



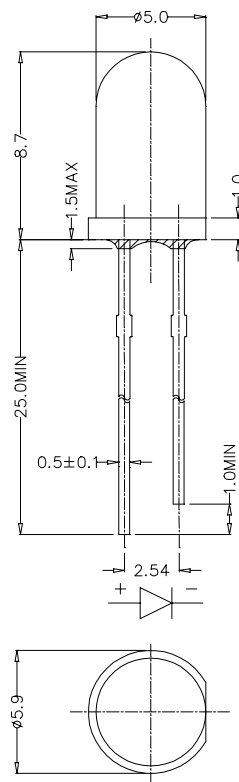
COTCO LUMINANT DEVICE (HUIZHOU) LTD

Part #: LC503MYL1-30Q

Product Description: Yellow 30° 5mm LED lamp with water transparent lens

Resin: Epoxy**Lens Color:** Water Transparent**Lead Frame:** Ag Plating Iron 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

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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

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

SPECIFICATION

Absolute Maximum Rating (T_a = 25°C)

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

Initial Electrical/Optical Characteristics (T_a = 25°C)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 20mA	1.7	2.0	2.5	V
Reverse Current	I _R	V _R = 5V	---	---	100	μ A
Wavelength	λ _D	I _F = 20mA	---	591	---	nm
Luminous Intensity	I _V	I _F = 20mA	770	1300	---	mcd
50% Power Angle	2θ _½	I _F = 20mA	---	30	---	deg

Ranks Combination

Dominant Wavelength \ Intensity	Rank S 770-1100 mcd	Rank T 1100-1520 mcd	Rank U 1520-2130 mcd
X3 587-590 nm	☒	☒	☒
X4 590-593 nm	☒	☒	☒
X5 593-596 nm	☒	☒	☒

*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 ±15%

Upper and lower tolerance limit of the Dominant Wavelength ±1.0nm

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GRAPHS

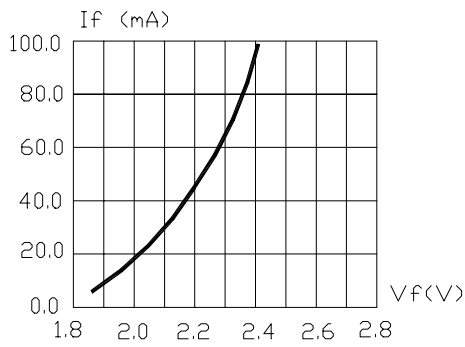


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

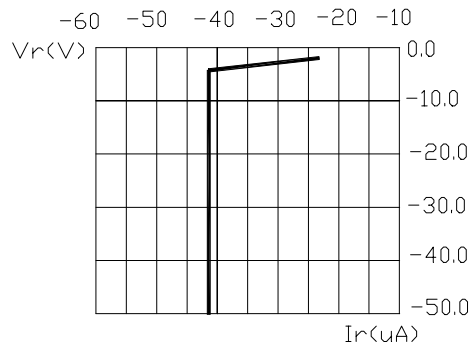


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

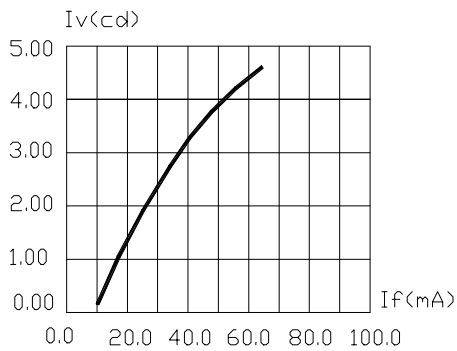


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

Half Power $\Delta\lambda=20\text{nm}$
Domi $\lambda=591\text{nm}$

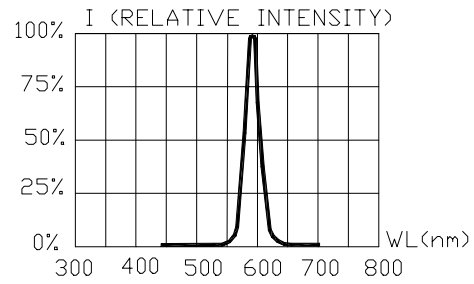


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

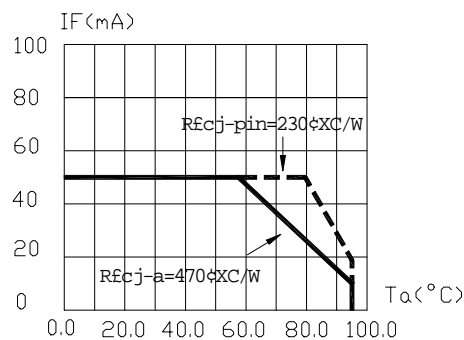


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax}=105^{\circ}\text{C}$

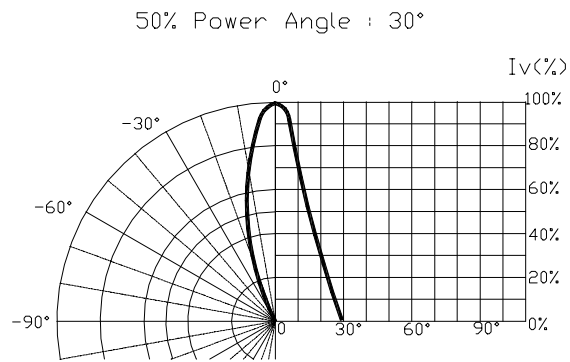


FIG.6 SPATIAL DISTRIBUTION.

1. Cathode PAD Area ($0.18 \times 0.18\text{inch}^2$)
2. Height above nominal seating plane in inches(0.3inch)

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