



SPECIFICATION

Description:

30 Degree 5mm Round LITEFO Lamp
in Amber Color with Water Transparent
Lens and No Stopper

Dice Material: GaP

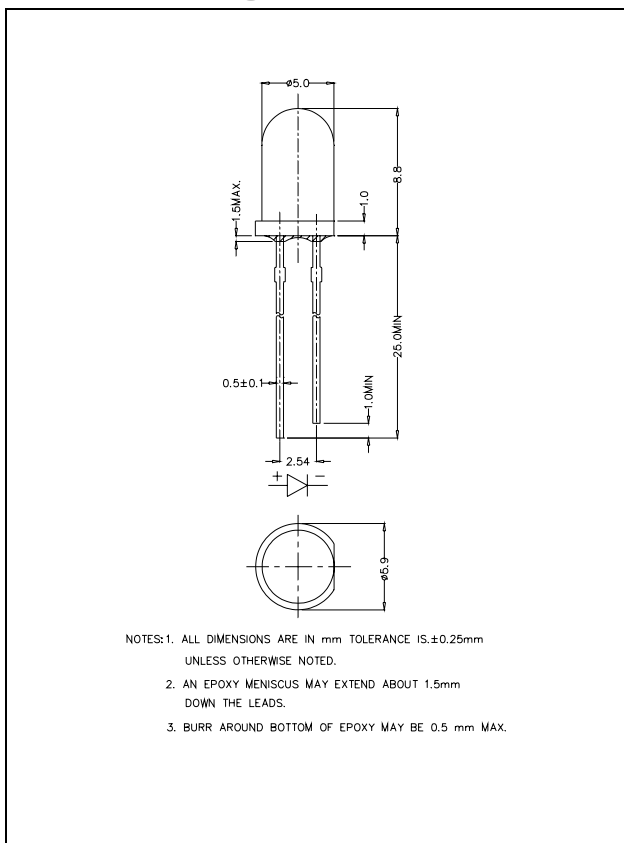
MODEL No : FC530ADYL21



Confirmed
by Customer: _____

Date: _____

Dimension Drawing



Applications

- Advertising Signs
- Indicators
- LCD Back Light
- Moving Message Sign

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

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}	$-40 \sim +95$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-40 \sim +100$	$^\circ\text{C}$
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 ($T_a = 25^\circ\text{C}$)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	---	2.1	2.6	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	100	μA
Dominant Wavelength	λ_D	$I_F = 20\text{mA}$	---	590	---	nm
Luminous Intensity	I_v	$I_F = 20\text{mA}$	770	1500	---	mcd
50% Power Angle	$2\theta_{1/2}$ H-H	$I_F = 20\text{mA}$	---	30	---	deg

Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be determined by LITEFO.
- 2) Pb content $< 1000\text{PPM}$.
- 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

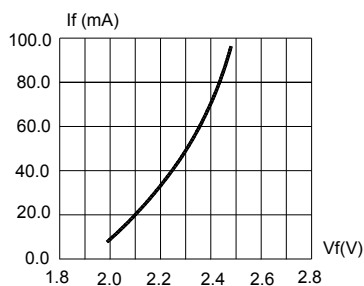


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

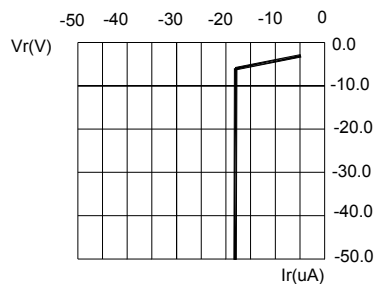


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

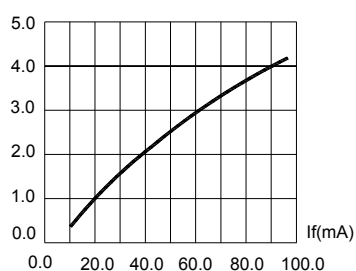


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

Half Power Δ WL=20nm
Domi WL= 591nm

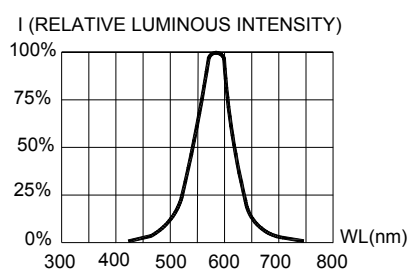


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

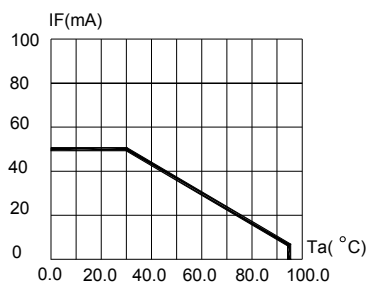


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ($T_{jmax}=105^{\circ}\text{C}$)

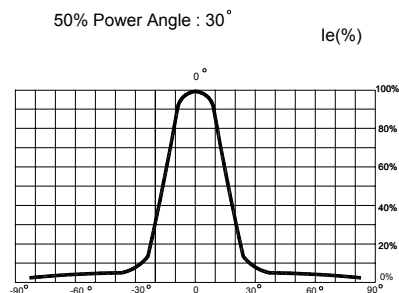


FIG.6 FAR FIELD PATTERN

Items	Signatures	Date	Revision History	
Prepared by	Lois	2004/10/07	DOC. No.	CHANGE DESCRIPTION
Checked by	Jarvis	2004/10/07	02 07Oct04	Add ESD, Pb Free Sign and Notes; Change FIG.1&3&5
Approved by	D.W.Liu	2004/10/07		
ECN#	ECN-H20040274			

Data is subject to change without prior notice.

Obsoletes Doc: A 22Apr04.