



COTCO LUMINANT DEVICE (HUIZHOU) LTD

Part #: LO484NHR4-B0G

**Product Description:** Red 100° Elliptical LED lamp with tinted diffused lens and stand offs.

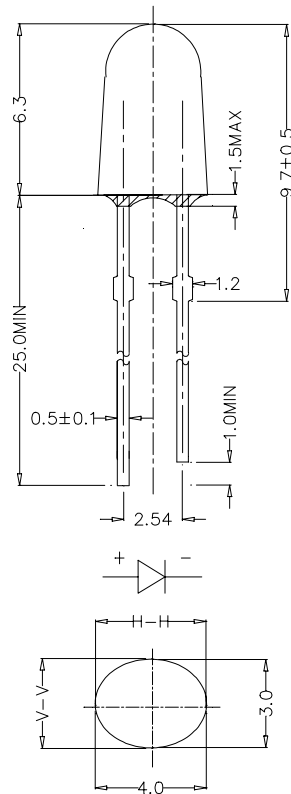
**Resin:** Epoxy

**Lens Color:** Water Transparent

**Lead Frame:** Ag Plating Copper Alloy

**Dice:** AlGaInP

### DIMENSION DRAWING



NOTES: 1. ALL DIMENSIONS ARE IN mm TOLERANCE IS: ±0.25mm  
UNLESS OTHERWISE NOTED.

2. AN EPOXY MENISCUS MAY EXTEND ABOUT 1.5mm  
DOWN THE LEADS.

3. BURR AROUND BOTTOM OF EPOXY MAY BE 0.5 mm MAX.

### For Pricing and Delivery Information Contact:

**Marktech Optoelectronics\***

120 Broadway, Menands, NY 12204

Phone: 800.984.5337 FAX: 518.432.7454

Web Site: [www.marktechopto.com](http://www.marktechopto.com)

\*Marktech is the exclusive North American Technical Sales and Marketing office for COTCO LED products

## SPECIFICATION

Absolute Maximum Rating (T<sub>a</sub> = 25•)

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I <sub>F</sub>	50	mA
Peak Forward Current pulse width •0.1msec duty •1/10	I <sub>FP</sub>	200	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	150	mW
Operation Temperature	T <sub>opr</sub>	-40 ~ + 95	•
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	•
Lead Soldering Temperature	T <sub>sol</sub>	260°C for 5sec (3mm from the base of the epoxy bulb)	

Initial Electrical/Optical Characteristics (T<sub>a</sub> = 25•)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	1.7	2.0	2.5	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V	---	---	100	••
Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	620	624	628	nm
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> = 20mA	280	450	---	mcd
50% Power Angle	2•½ H-H	I <sub>F</sub> = 20mA	---	100	---	deg
	2•½ V-V	I <sub>F</sub> = 20mA	---	45	---	deg

Luminous Intensity Combination

Rank	P	Q	R
Luminous Intensity (I <sub>f</sub> =20mA)	280-390 mcd	390-550 mcd	550-770 mcd

\*One normal delivery will include all ranks listed above.

The quantity ratio of the ranks is decided by COTCO.

Measurement Uncertainty of the Luminous intensity : ±15%

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GRAPHS

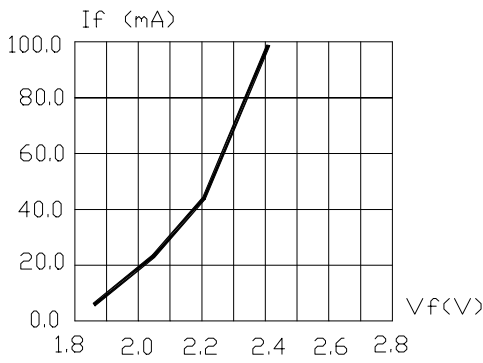


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

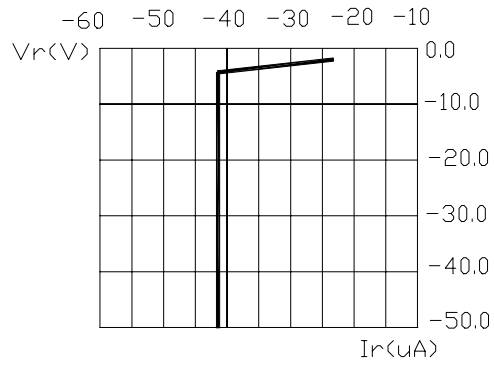


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

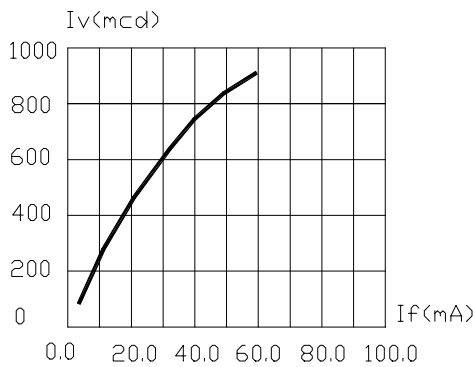


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

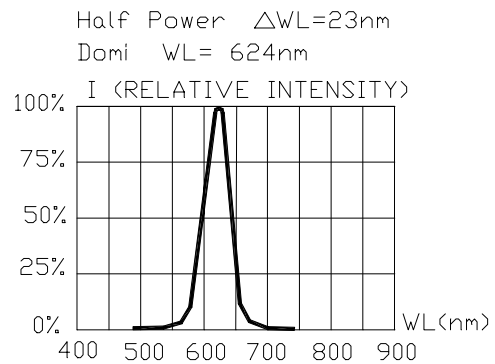


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

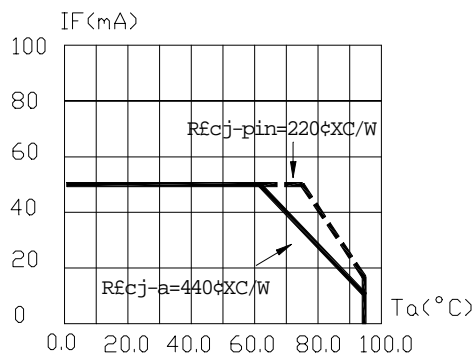


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON Tjmax=105°C

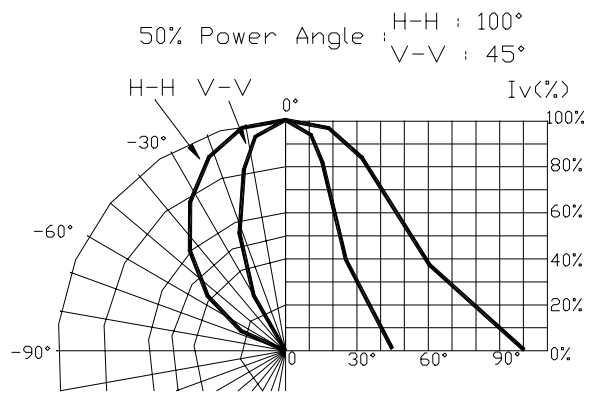


FIG.6 SPATIAL DISTRIBUTION.

1. Cathode PAD Area (0.18 × 0.18 inch<sup>2</sup>)
2. Height above nominal seating plane in inches (0.3 inch)

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