

## FYL- 10023SURC1B

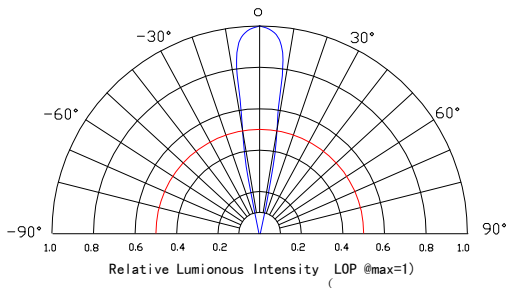
### Features:

- High intensity
- General purpose leads
- RoHs complant.

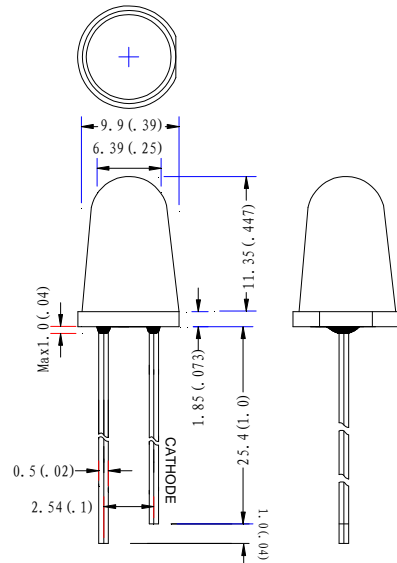
### Descriptions:

- Dice material: AlGaInP
- Emitting Color: Super bright Red
- Device Outline: Φ10mm 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.

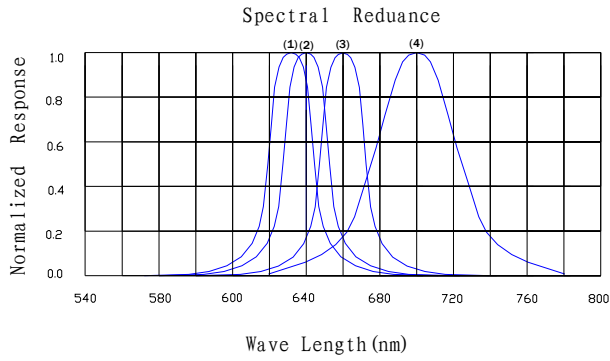
### Absolute maximum ratings( $T_a=25^\circ\text{C}$ )

| Parameter   | MAX.  | Unit                 |
|---|---|----------------------|
| Power Dissipation                                   | 50  | mW                   |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse) | 100   | mA                   |
| Continuous Forward Current                          | 20  | mA                   |
| Derating Linear From $50^\circ\text{C}$             | 0.4   | mA/ $^\circ\text{C}$ |
| Reverse Voltage                                     | 5   | 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          |                      |

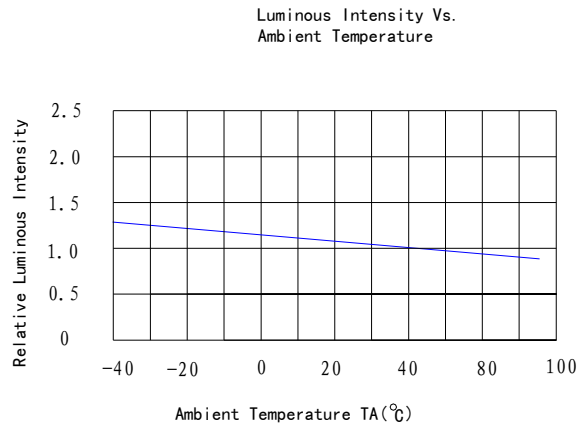
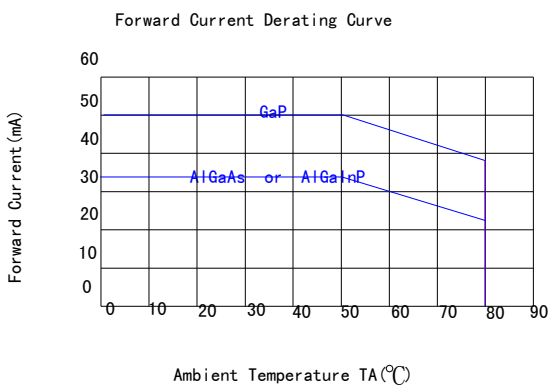
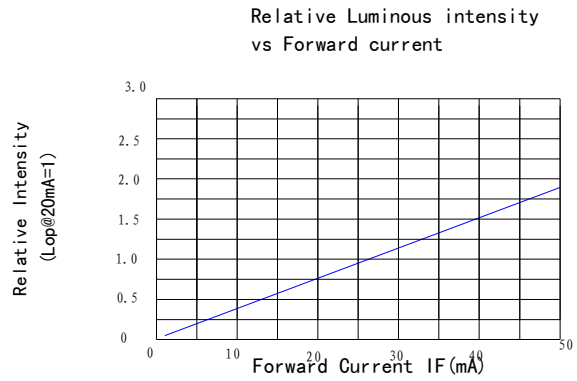
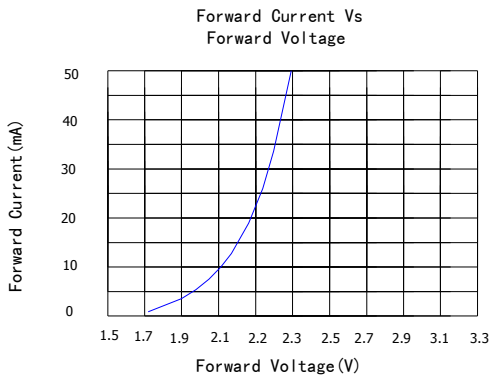
### Electrical and optical characteristics( $T_a=25^\circ\text{C}$ )

