



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



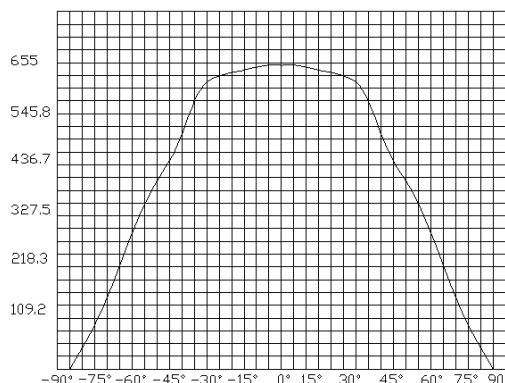
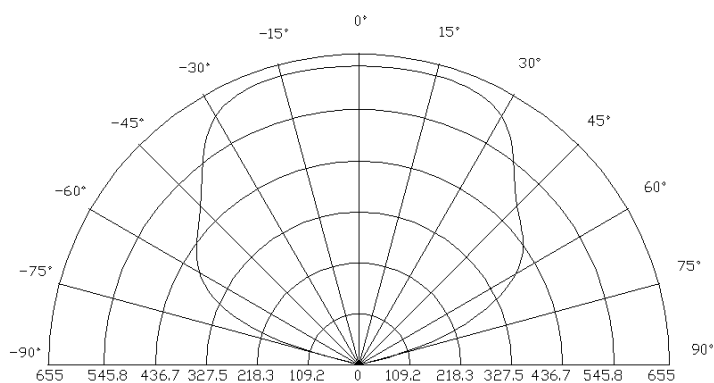
## Features

- Long operating life
- Highest flux
- Available in Red
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Instant light (less than 100ns )
- Fully dimmable
- No UV
- Superior ESD protection
- RoHS compliant

## Applications

- Fiber optic alternative/Decorative/entertainment
- Mini-accet/Up lighters/Down lighters/ Orientation
- Indoor/Outdoor commercial and Residential Architectural
- Cove/Under shelf/Task
- Bollards/Security/Garden
- Portable(flashlight,bicycle)
- Edge-lit signs(Exit,point of sale)
- Automotive Exit (Stop-Tail-Tum,CHMSL,Mirror Side Repeat)
- Traffic signaling/Beacons/RailCrossing and Wayside

## Radiation Pattern



### Typical Optical/ Electrical Characteristics @T<sub>a</sub>=25°C

| Item                                | Symbol            | Condition             | Min. | Typ. | Max. | Unit |
|-------------------------------------|-------------------|-----------------------|------|------|------|------|
| Forward Voltage                     | V <sub>F</sub>    | I <sub>F</sub> =350mA | 2.0  | --   | 2.8  | V    |
| Reverse Current                     | I <sub>R</sub>    | V <sub>R</sub> =5v    | --   | --   | 30   | uA   |
| 50% Power Angle                     | 2θ <sub>1/2</sub> | I <sub>F</sub> =350mA | 120  | --   | 140  | deg  |
| Luminous Flux                       | φ <sub>v</sub>    | I <sub>F</sub> =350mA | 34.9 | 39.8 |      | lm   |
| Recommend Forward Current           | I <sub>F</sub>    | --                    | --   | —    | 350  | mA   |
| Wave Length                         | λ <sub>d</sub>    | I <sub>F</sub> =350mA | 620  | --   | 630  | nm   |
| Thermal Resistance,Junction to Case | R <sub>JP</sub>   | I <sub>F</sub> =350mA | --   | 10   | --   | °C/w |
| The sample delivers goods data      |                   |                       |      |      |      |      |
| Item                                | Symbol            | Condition             | Min. | Avg. | Max. | Unit |
| Luminous Flux                       | φ <sub>v</sub>    | I <sub>F</sub> =350mA |      |      |      | lm   |
| 50% Power Angle                     | 2θ <sub>1/2</sub> |                       |      |      |      | deg  |
| Forward Voltage                     | V <sub>F</sub>    |                       |      |      |      | v    |
| Wave Length                         | λ <sub>d</sub>    |                       |      |      |      | nm   |

#### Notes:

- 1.Tolerance of measurement of forward voltage±0.1V.
- 2.Tolerance of measurement of peak Wavelength±2.0nm.
- 3.Tolerance of measurement of luminous flux±15%.

### Absolute Maximum Rating

| Item                        | Symbol           | Absolute Maximum Rating  | Unit |
|-----------------------------|------------------|--------------------------|------|
| Forward Current             | I <sub>F</sub>   | 350                      | mA   |
| Peak Forward Current*       | I <sub>FP</sub>  | 500                      | mA   |
| Reverse Voltage             | V <sub>R</sub>   | 5                        | V    |
| Power Dissipation           | P <sub>D</sub>   | 1000                     | mW   |
| Electrostatic discharge     | E <sub>SD</sub>  | ±2000                    | V    |
| Operation Temperature       | T <sub>OPR</sub> | -40~+80                  | °C   |
| Storage Temperature         | T <sub>STG</sub> | -40~+100                 | °C   |
| Lead Soldering Temperature* | T <sub>SOL</sub> | Max. 260°C for 3sec Max. |      |

\*IFP Conditions : Pulse Width≤10msec duty≤1/10

\* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment.

