



SPECIFICATION

Description:

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

Dice Material: GaP

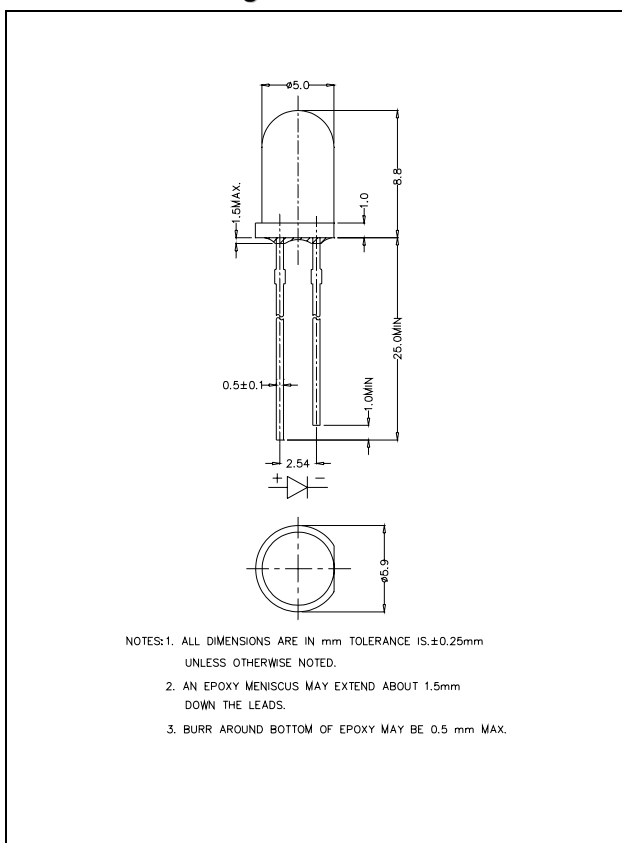
MODEL No : FC515ADYL21



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	$I_F = 20\text{mA}$	1520	3000	---	mcd
50% Power Angle	$2\theta_{1/2}$ H-H	$I_F = 20\text{mA}$	---	15	---	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

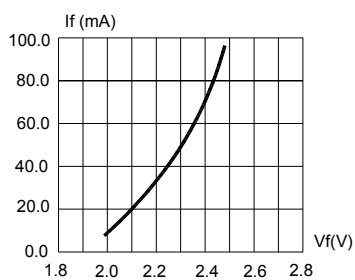


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

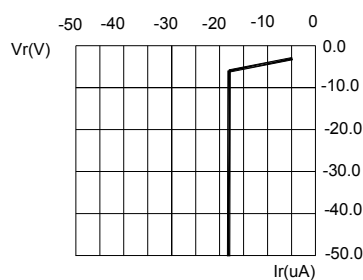


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

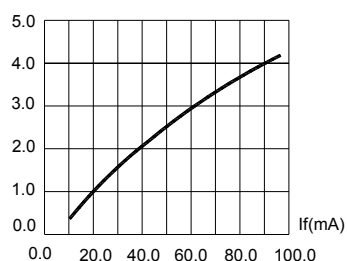


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

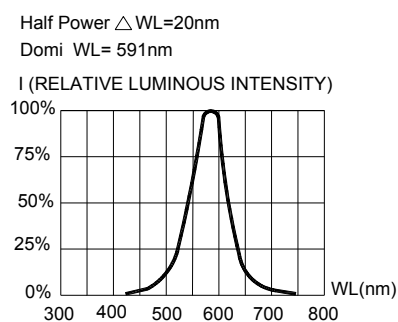


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

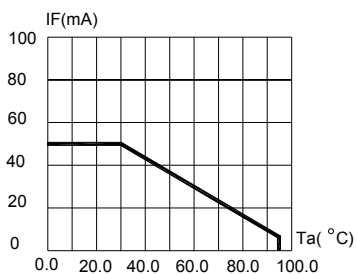


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ($T_{jmax}=105^{\circ}\text{C}$)

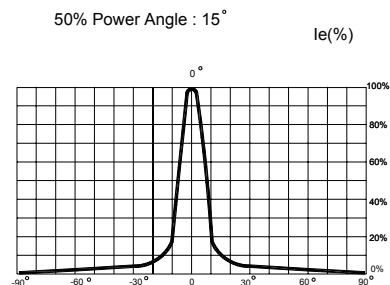


FIG.6 FAR FIELD PATTERN

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.