



COTCO LUMINANT DEVICE (HUIZHOU) LTD

Part #: LC461MHR4-95G

Product Description: Red 95° 5mm LED lamp with tinted diffused lens and stand offs.

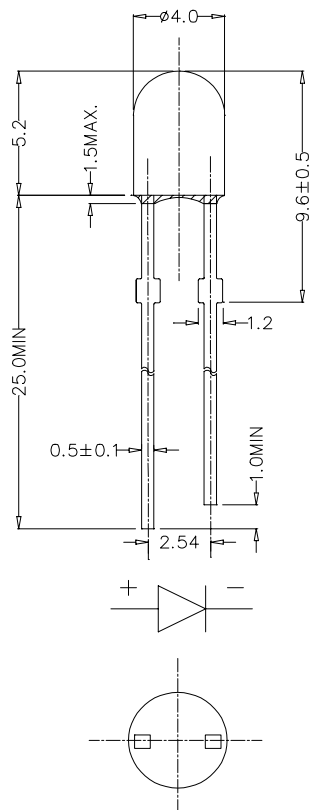
Resin: Epoxy

Lens Color: Tinted Diffused

Lead Frame: Ag Plating Copper Alloy

Dice: AlGaInP

DIMENSION DRAWING



- NOTES: 1. ALL DIMENSIONS ARE IN mm TOLERANCE IS. ± 0.25 mm 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.

COTCO-D-074 REV.0

Delivery Information Contact:

Marktech Optoelectronics*
 120 Broadway, Menands, NY 12204
 Phone: 800.984.5337 FAX: 518.432.7454
 Web Site: www.marktechopto.com

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

SPECIFICATION

Absolute Maximum Rating ($T_a = 25^\circ\text{C}$)

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I_F	50	mA
Peak Forward Current pulse width $\leq 0.1\text{msec}$ duty $\leq 1/10$	I_{FP}	200	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	150	mW
Operation Temperature	T_{opr}	-40 ~ +95	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +100	$^\circ\text{C}$
Lead Soldering Temperature	T_{sol}	260 $^\circ\text{C}$ for 5sec (3mm from the base of the epoxy bulb)	

Initial Electrical/Optical Characteristics ($T_a = 25^\circ\text{C}$)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	1.7	2.0	2.5	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	100	μA
Wavelength	λ_D	$I_F = 20\text{mA}$	620	624	628	nm
Luminous Intensity	I_V	$I_F = 20\text{mA}$	102	200	---	mcd
50% Power Angle	$2\theta_{\frac{1}{2}}$	$I_F = 20\text{mA}$	---	95	---	deg

Luminous Intensity Combination

Rank	L	M	N
Luminous Intensity ($I_f=20\text{mA}$)	102-145 mcd	145-200 mcd	200-280 mcd

*One normal delivery will include all ranks listed above.

The quantity ratio of the ranks is decided by COTCO.

Upper and lower tolerance limit of the Luminous flux $\pm 15\%$

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GRAPHS

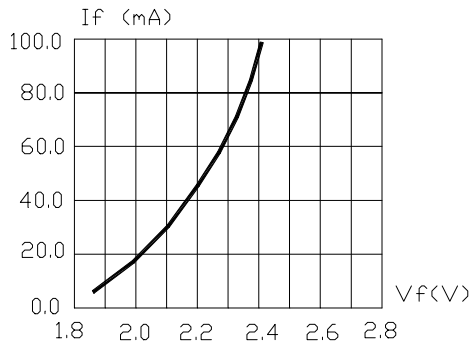


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

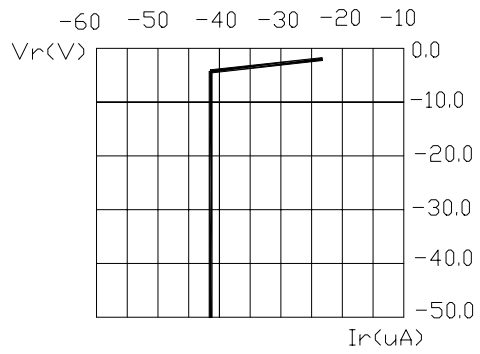


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

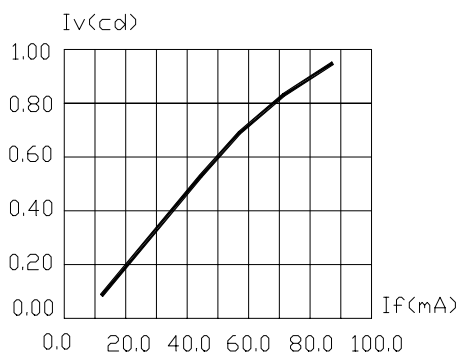


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

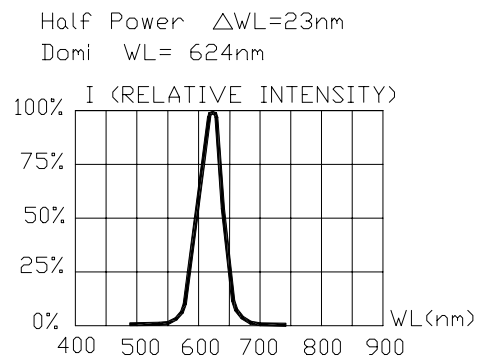


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

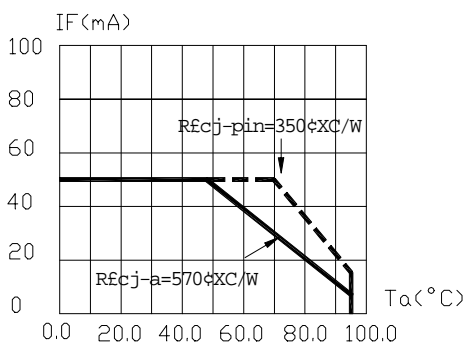


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON Tjmax=105°C

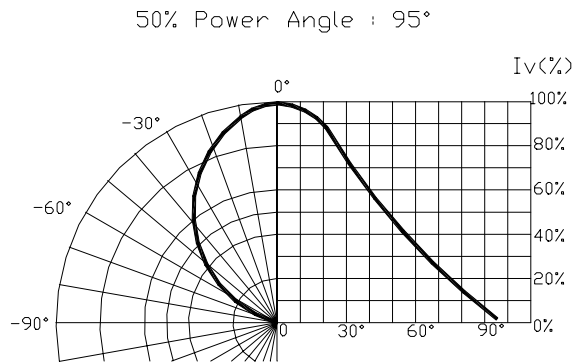


FIG.6 SPATIAL DISTRIBUTION.

- 1.Cathode PAD Area (0.18 × 0.18inch²)
- 2.Height above nominal seating plane in inches(0.3inch)

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