TENTATIVE

TOSHIBA LED LAMP InGaA&P RED LIGHT EMISSION

LRH247

PANEL CIRCUIT INDICATOR

- InGaAlP RED LED
- Elliptical Lens: Colorless Clear Lens
- Wide Radiation
- Low Drive Current, High Intensity Red Light Emission
- Plastic Molded Colorless Clear Lens Provides for High Contrast of ON-OFF Ratio.
- Fast Response Time, Capable of Pulse Operation.
- APPLICATIONS: Suitable for Outdoor Message Signboard, Full Color Panel, Backlight.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Forward Current	$I_{ m F}$	50	mA	
Reverse Voltage	v_{R}	4	V	
Power Dissipation	P_{D}	125	mW	
Operating Temperature Range	$T_{ m opr}$	-30~85	°C	
Storage Temperature Range	$\mathrm{T_{stg}}$	-40~120	$^{\circ}\mathrm{C}$	

5.8 ± 0.2 5.0 ± 0.2 5.8 ± 0.2 ANODE

Unit in mm

Weight: 0.3 g

TOSHIBA

CATHODE

JEDEC EIAJ

ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Forward Voltage	$V_{\mathbf{F}}$	$I_{ m F}=20~{ m mA}$	_	1.9	2.5	V
Reverse Current	I_{R}	$V_R = 4 V$		_	50	μ A
Luminous Intensity	$I_{ m V}$	$I_F = 20 \text{ mA (Note)}$	153	450	_	mcd
Peak Emission Wavelength	λp	$I_{ m F}=20~{ m mA}$	_	644	_	nm
Spectral Line Half Width	Δλ	$I_{ m F}=20~{ m mA}$	_	18	_	nm
Dominant Wavelength	λd	$ m I_F = 20~mA$	_	630	_	nm

(Note): Lamps are classified into the following ranks according to their luminous intensity. Measurement tolerance for each limit is $\pm 15\%$.

 $P: 180\sim360 \text{ mcd}, Q: 320\sim640 \text{ mcd}, R: 560\sim1120 \text{ mcd}.$

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 Gallium arsenide (GaAs) is a substance used in the products described in this document. GaAs dust and fumes are toxic. Do not break, cut or pulverize the product, or use chemicals to dissolve them. When disposing of the products, follow the appropriate regulations. Do not dispose of the products with other industrial waste or with domestic garbage.

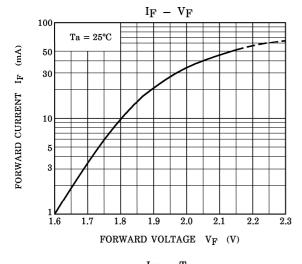
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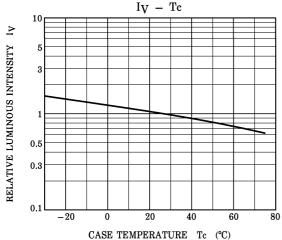
TOSHIBA TLRH247

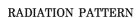
PRECAUTION

Please be careful of the followings

- Soldering temperature: 260°C max Soldering time: 3 s max (Soldering portion of lead: bellow the lead stopper)
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible LED lamp also emits some IR light. If a photodetector is located near the LED lamp, please ensure that it will not be affected by this IR light.







 $Ta = 25^{\circ}C$

