

SPECIFICATION FOR COTCO LED LAMP

Document No: SPE/LO566PYO2-65H-A-MT
Model No : LO566PYO2-65H-A-MT
Rev. No: 01
Date: 2006-12-06

Description:

65 Degree 5mm Oval LED Lamp in Yellow
Orange Color with White Diffused Lens and No
Stopper

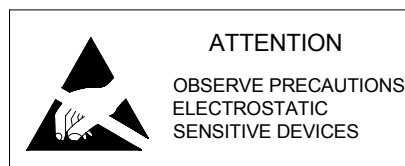
*This specification is only for MT

Dice Material: AlGaInP

Confirmed

by Customer: _____

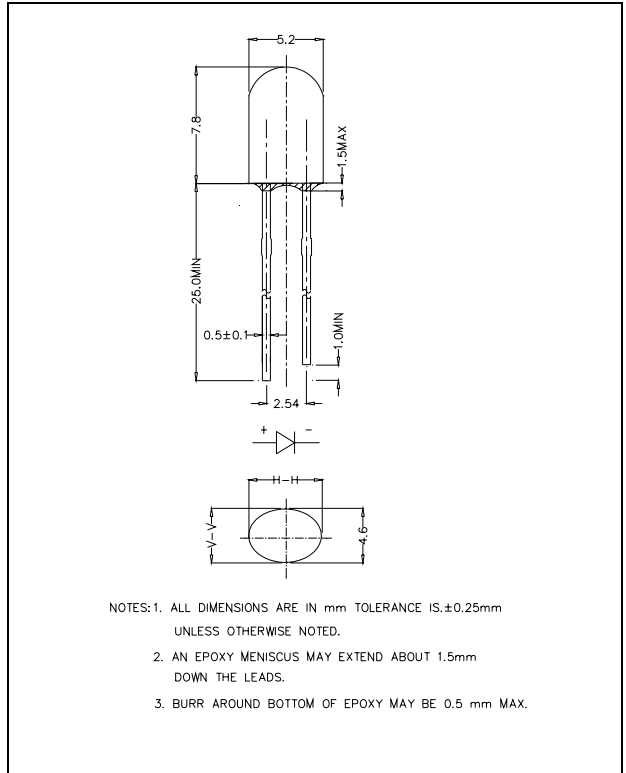
Date: _____



Applications:

- Variable Message Signs
- Message Board

Dimension Drawing



Absolute Maximum Ratings at Ta = 25°C

Items	Symbol	Absolute maximum Rating	Unit
Forward Current* ²	I _F	50	mA
Peak Forward Current* ¹	I _{FP}	200	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	125	mW
Operation Temperature	T _{opr}	-40 ~ + 95	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Lead Soldering Temperature	T _{sol}	Max.260°C for 3 sec Max. (3mm from the base of the epoxy bulb)	

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

*2 For long term performance the drive currents between 10mA and 30mA are recommended. Please contact COTCO sales representative for more information on recommended drive conditions.

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

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 20mA	---	2.0	2.5	V
Reverse Current	I _R	V _R = 5V	---	---	100	μA
Dominant Wavelength	λ _D	I _F = 20mA	600	605	609	nm
Luminous Intensity	I _v	I _F = 20mA	770	1300	---	mcd
50% Power Angle	2θ _{½H-H}	I _F = 20mA	---	65	---	deg
	2θ _{½V-V}	I _F = 20mA	---	30	---	deg

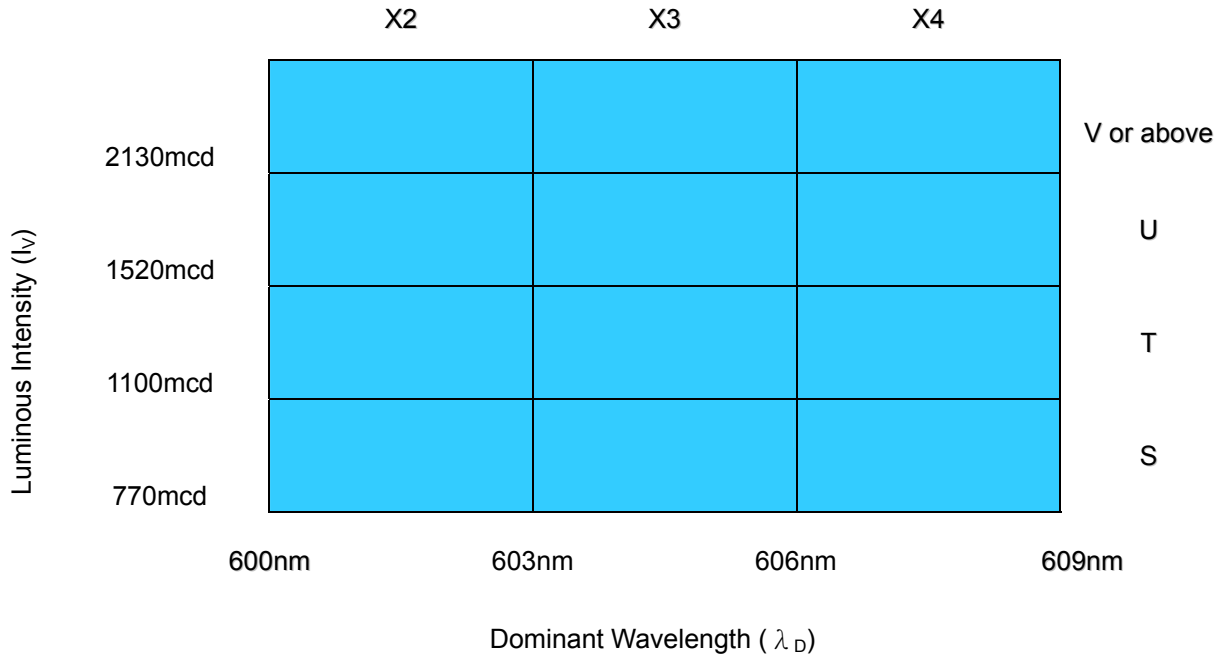
Standard bins for LO566PYO2-65H-A-MT ($I_F = 20mA$):

