



SPECIFICATION

Description:

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

Dice Material: InGaN

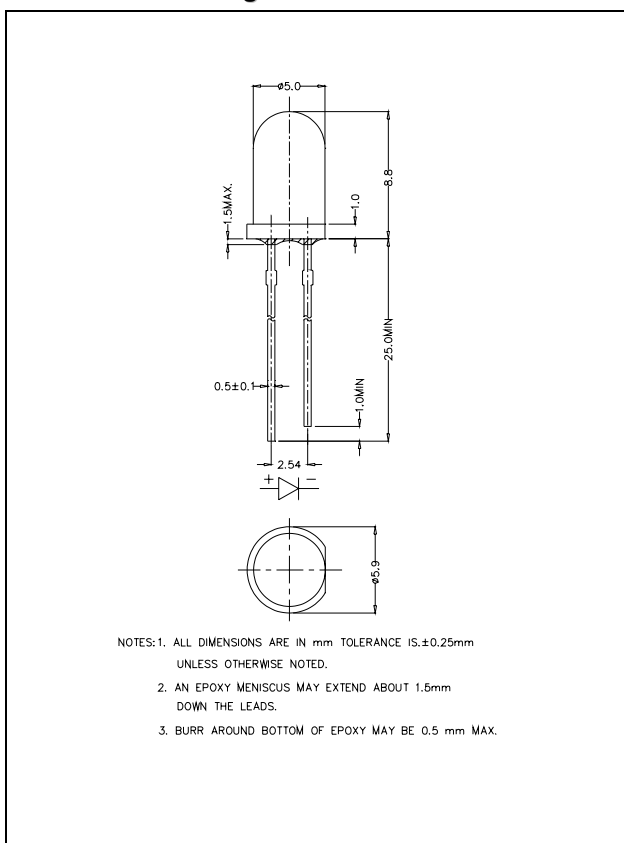
MODEL No : FC515APBL21



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	I_F	25	mA
Peak Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	105	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)	

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

Typical Electrical & Optical Characteristics ($T_a = 25^\circ\text{C}$)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	---	3.6	4.2	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	100	μA
Dominant Wavelength	λ_D	$I_F = 20\text{mA}$	465	470	475	nm
Luminous Intensity	I_v	$I_F = 20\text{mA}$	1520	2800	---	mcd
50% Power Angle	$2\theta_{1/2}$ H-H	$I_F = 20\text{mA}$	---	15	---	deg

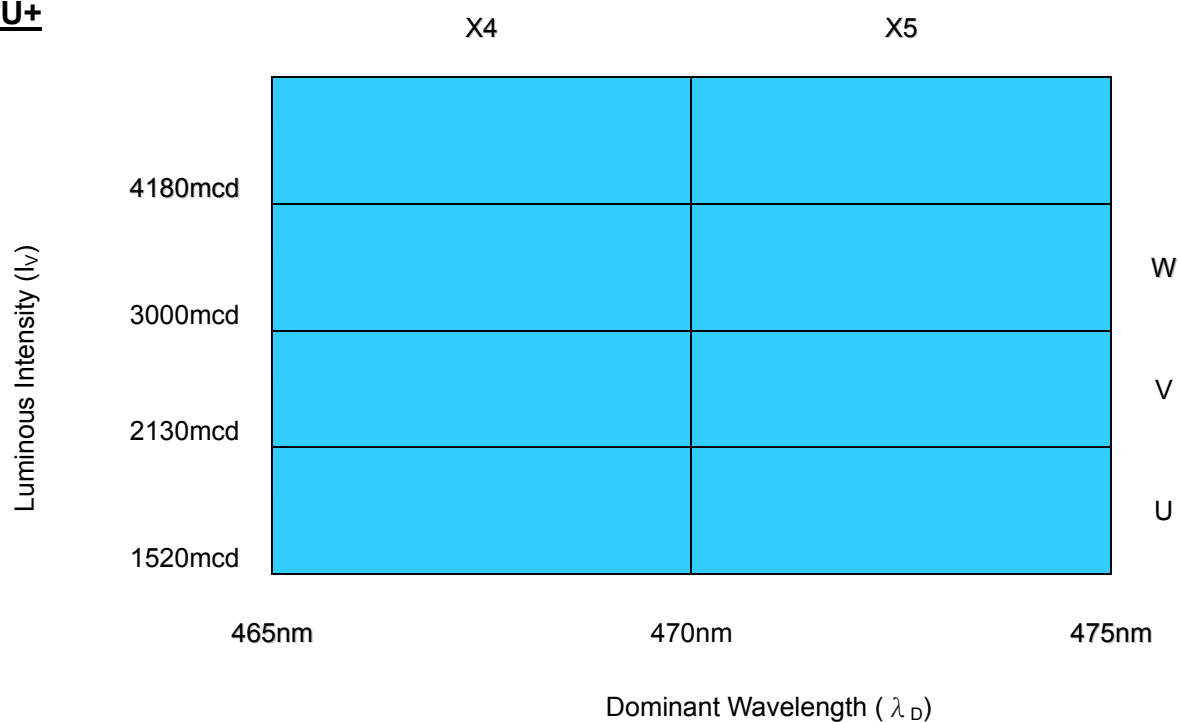
Standard bins for FC515APBL21 ($I_F = 20\text{mA}$):

