



SPECIFICATION

Description:

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

Dice Material: InGaN

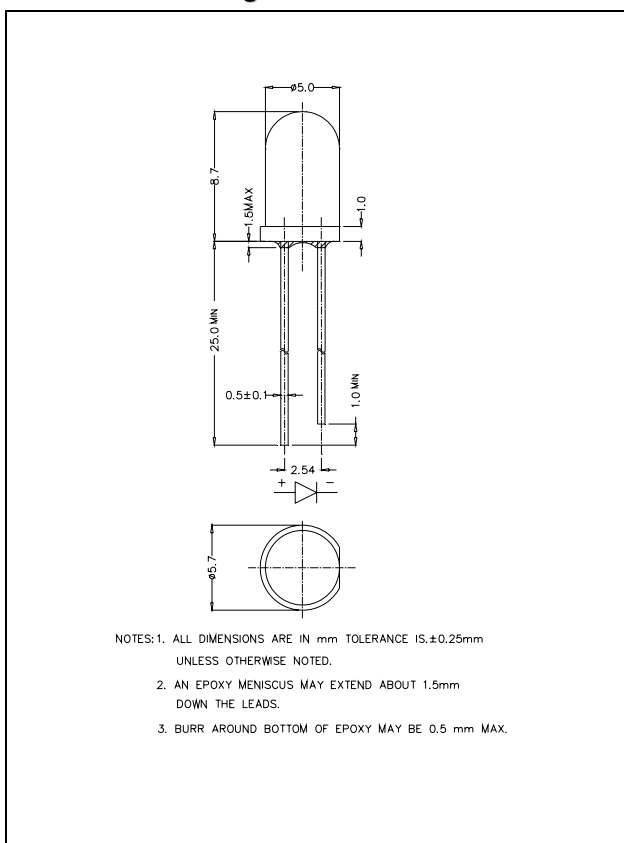
MODEL No : FC515ANBL21



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 $^\circ\text{C}$ 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 | $I_F = 20\text{mA}$ | 770 | 1300 | --- | mcd |
| 50% Power Angle | $2\theta_{1/2}$ H-H | $I_F = 20\text{mA}$ | --- | 15 | --- | deg |

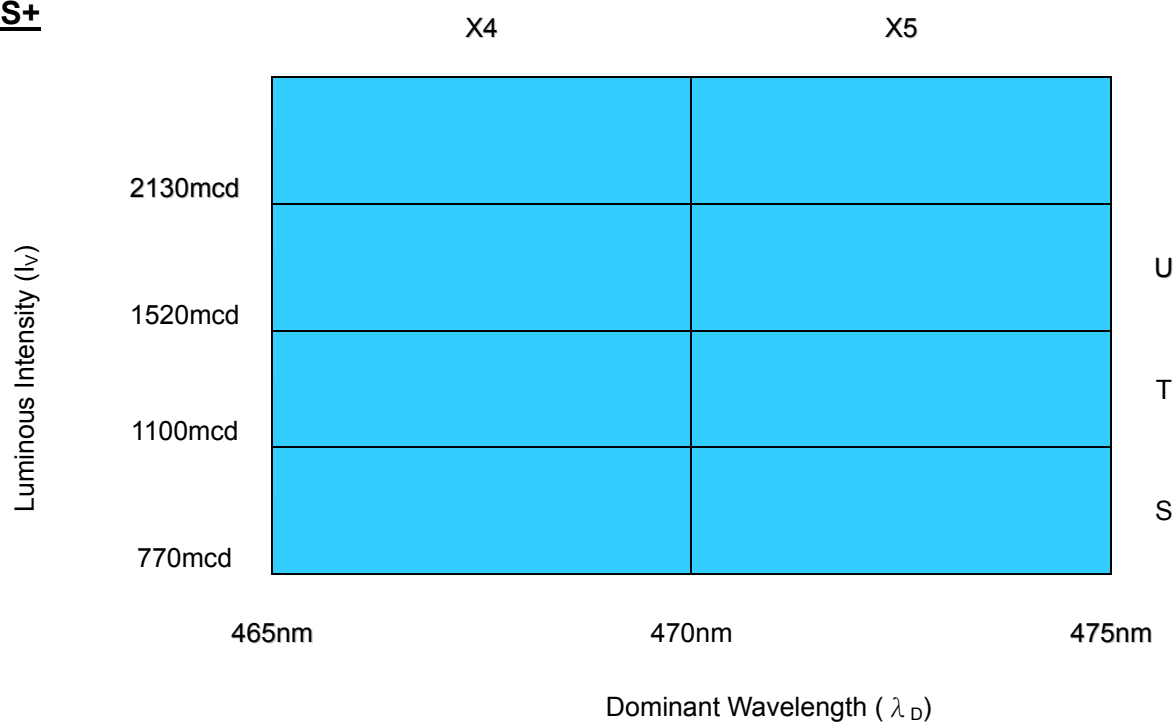
Standard bins for FC515ANBL21 ($I_F = 20\text{mA}$):