Lamps are sorted to Luminous Intensity – I_V , V_F & Dominant Wavelength – λ_D bins shown.

Orders for LO566PYO2-65H-A-MT may be filled with any or all bins contained as below.

All Luminous Intensity – I_V , V_F & Dominant Wavelength – λ_D values shown and specified are at $I_F = 20mA$.

* **S+**



* S+ indicates Luminous Intensity is at S bin or above.

Forward Voltage (V_F)

Rank	V1	V2	V3	V4	V5
Voltage	1.6-1.8V	1.8-2.0V	2.0-2.2V	2.2-2.4V	2.4-2.6V

Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be based on the Dices distribution.
- 2) Pb content <1000PPM.
- 3) Tolerance of measurement of luminous intensity is $\pm 15\%$.
- 4) Tolerance of measurement of dominant wavelength is $\pm 1nm$.
- 5) Tolerance of measurement of V_f is $\pm 0.05 V$.
- 6) Packaging methods are available for selection, Please refer to PACKAGING STANDARD.
- 7) Please refer to LED LAMP RELIABILITY TEST STANDARD for reliability test conditions.
- 8) Please refer to APPLICATION NOTES for Application.

Graphs

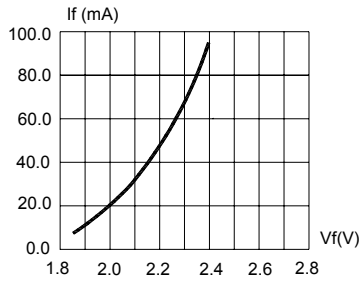


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

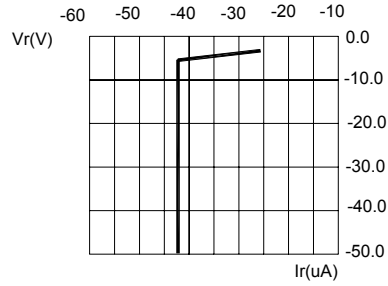


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

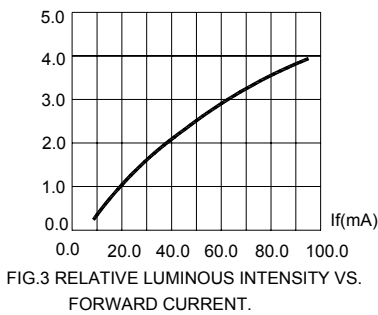


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

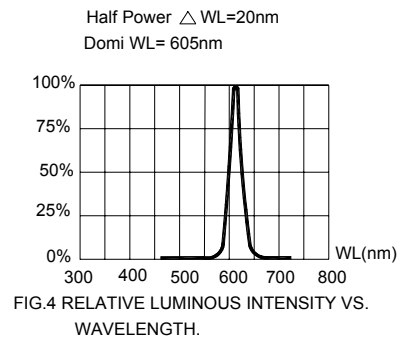


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

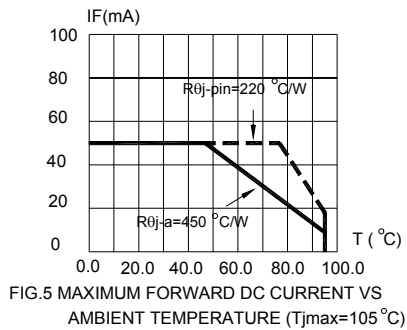


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ($T_{jmax}=105^{\circ}C$)

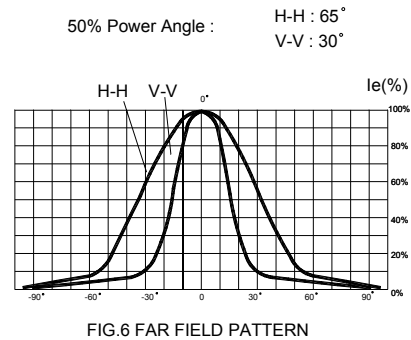


FIG.6 FAR FIELD PATTERN

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

Items	Signatures	Date
Prepared by	LiuZM	2006-12-06
Checked by	MaJF	2006-12-06
Approved by	David	2006-12-06
FCN#	FCN20060	

Revision History		
Rev. No	Date	Change Description

Data is subject to change without prior notice; please refer to COTCO Website for the latest version.

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