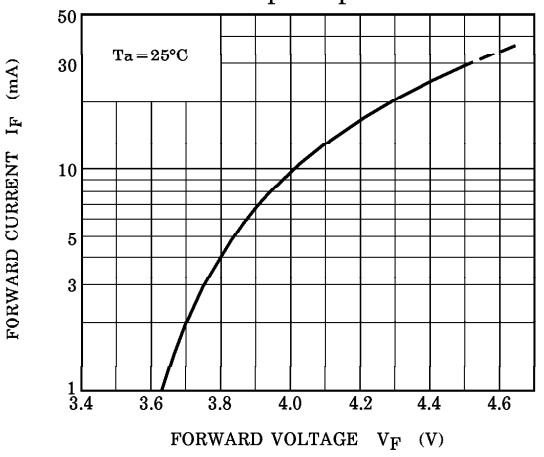
(Note 2) Cathode of LED1 and anode of LED2 are in common (pin number 2).
Please be careful to use this pin.

PRECAUTION

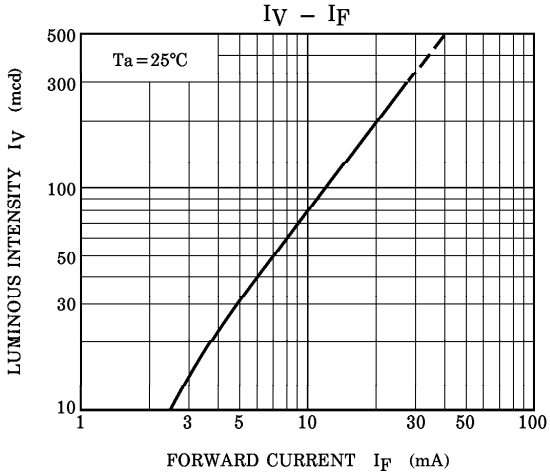
Please be careful of the followings.

- Soldering temperature : 260°C MAX. Soldering time : 3s MAX.
  (Soldering portion of lead : below the lead stopper)
- 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.

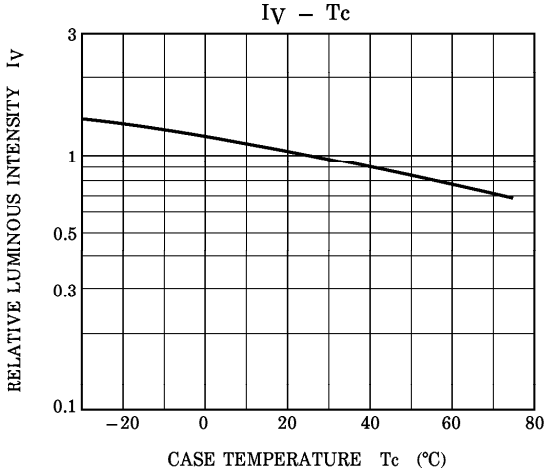
$I_F - V_F$



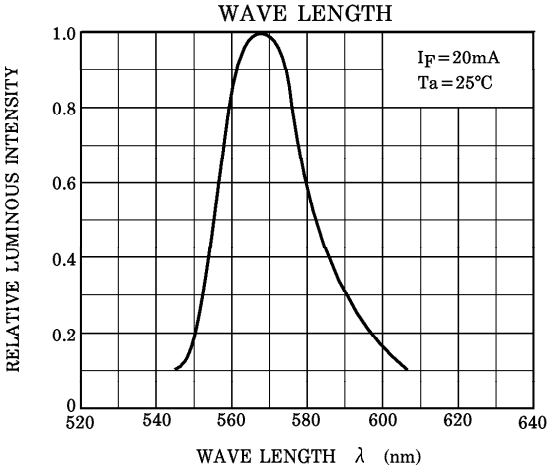
$I_V - I_F$



$I_V - Tc$

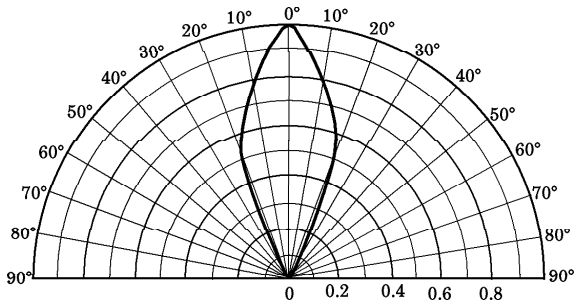


RELATIVE LUMINOUS INTENSITY – WAVE LENGTH



RADIATION PATTERN (//)

Ta = 25°C



$I_F - Ta$