



Crest Technologies Pty Ltd
 46/41-49 Norcal Rd Nunawading 3131 Australia
 Tel: (03) 9873 8830 Fax: (03) 9873 8799
 Email: sales@cresttech.com.au
 Web: http://www.cresttech.com.au

Model: L-5T2CQW-D5

50 Degree 5mm Round LED Lamp in White Color with Water Transparent Lens and Stopper

Dice Material:

InGaN

Applications:

- Advertising Signs
- Indicators
- LCD Back Light
- Illuminations

Absolute Maximum Ratings at Ta = 25°C

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I _F	25	mA
Peak Forward Current*	I _{FP}	100	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	105	mW
Operation Temperature	T _{opr}	-20 ~ + 75	°C
Storage Temperature	T _{stg}	-30 ~ + 80	°C
Lead Soldering Temperature	T _{sol}	Max.260°C for 3 sec Max. (3mm from the base of the epoxy bulb)	

*pulse width <=0.1msec duty <=1/10

Typical Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 20mA	---	3.6	4.2	V
Forward Voltage	V _F	I _F = 1.0μA	1.7	---	2.5	V
Reverse Current	I _R	V _R = 5V	---	---	100	μA
Luminous Intensity	I _v	I _F = 20mA	1100	1800	---	mcd
Chromaticity Coordinates	x	I _F = 20mA	---	0.31	---	---
	y	I _F = 20mA	---	0.32	---	---
50% Power Angle	2θ½	I _F = 20mA	---	50	---	deg

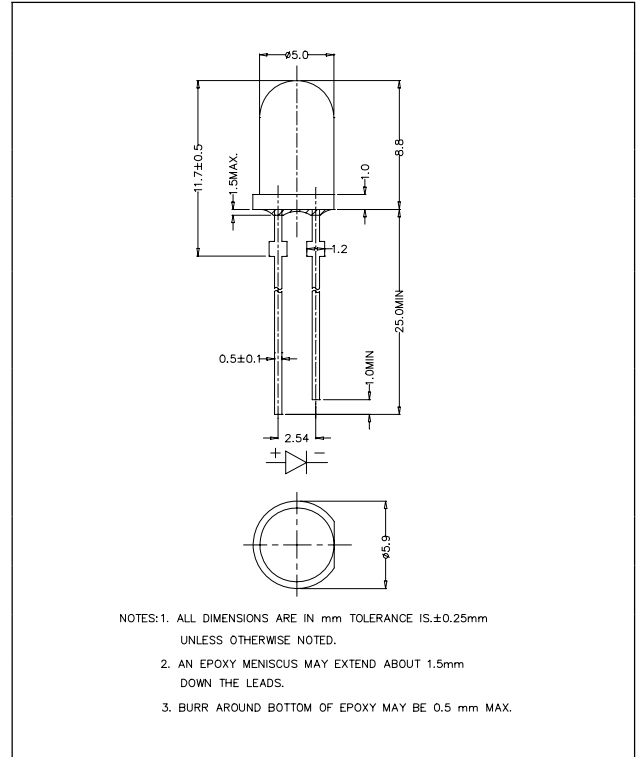
Ranks Combination (I_F = 20mA)

Rank	T	U	V
Luminous Intensity	1100-1520 mcd	1520-2130 mcd	2130-3000 mcd

Rank	a				b1				b2				c				
Chromaticity Coordinates	x	0.280	0.264	0.283	0.296	0.287	0.283	0.330	0.330	0.296	0.287	0.330	0.330	0.330	0.330	0.361	0.356
	y	0.248	0.267	0.305	0.276	0.295	0.305	0.360	0.339	0.276	0.295	0.339	0.318	0.318	0.360	0.385	0.351

