

## FYL-5023UBC1A

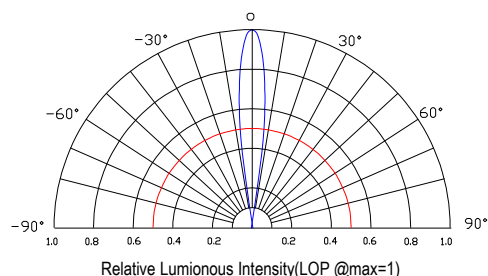
### Features:

- High intensity
- General purpose leads
- RoHs compliant.

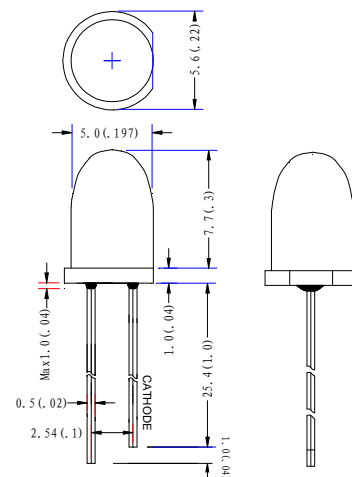
### Descriptions:

- Dice material: InGaN.
- Emitting Color: Super bright Blue.
- Device Outline:  $\Phi 5\text{mm}$  Bullet head Type.
- Lens Type: Water clear

### Radiation pattern.



### Package configuration



- ◆ All dimensions are millimeters (inches)
- ◆ Tolerance is  $\pm 0.25\text{mm}(.010")$  unless otherwise noted.

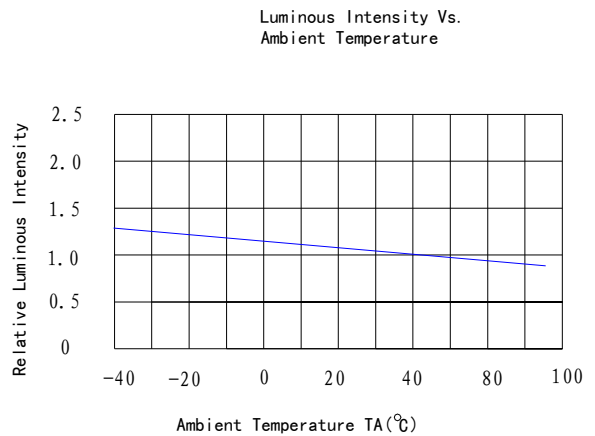
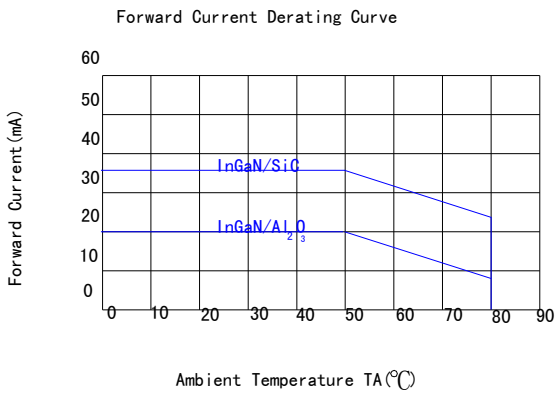
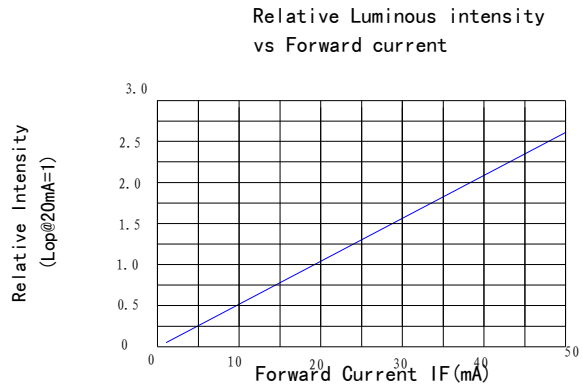
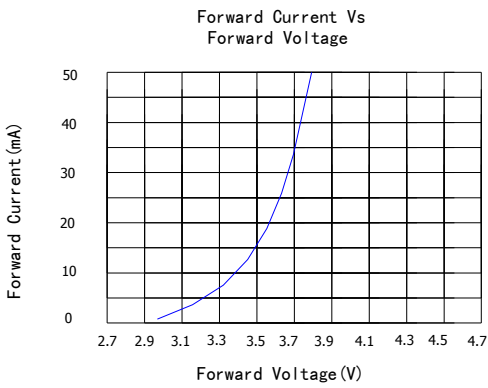
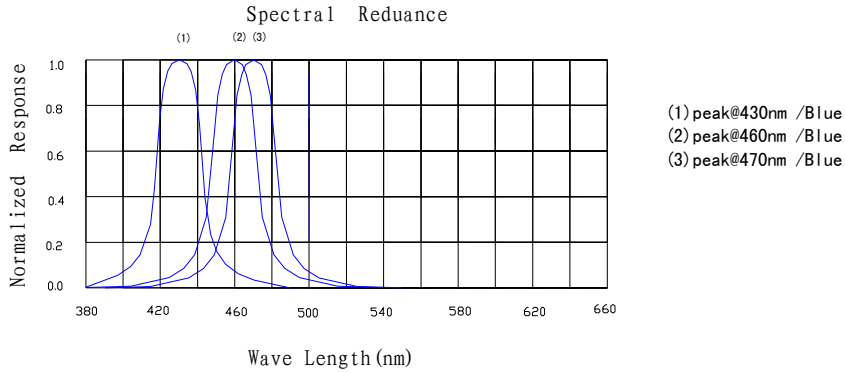
### Absolute maximum ratings( $T_a=25^\circ\text{C}$ )

