



SPECIFICATION

Description:

70 Degree Oval LITEFO Lamp in
Amber Color with Water Transparent
Lens and Stopper

Dice Material: AlGaInP

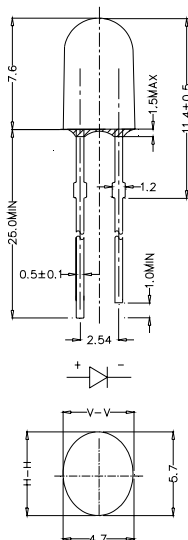
MODEL No : FO570ATYL11



Confirmed
by Customer: _____

Date: _____

Dimension Drawing



NOTES: 1. ALL DIMENSIONS ARE IN mm TOLERANCE IS ± 0.25 mm
UNLESS OTHERWISE NOTED.

2. AN EPOXY MENISCUS MAY EXTEND ABOUT 1.5mm
DOWN THE LEADS.

3. BURR AROUND BOTTOM OF EPOXY MAY BE 0.5 mm MAX.

Applications

- Variable Message Signs
- Message Board

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	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 3 sec Max. (3mm from the base of the epoxy bulb)	

*1 pulse width $\leq 0.1\text{msec}$ duty $\leq 1/10$

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

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

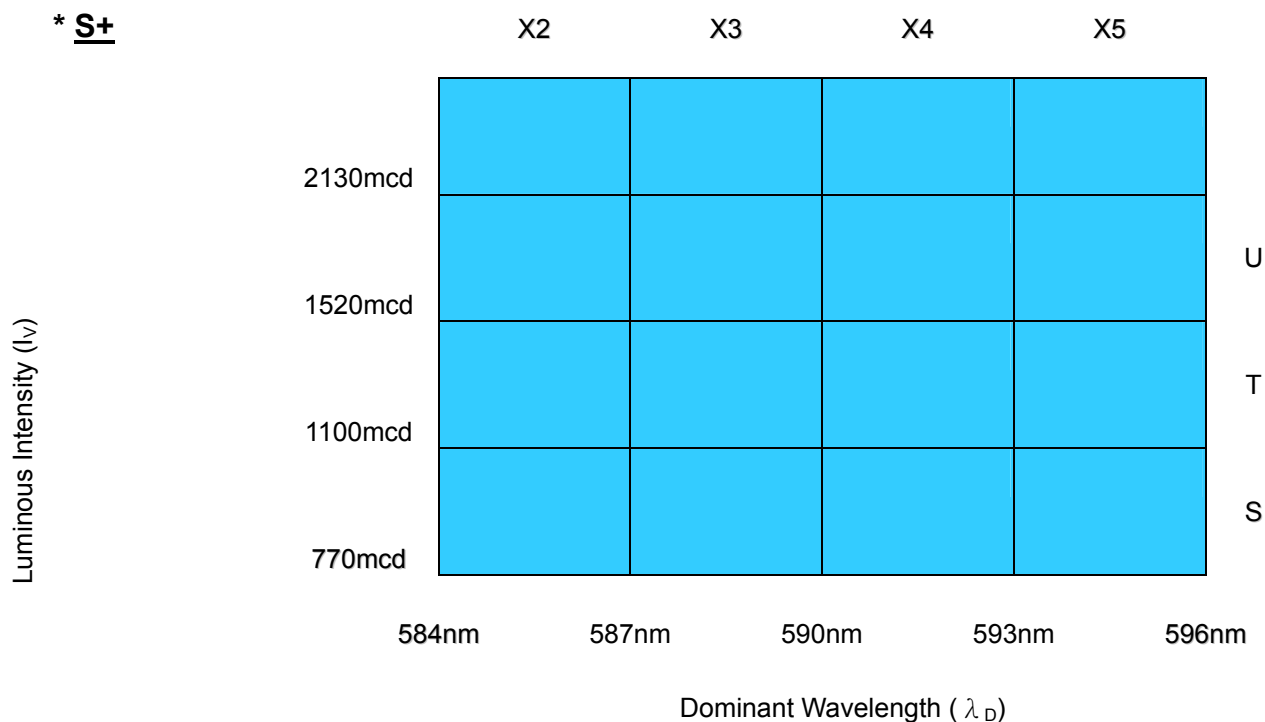
Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	---	2.3	2.6	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	100	μA
Dominant Wavelength	λ_D	$I_F = 20\text{mA}$	584	591	596	nm
Luminous Intensity	I_V	$I_F = 20\text{mA}$	770	1100	---	mcd
50% Power Angle	$2\theta_{\frac{1}{2}} \text{ H-H}$	$I_F = 20\text{mA}$	---	70	---	deg
	$2\theta_{\frac{1}{2}} \text{ V-V}$	$I_F = 20\text{mA}$	---	40	---	deg