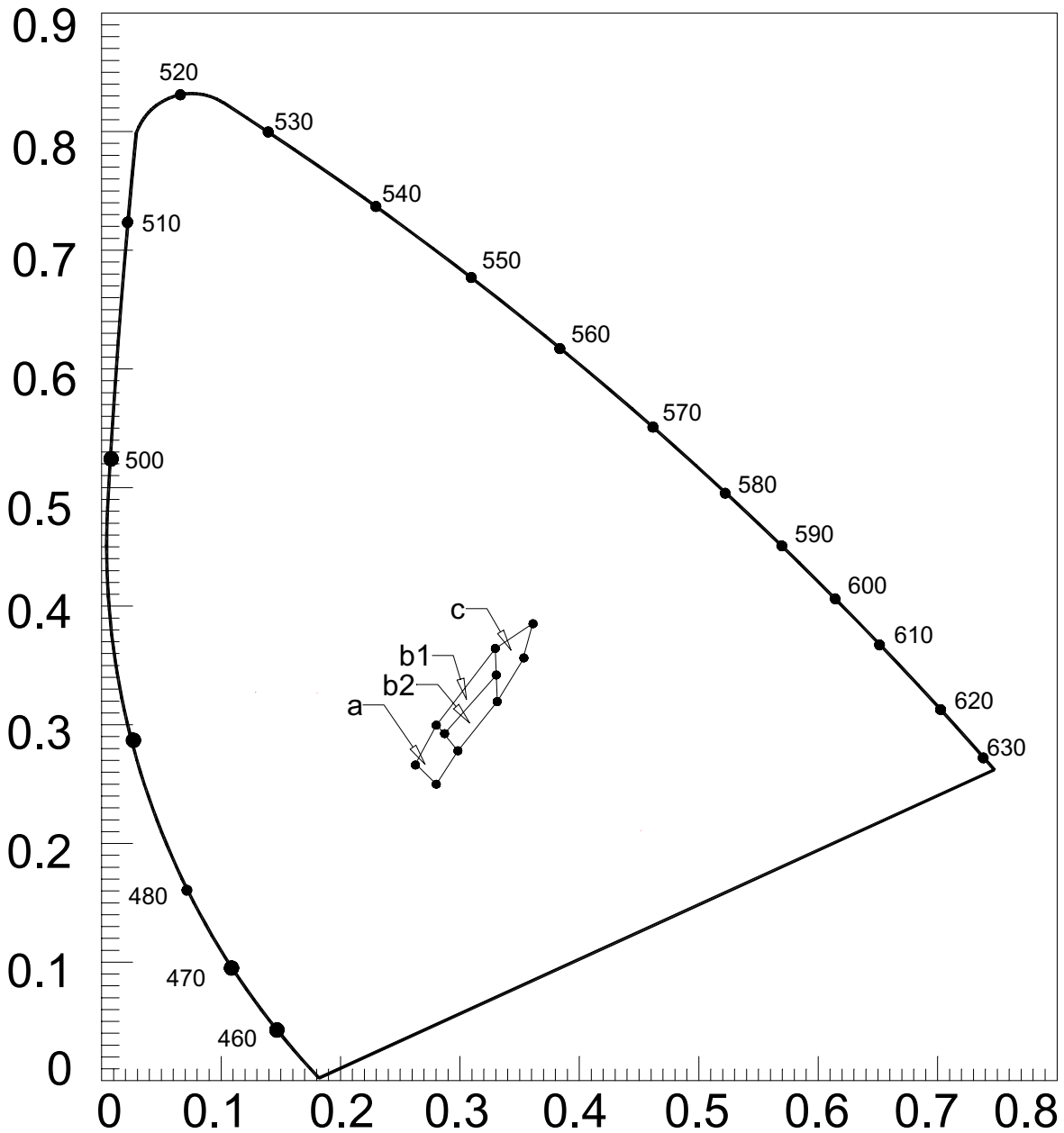
Rank	V8	V9	V10	V11	V12	V13
Voltage	3.0-3.2 V	3.2-3.4 V	3.4-3.6 V	3.6-3.8 V	3.8-4.0 V	4.0-4.2 V

Dimension Drawing



CIE Chromaticity Diagram

(y)



(x)

Graphs

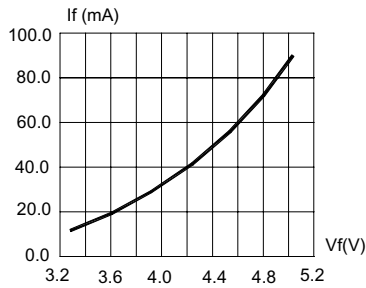


FIG. 1 FORWARD CURRENT VS. FORWARD VOLTAGE.

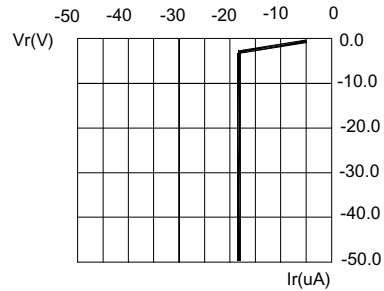


FIG. 2 REVERSE CURRENT VS. REVERSE VOLTAGE.

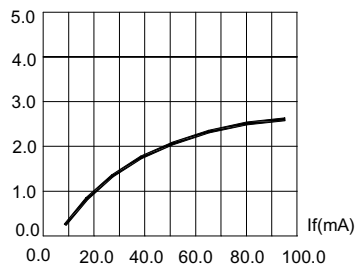


FIG. 3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

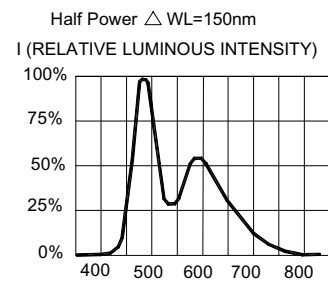


FIG. 4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

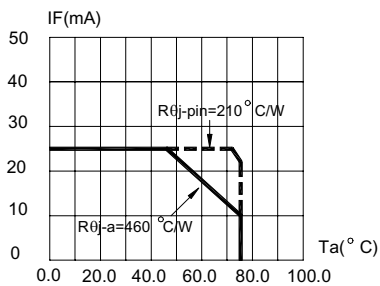


FIG. 5 MAXIMUM FORWARD DC CURRENT VS. AMBIENT TEMPERATURE ($T_{jmax}=95^{\circ}C$)

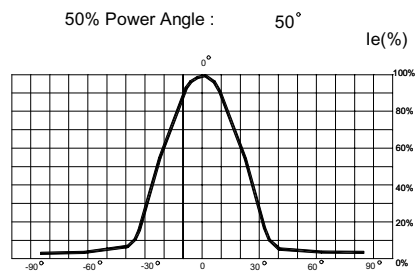


FIG. 6 FAR FIELD PATTERN

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