| Parameter                | Symbol          | Min. | Typ. | Max. | Unit          | Test Condition |
|--------------------------|-----------------|------|------|------|---------------|----------------|
| Luminous Intensity       | IV              | -    | 5000 | -    | mcd           | IF=20mA        |
| Viewing Angle            | 2 $\theta$ 1/2  | 15   | 20   | 25   | Deg           |                |
| Peak Emission            | $\lambda_p$     | 625  | 630  | 635  | nm            |                |
| Dominant Wavelength      | $\lambda_d$     | 620  | 625  | 630  | nm            |                |
| Spectral Line Half-Width | $\Delta\lambda$ | 10   | 15   | 20   | nm            |                |
| Forward Voltage          | VF              | 1.8  | 2.0  | 2.4  | V             | VR=5V          |
| Reverse Current          | IR              |      |      | 50   | $\mu\text{A}$ |                |

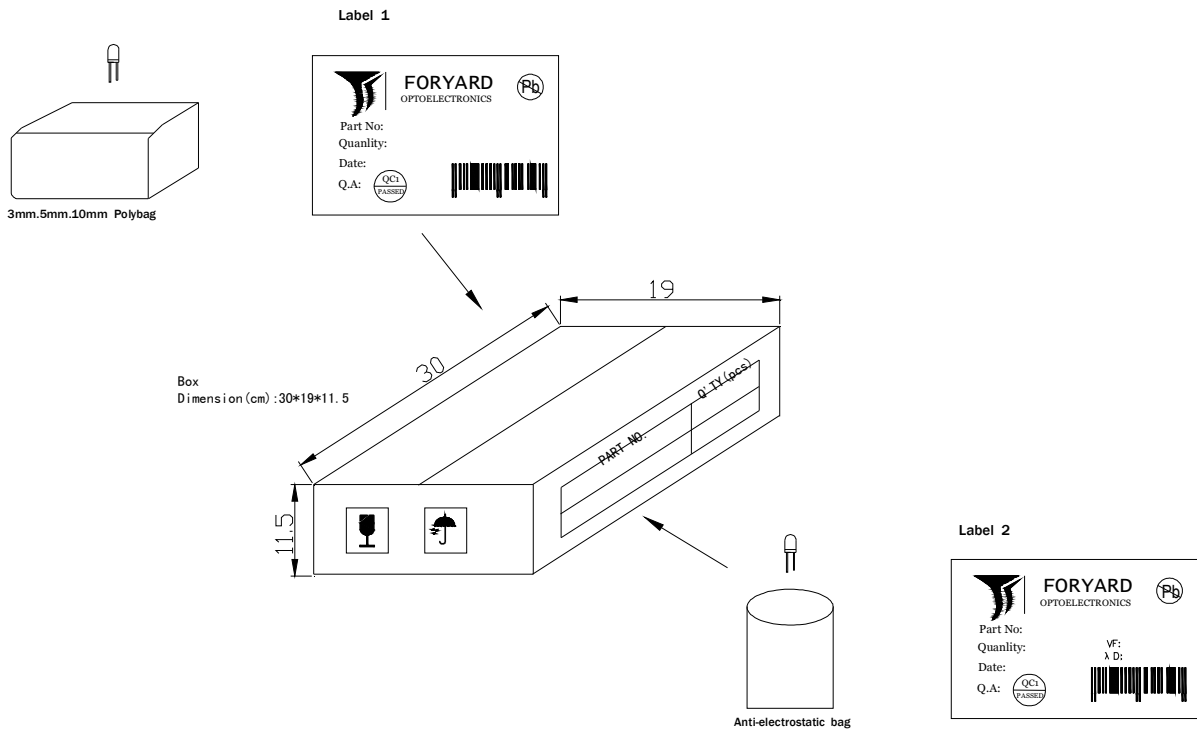
## Typical Electrical Characteristics Curves (25 °c Ambient Temperature Unless Otherwise Noted)



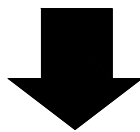
- (1) AlGaInP peak@630/Red
- (2) GaAsP/GaP peak@640nm /Red
- (3) AlGaAs/GaAs peak@660nm/Super Red
- (4) GaP peak@700nm/ Red



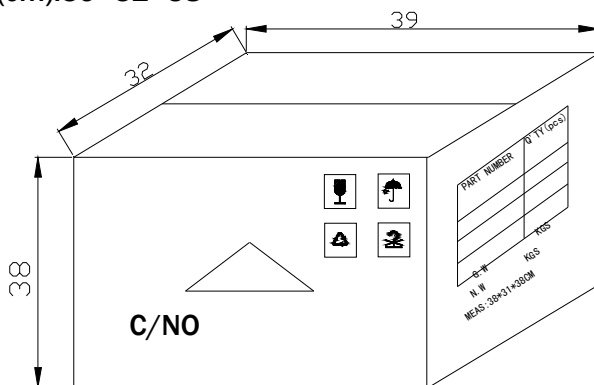
## LAMP PACKING.



| 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