**TENTATIVE** 

TOSHIBA LED LAMP GAARAS RED / GAP GREEN LIGHT EMISSION

## **TLRAG296**

DUAL COLOR PANEL CIRCUIT INDICATOR

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 : IF=3~5mA (DC)

GREEN:  $I_F = 15 \sim 20 \text{mA}$  (DC)

Fast Response Time, Capable of Pulse Operation.

### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current (DC) (Note)	$I_{\mathbf{F}}$	40	mA
Reverse Voltage	$v_{R}$	4	v
Operating Temperature Range	Topr	-30~85	°C
Storage Temperature Range	$T_{ m stg}$	-40~100	°C

# Unit in mm 0.5 0.5 ANODE (RED) CATHODE (COMMON) ANODE (GREEN)

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IIBA		
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Weight: 0.37g

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

CHARACTERISTI	С	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	Red	$V_{\rm F}$ $I_{\rm F}$ = 20mA	T		2.0	2.4	3.7
	Green		_	2.15	2.8	V	
Reverse Current	Red	I <sub>R</sub> V <sub>R</sub> =4V	7	_	_	100	
	Green		_	_	5	$\mu$ A	
Luminous Intensity	Red	IV	IF=20mA	153	500	_	
	Green			85	150	<u> </u>	mcd
Peak Emission Wave	Red	$\lambda_{\mathbf{P}}$	I <sub>F</sub> =20mA		660		
Length	Green				567	_	nm
Spectral Line Half	Red	- Δλ	$\lambda$ I <sub>F</sub> =20mA		25	_	
Width	Green				25		nm

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

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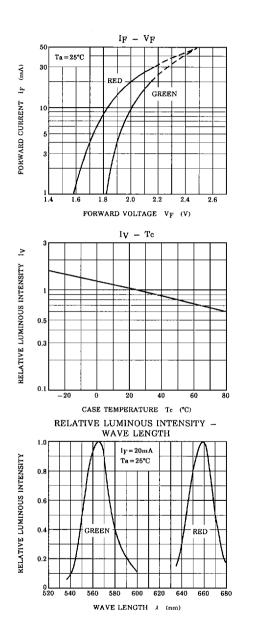
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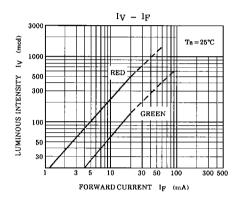
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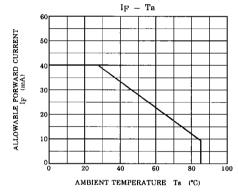
### **PRECAUTION**

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.







RADIATION PATTERN

 $Ta = 25^{\circ}C$ 

