



## SPECIFICATION

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

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	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C
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°C)

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	μ A
Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	---	591	---	nm
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> = 20mA	3000	5500	---	mcd
50% Power Angle	2θ <sub>½</sub>	I <sub>F</sub> = 20mA	---	6	---	deg

Ranks Combination

Intensity		Rank W 3000-4180 mcd	Rank X 4180-5860 mcd	Rank Y 5860-8200 mcd
Dominant Wavelength				
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:

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## 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

GRAPHS

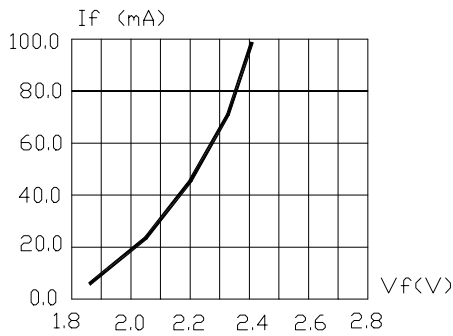


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

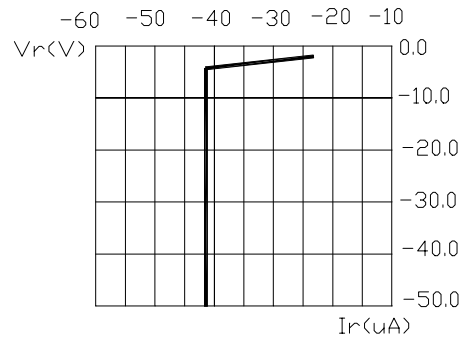


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

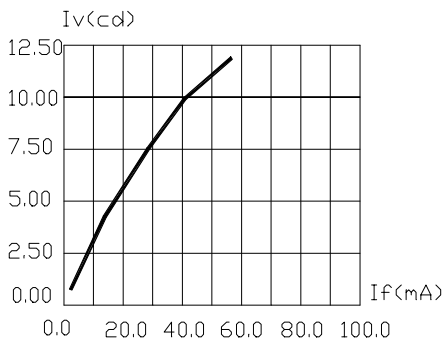


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

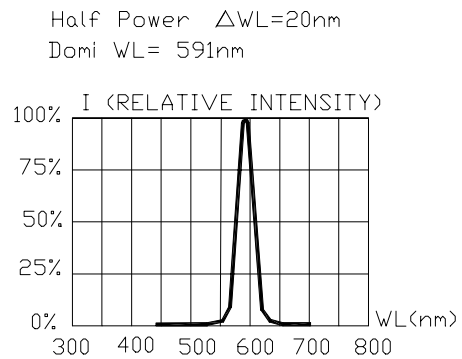


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

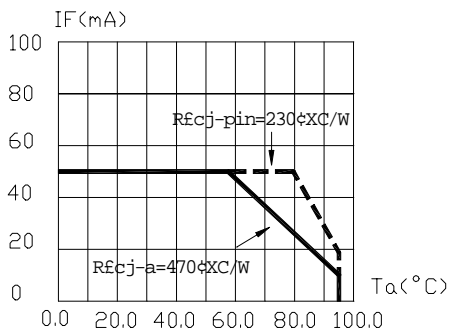


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON  $T_{jmax}=105^{\circ}C$

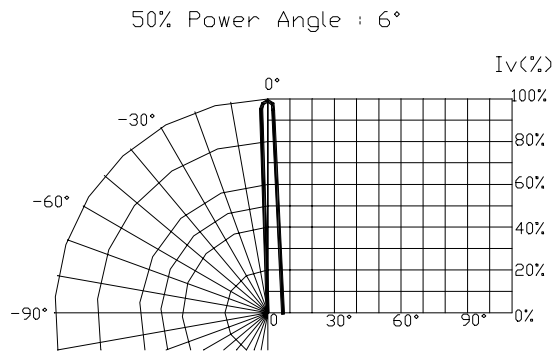


FIG.6 SPATIAL DISTRIBUTION.

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

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