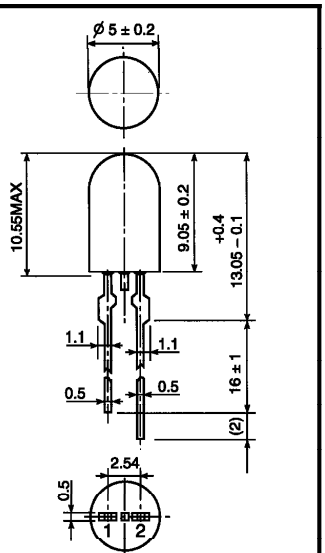
TOSHIBA LED LAMP GaP GREEN LIGHT EMISSION

TLGD175

2 CHIP LED LAMP FOR MESSAGE BOARD

Unit in mm



1. ANODE
2. CATHODE

JEDEC	—
EIAJ	—
TOSHIBA	

Weight : 0.35g

- 2 Chip Series Connection
- All Plastic Mold Type : Clear Transparent 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.
- Wide Radiation : Suitable for Message Board

  (±30deg : //, ±15deg : ⊥)

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	120	mW
Operating Temperature Range	T_{opr}	−30~85	°C
Storage Temperature Range	T_{stg}	−40~100	°C

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	TLGD175	I_V	I_F=20mA (Note)	153	400	—	mcd
	TLGD175 (PQ)			153	—	736	
Peak Emission Wave Length		λ_p	I_F=20mA	—	567	—	nm
Spectral Line Half Width		$\Delta\lambda$	I_F=20mA	—	25	—	nm

(Note) Rank selection carried out under next standard range respectively, although it needs ±15% sdditionary for guaranteed limits.

P : 180-360mcd Q : 320-640mcd

Each rank products is classified by package unit, and (PQ) includes P and Q.

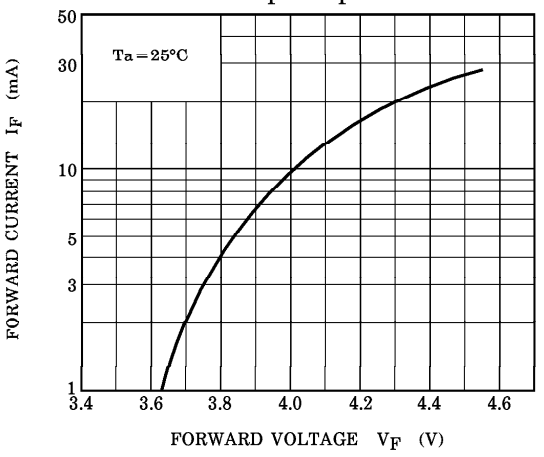
961001EAA2

PRECAUTION

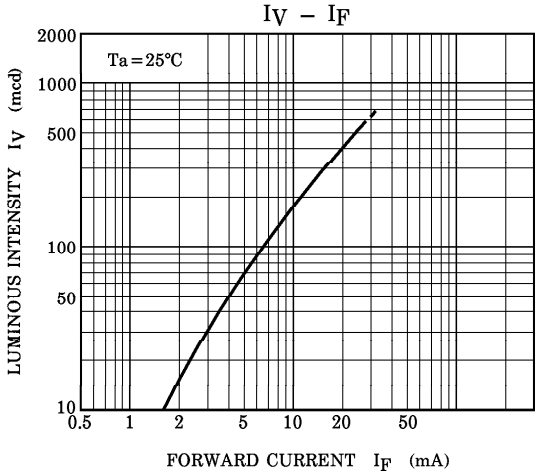
Please be careful of the followings.

- 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 below the lead stopper without forming stress to the resin. Soldering should be performed after lead forming.

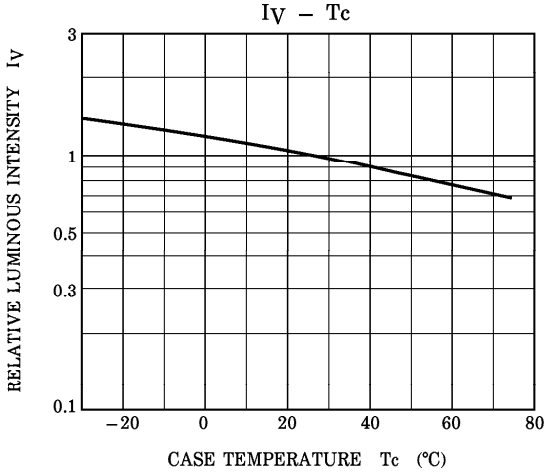
$I_F - V_F$



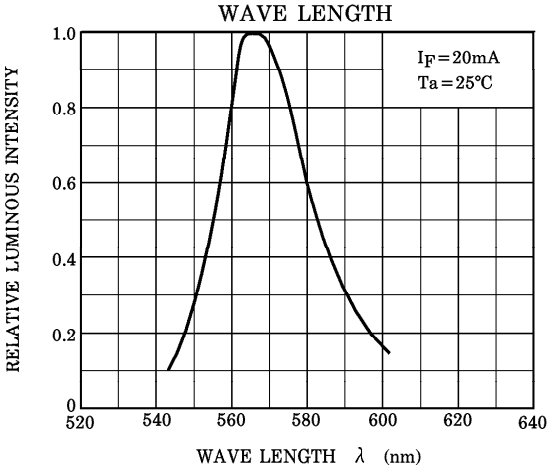
$I_V - I_F$



$I_V - Tc$

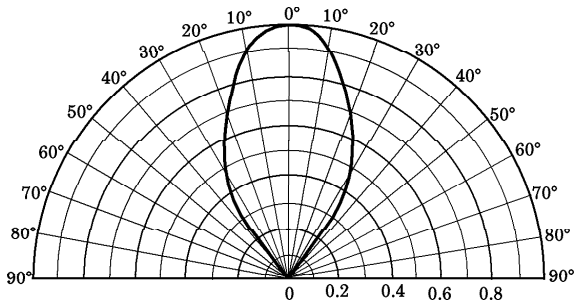


RELATIVE LUMINOUS INTENSITY – WAVE LENGTH



RADIATION PATTERN (//)

Ta = 25°C



$I_F - Ta$