Standard bins for FO570ATYL11 ($I_F = 20\text{mA}$):

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

Orders for FO570ATYL11 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 $I_F = 20\text{mA}$.



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

Forward Voltage (V_F)

Rank	V2	V3	V4	V5
Voltage	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 determined by LITEFO.
- 2) Pb content <1000PPM.
- 3) Tolerance of measurement of luminous intensity is $\pm 15\%$.
- 4) Tolerance of measurement of dominant wavelength is $\pm 1\text{nm}$.
- 5) Tolerance of measurement of V_f is $\pm 0.05\text{V}$.

Graphs

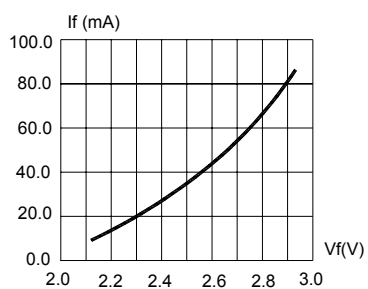


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

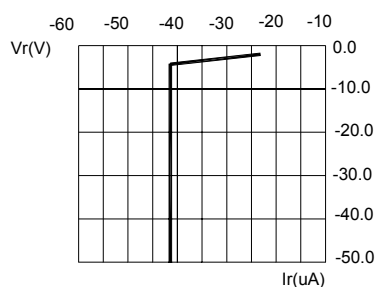


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

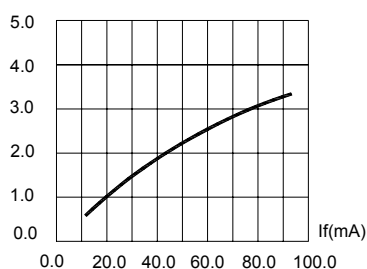


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

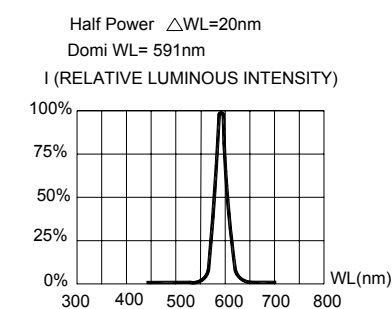


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

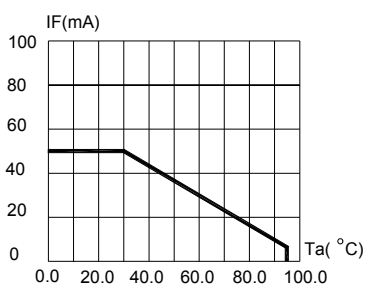


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ($T_{jmax}=105^{\circ}\text{C}$)

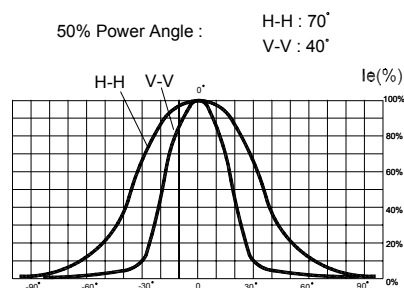


FIG.6 FAR FIELD PATTERN

Items	Signatures	Date	Revision History	
Prepared by	Lois	2004/08/16	DOC. No.	CHANGE DESCRIPTION
Checked by	Jarvis	2004/08/16		
Approved by	D.W.Liu	2004/08/16		
ECN#	ECN-H20040219			

Data is subject to change without prior notice.

Obsoletes Doc: ---