| Parameter   | MAX.  | Unit                 |
|---|---|----------------------|
| Power Dissipation   | 70  | mW                   |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 100   | mA                   |
| Continuous Forward Current                                | 20  | mA                   |
| Derating Linear From $50^\circ\text{C}$                   | 0.4   | mA/ $^\circ\text{C}$ |
| Reverse Voltage   | 5   | V                    |
| Electrostatic Discharge (ESD)                             | 150   | V                    |
| Operating Temperature Range                               | $-30^\circ\text{C}$ to $+80^\circ\text{C}$  |                      |
| Storage Temperature Range                                 | $-40^\circ\text{C}$ to $+100^\circ\text{C}$ |                      |
| Lead Soldering Temperature[4mm(.157") From Body]          | 260 $^\circ\text{C}$ for 5 Seconds          |                      |

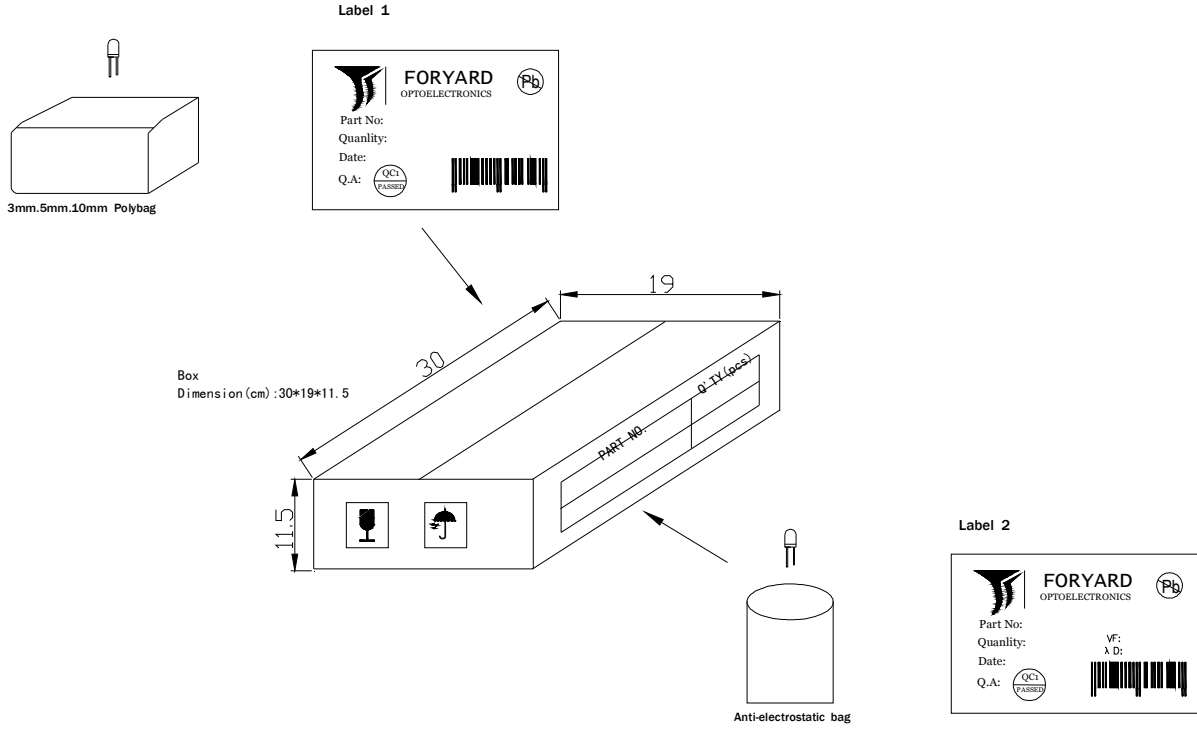
### Electrical and optical characteristics( $T_a=25^\circ\text{C}$ )

