

SPECIFICATION

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

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I_F	25	mA
Peak Forward Current pulse width $\leq 0.1\text{msec}$ duty $\leq 1/10$	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	120	mW
Operation Temperature	T_{opr}	-20 ~ + 75	$^\circ\text{C}$
Storage Temperature	T_{stg}	-30 ~ + 80	$^\circ\text{C}$
Lead Soldering Temperature	T_{sol}	260 $^\circ\text{C}$ for 3sec (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	$I_F = 20\text{mA}$	3.2	3.6	4.2	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	100	μA
Wavelength	λ_D	$I_F = 20\text{mA}$	---	525	---	nm
Luminous Intensity	I_V	$I_F = 20\text{mA}$	4180	6000	---	mcd
50% Power Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	---	15	---	deg

Ranks Combination

Intensity Dominant Wavelength	Rank X 4180-5860 mcd	Rank Y 5860-8200 mcd	Rank Z 8200-12000 mcd
X7 520-525 nm	☒	☒	☒
X8 525-530 nm	☒	☒	☒
X9 530-535 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 $\pm 15\%$ Upper and lower tolerance limit of the Dominant Wavelength $\pm 1.0\text{nm}$

COTCO-D-074 REV.0

Pricing and Delivery Information Contact:

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Marktech Optoelectronics*

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

GRAPHS

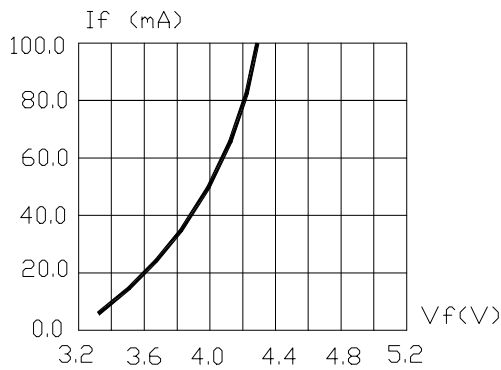


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

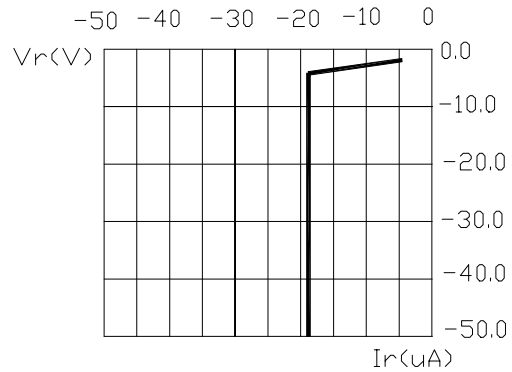


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

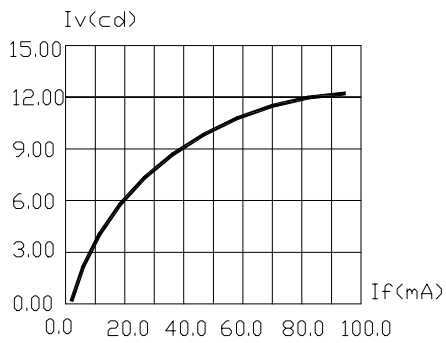


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

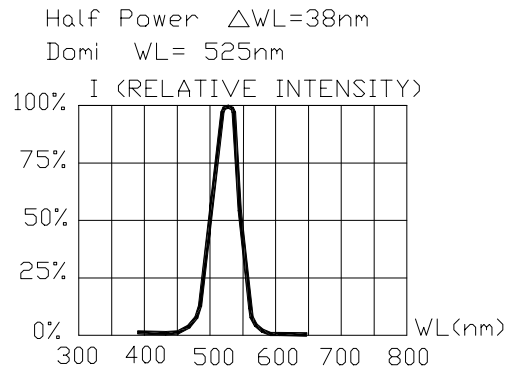


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

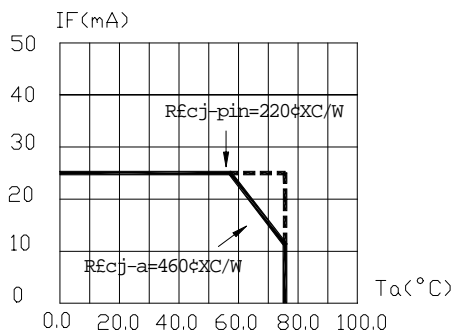


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE. DERATING BASED ON $T_{jmax} = 95^\circ\text{C}$

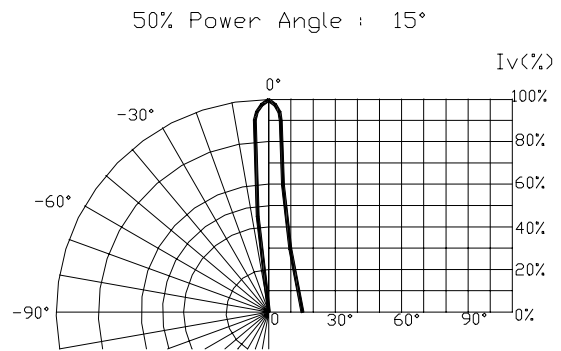


FIG.6 SPATIAL DISTRIBUTION.

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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