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

Orders for FC515APBL21 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 $I_F = 20\text{mA}$.

* U+



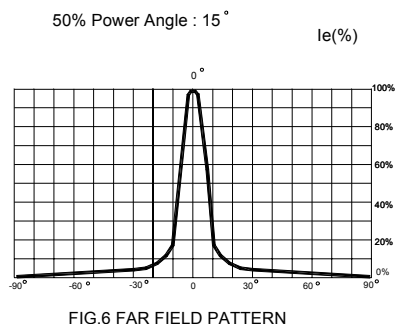
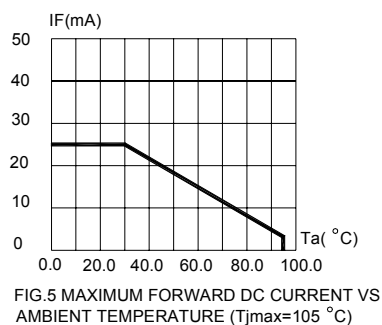
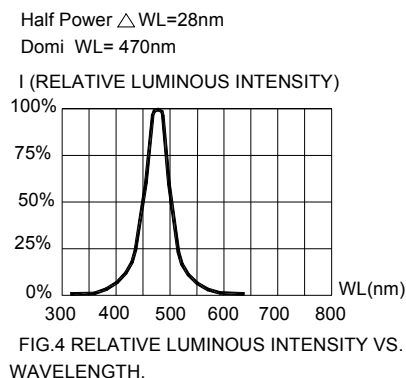
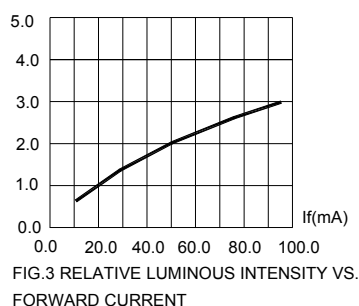
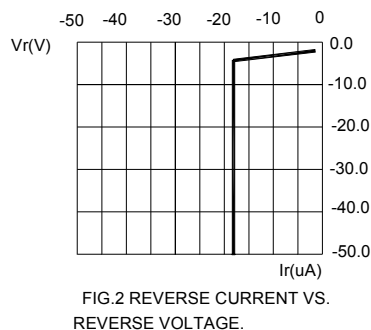
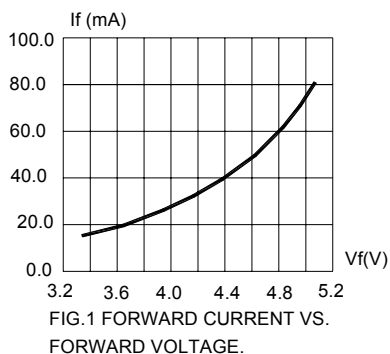
* U+ indicates Luminous Intensity is at U bin or above.

Forward Voltage (V_F)

Rank	V8	V9	V10	V11	V12	V13
Voltage	3.0-3.2V	3.2-3.4V	3.4-3.6V	3.6-3.8V	3.8-4.0V	4.0-4.2V

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 $\pm 0.05\text{ V}$.



Items	Signatures	Date	Revision History	
Prepared by	Lois	2004/10/07	DOC. No.	CHANGE DESCRIPTION
Checked by	Jarvis	2004/10/07	B 16Jun04	VF add V8. Add Pb Free sign.
Approved by	D.W.Liu	2004/10/07	03 07Oct04	Change T_{opr} & T_{stg} ; Change FIG.1&3&5; Change IV& λ_D Rank form.
ECN#	ECN-H20040274			

Data is subject to change without prior notice.

Obsoletes Doc: B 16Jun04.