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

Orders for FC515ANBL21 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+**



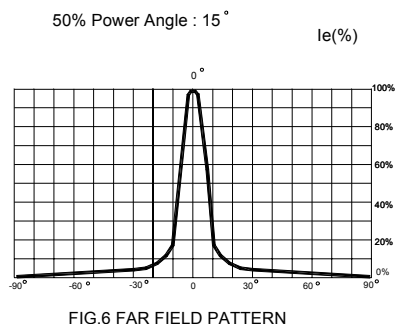
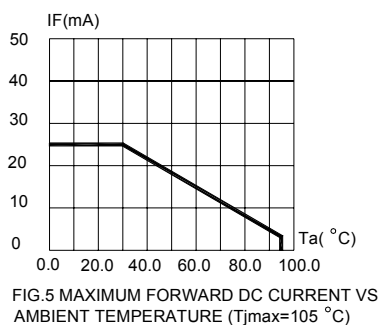
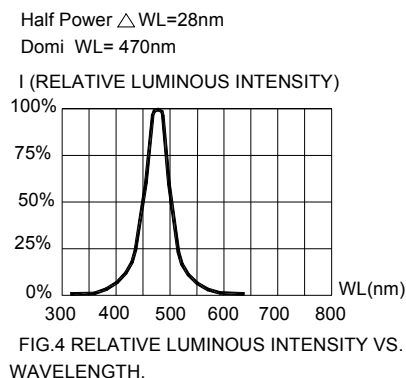
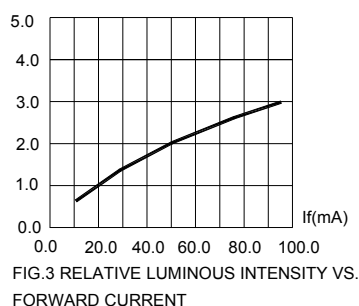
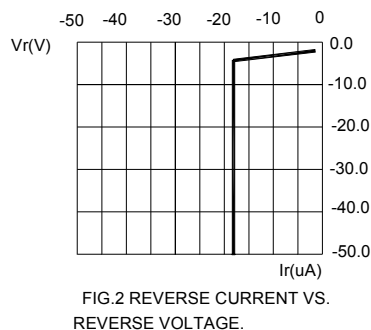
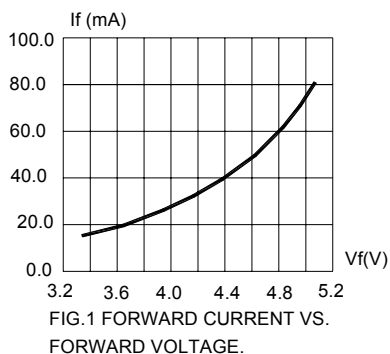
* S+ indicates Luminous Intensity is at S bin or above.

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 24Jun04 | 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 24Jun04.