



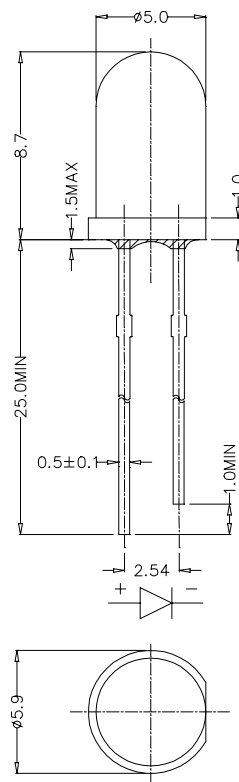
COTCO LUMINANT DEVICE (HUIZHOU) LTD

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

1/3

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

COTCO-D-074 REV.0

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

GRAPHS

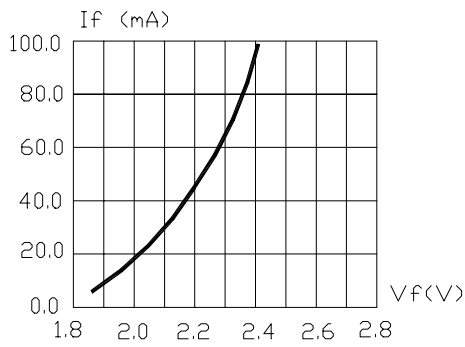


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

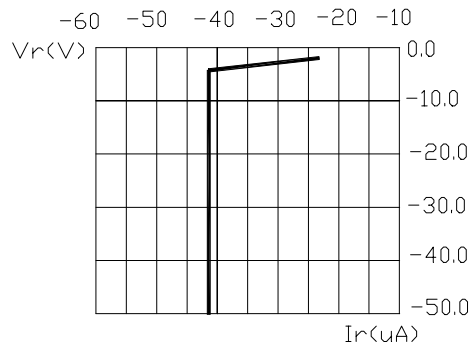


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

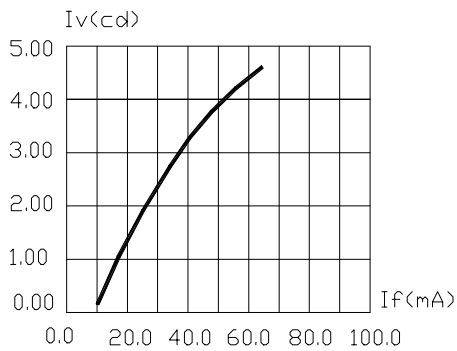


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

Half Power $\Delta WL = 20nm$
Domi WL = 591nm

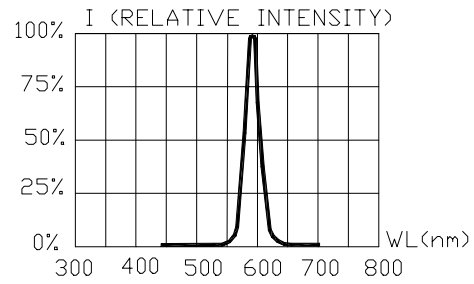


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

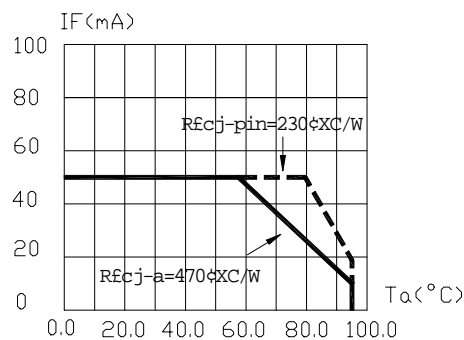


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax} = 105^\circ\text{C}$

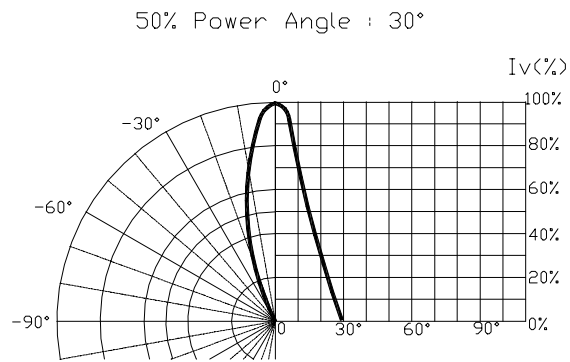


FIG.6 SPATIAL DISTRIBUTION.

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

COTCO-D-074 REV.0

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