| Parameter                | Symbol          | Min. | Typ. | Max. | Unit          | Test Condition    |
|--------------------------|-----------------|------|------|------|---------------|-------------------|
| Luminous Intensity       | $I_v$           | —    | 6000 | —    | mcd           | $I_F=20\text{mA}$ |
| Viewing Angle            | $2\theta_{1/2}$ | 7    | 12   | 17   | Deg           |                   |
| Peak Emission            | $\lambda_p$     | 465  | 470  | 475  | nm            |                   |
| Dominant Wavelength      | $\lambda_d$     | 460  | 465  | 470  | nm            |                   |
| Spectral Line Half-Width | $\Delta\lambda$ | 10   | 15   | 20   | nm            |                   |
| Forward Voltage          | $V_F$           | 2.8  | 3.2  | 3.6  | V             |                   |
| Reverse Current          | $I_R$           |      |      | 50   | $\mu\text{A}$ | $V_R=5\text{V}$   |

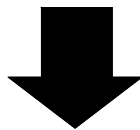
## Typical Electrical Characteristics Curves (25 °c Ambient Temperature Unless Otherwise Noted)



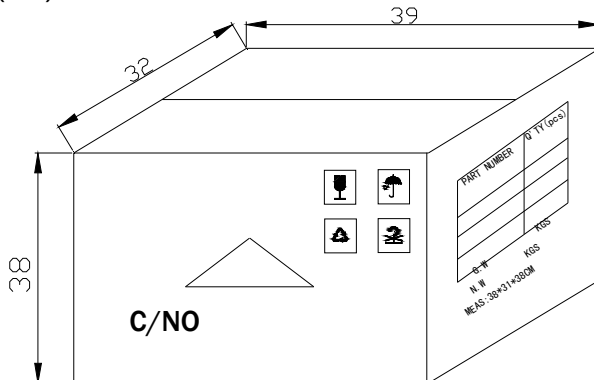
## LAMP PACKING.



| DEVICE           | QTY/polybag(pcs) | Polybag/box A | Fig     |
|------------------|------------------|---------------|---------|
| 5mm(T-1 3/4)     | 1000             | 8 bags        | Label 1 |
| 3mm(T-1 )        | 1000             | 10 bags       | Label 1 |
| 10mm(T-1)        | 250              | 8 bags        | Label 1 |
| Blue/Green/White | 500pcs           | 8 bags        | Label 2 |



**CARTON**  
Dimension(cm):39\*32\*38



6 Boxes/Carton  
5mm:48,000pcs  
3mm:60,000pcs  
10mm:12,000pcs  
Blue/Pure Green/bluish Green  
/White:24,000pcs