

TOSHIBA LED LAMP GaP GREEN LIGHT EMISSION

TLGD189

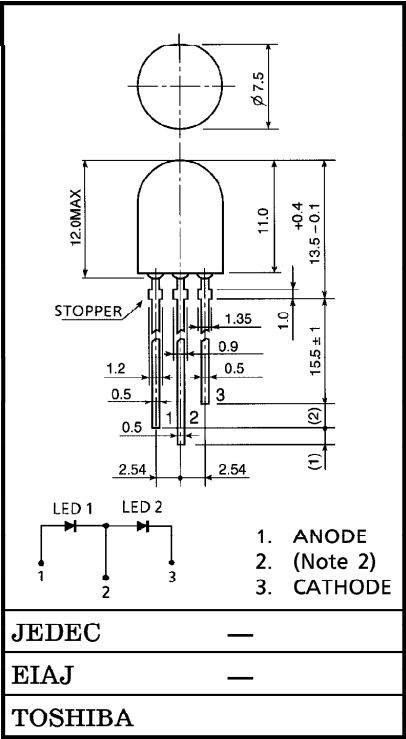
PANEL CIRCUIT INDICATOR

- 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 :  $I_F=15\sim20\text{mA}$  (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 Massage Signboards.

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

Unit in mm



Weight : 0.67g

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## ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

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

(Note 1) Rank selection carried out under next standard range respectively, although it needs  $\pm 15\%$  additional 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.

