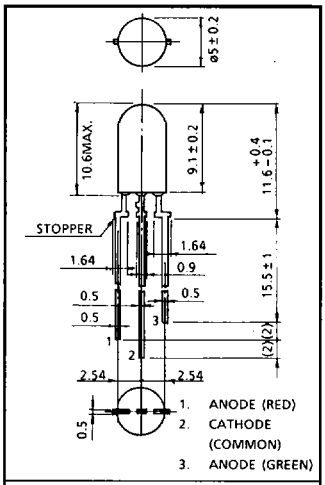
TENTATIVE TOSHIBA LED LAMP GaAℓAs RED / GaP GREEN LIGHT EMISSION

TLRAG296

DUAL COLOR PANEL CIRCUIT INDICATOR

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	

Weight : 0.37g

- 5mm DIAMETER (T-1 3/4)
- High Bright Dual Color (GaAℓAs : RED / GaP : GREEN) Emission
- Common Cathode Type
- All Plastic Mold Type : Collorless Clear Lens
- Low Drive Current, High Intensity Light Emission.
  Recommended Forward Current
  RED : I_F = 3~5mA (DC)
  GREEN : I_F = 15~20mA (DC)
- Fast Response Time, Capable of Pulse Operation.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current (DC) (Note)	I_F	40	mA
Reverse Voltage	V_R	4	V
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	Red	V_F	I_F = 20mA	—	2.0	2.4	V
	Green			—	2.15	2.8	
Reverse Current	Red	I_R	V_R = 4V	—	—	100	μA
	Green			—	—	5	
Luminous Intensity	Red	I_V	I_F = 20mA	153	500	—	mcd
	Green			85	150	—	
Peak Emission Wave Length	Red	λ_P	I_F = 20mA	—	660	—	nm
	Green			—	567	—	
Spectral Line Half Width	Red	$\Delta\lambda$	I_F = 20mA	—	25	—	nm
	Green			—	25	—	

(Note) The sum of the RED and GREEN currents must not exceed I_F − Ta.

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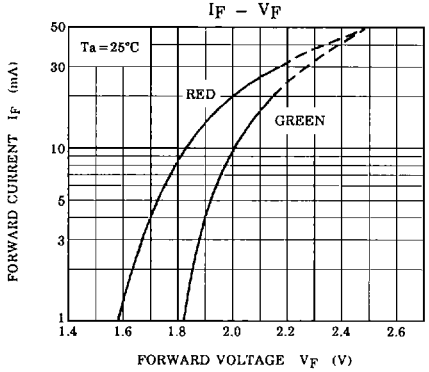
PRECAUTION

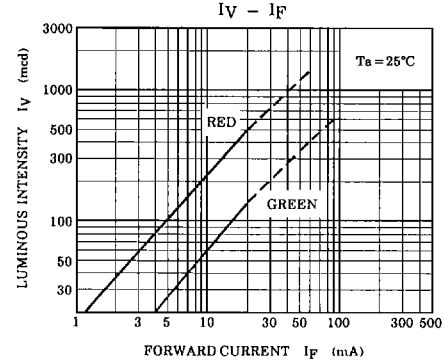
Please be careful of the followings.

- Soldering temperature : 260°C MAX. Soldering time : 3s MAX.
  (Soldering portion of lead : bellow the lead stopper)
- If the lead is formed, the lead should be formed bellow the lead stopper without forming stress to the resin. Soldering should be performed after lead forming.
- The moisture resistance of the device has been improved. However, if this device is to be used in high temperature and high humidity environments, sufficient evaluation should be performed to ensure the suitability for the application.

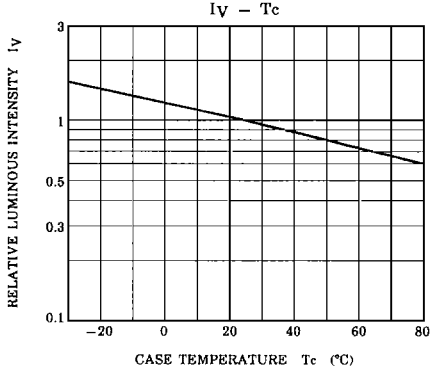
$I_F - V_F$



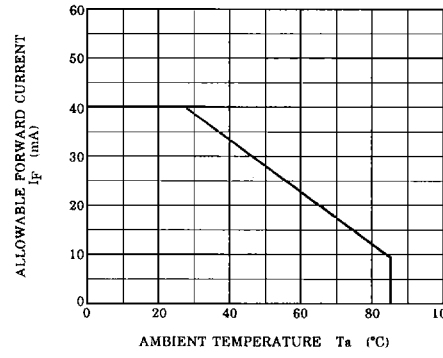
$I_V - I_F$



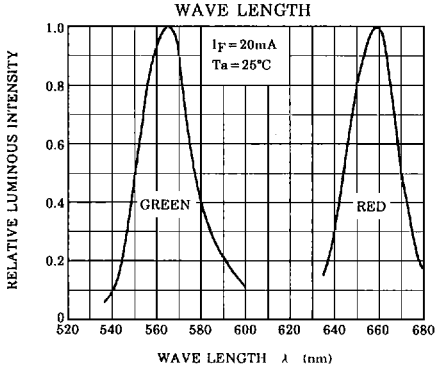
$I_V - Tc$



$I_F - Ta$



RELATIVE LUMINOUS INTENSITY – WAVE LENGTH



RADIATION PATTERN

Ta = 25°C