

SPECIFICATION FOR COTCO LED LAMP

MODEL No : LO566NBL4-70G-MT
DOC. No : A 01Jul03

Description:

70 Degree Oval LED Lamp in Blue
Color with Tinted Diffused Lens and
Stopper

*This specification is only for Marktech

Dice Material: InGaN

Confirmed
by Customer: _____

Date: _____

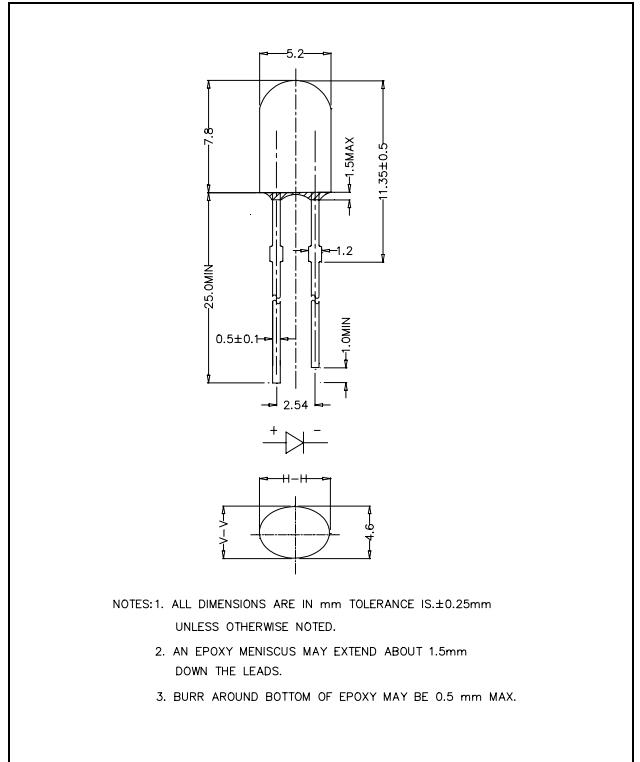


COTCO LUMINANT DEVICE (HUIZHOU) LTD.

Applications:

- Variable Message Signs
- Message Board

Dimension Drawing



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	120	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
Reverse Current	I _R	V _R = 5V	---	---	100	μA
Dominant Wavelength	λ _D	I _F = 20mA	465	470	475	nm
Luminous Intensity	I _V	I _F = 20mA	145	240	---	mcd
50% Power Angle	2θ _{1/2} H-H	I _F = 20mA	---	70	---	deg
	2θ _{1/2} V-V	I _F = 20mA	---	40	---	deg

Ranks Combination (I_F = 20mA)

Rank	M	N	P
Luminous Intensity	145-200 mcd	200-280 mcd	280-390 mcd

Rank	X4	X5
Dominant Wavelength	465-470 nm	470-475 nm

Rank	V9	V10	V11	V12	V13
Voltage	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

Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be determined by Cotco.
- 2) Tolerance of measurement of luminous intensity is ±15%.
- 3) Tolerance of measurement of dominant wavelength is ±1nm.
- 4) Tolerance of measurement of Vf is ±0.05 V.
- 5) Packaging methods are available for selection, please refer to PACKAGING STANDARD.
- 6) Please refer to LED LAMP RELIABILITY TEST STANDARD for reliability test conditions.

Graphs

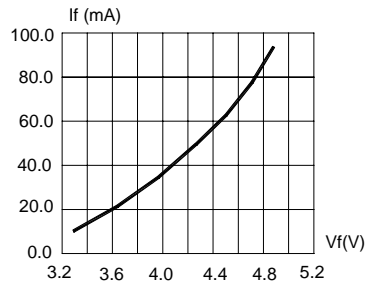


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

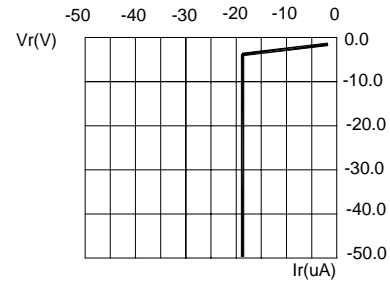


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

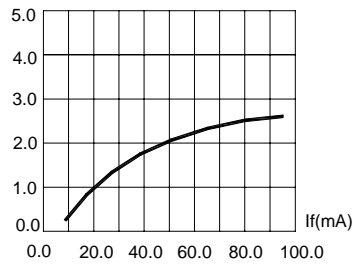


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

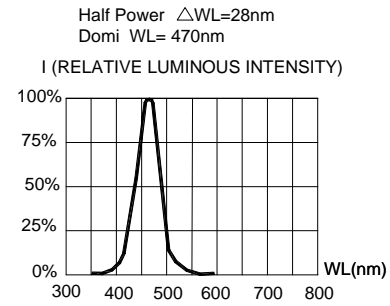


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

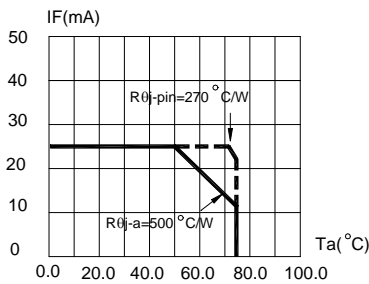


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ($T_{jmax}=95^{\circ}C$)

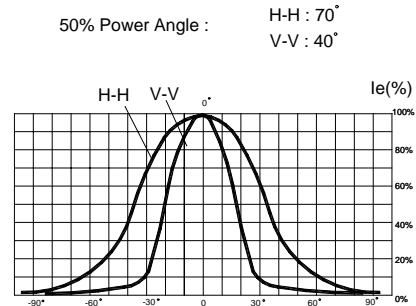


FIG.6 FAR FIELD PATTERN

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

Items	Signatures	Date	Revision History	
Prepared by	LiuZM	2003/07/01	DOC. No.	CHANGE DESCRIPTION
Checked by	ZouGR	2003/07/01		
Approved by	David	2003/07/01		
ECN#	ECN-H20030213			

Data is subject to change without prior notice.

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Obsoletes Doc: ---