

SPECIFICATION FOR COTCO LED LAMP

MODEL No : LO566AYL4-70G-MT
DOC. No : A 10May04

Description:

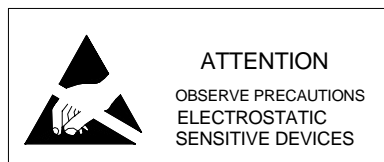
70 Degree 5mm Oval LED Lamp in
Amber Color with Tinted Diffused Lens
and Stopper

*This specification is only for Marktech

Dice Material: AlGaInP

Confirmed
by Customer: _____

Date: _____



COTCO LUMINANT DEVICE (HUIZHOU) LTD.



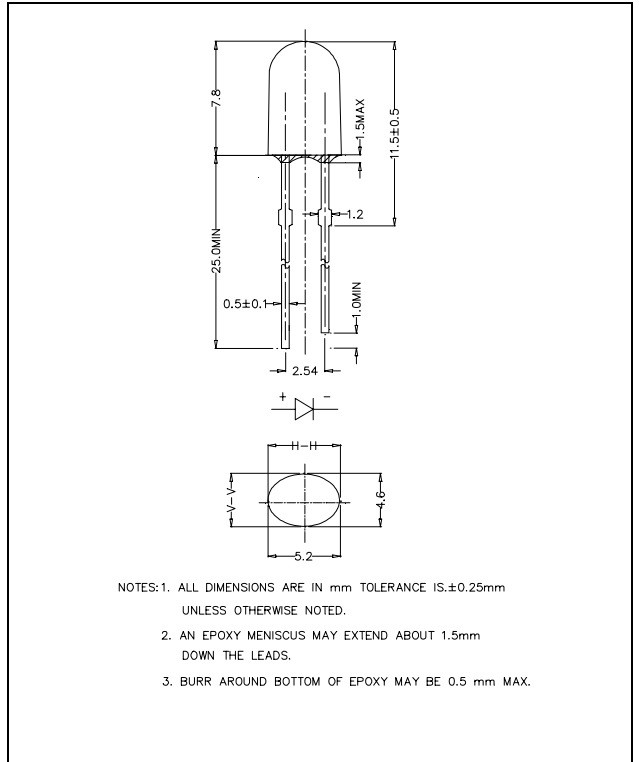
For part availability and ordering information please call Toll Free: 800.984.5337
Website: www.marktechopto.com | Email: info@marktechopto.com

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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	50	mA
Peak Forward Current*	I_{FP}	200	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	130	mW
Operation Temperature	T_{opr}	-40 ~ + 95	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Lead Soldering Temperature	T_{sol}	Max.260°C for 5 sec Max. (3mm from the base of the epoxy bulb)	

*pulse width ≤ 0.1 msec duty $\leq 1/10$

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

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20$ mA	---	2.1	2.6	V
Reverse Current	I_R	$V_R = 5$ V	---	---	100	μ A
Dominant Wavelength	λ_D	$I_F = 20$ mA	584	591	596	nm
Luminous Intensity	I_V	$I_F = 20$ mA	770	1500	---	mcd
50% Power Angle	$2\theta_{\frac{1}{2}H-H}$	$I_F = 20$ mA	---	70	---	deg
	$2\theta_{\frac{1}{2}V-V}$	$I_F = 20$ mA	---	40	---	deg

Ranks Combination ($I_F = 20$ mA)

Rank	S	T	U
Luminous Intensity	770-1100 mcd	1100-1520 mcd	1520-2130 mcd

Rank	X2	X3	X4	X5
Dominant Wavelength	584-587 nm	587-590 nm	590-593 nm	593-596 nm

Rank	V1	V2	V3	V4	V5
Voltage	1.6-1.8 V	1.8-2.0 V	2.0-2.2 V	2.2-2.4 V	2.4-2.6 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 $\pm 15\%$.
- 3) Tolerance of measurement of dominant wavelength is ± 1 nm.
- 4) Tolerance of measurement of V_f 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

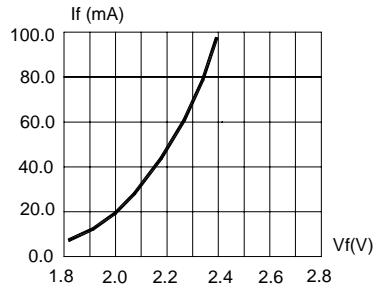


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

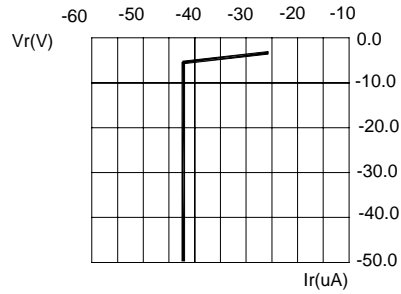


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

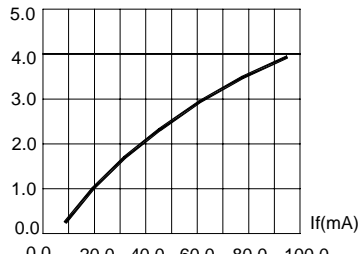


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

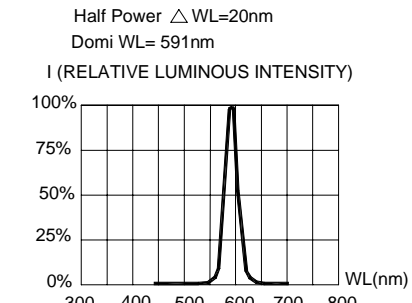


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

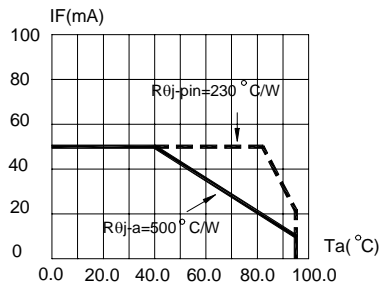


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ($T_{jmax}=105^{\circ}\text{C}$)

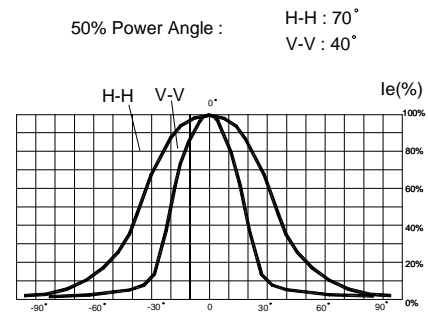


FIG.6 FAR FIELD PATTERN

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

Items	Signatures	Date	Revision History	
Prepared by	LiuZM	2004/05/10	DOC. No.	CHANGE DESCRIPTION
Checked by	ZouGR	2004/05/10		
Approved by	David	2004/05/10		
ECN#	ECN-H20040116			

Data is subject to change without prior notice.

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Obsoletes Doc: ---