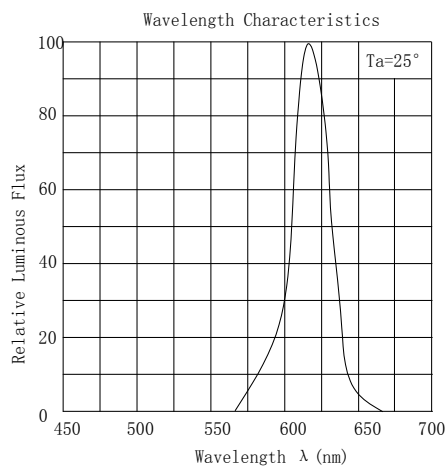
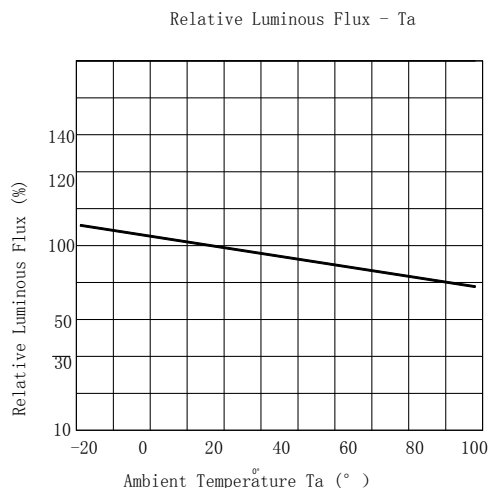
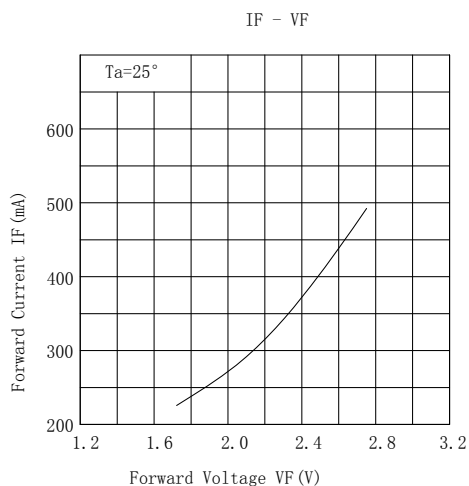
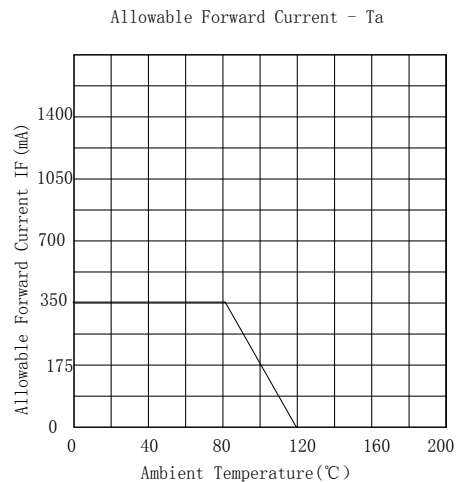
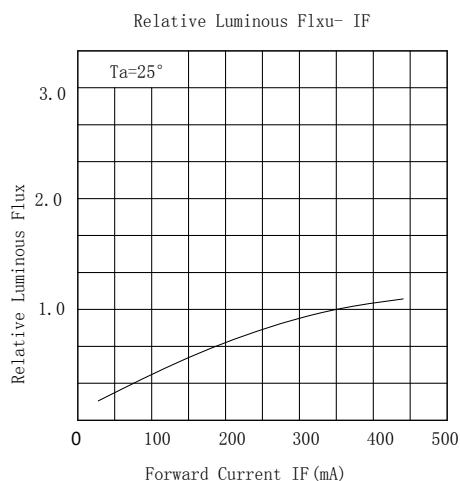
wave peak and soak-stannum soldering etc.is not suitable for this products.

Reflow soldering should not be done more than two times.The reflow temperature we recommend is 210°C

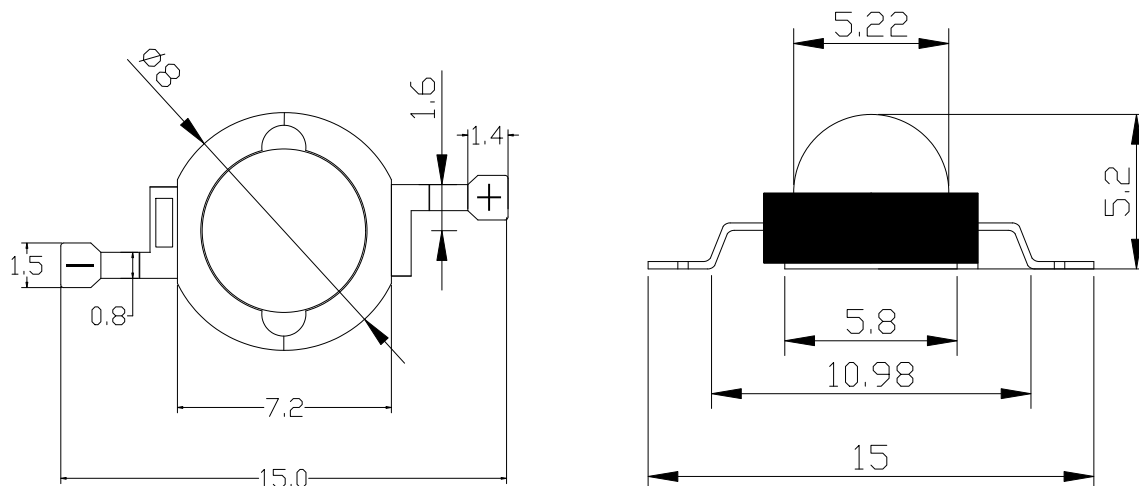
\* Suggest to solder it by professional high power LED soldering machine.

\* Can use invariable-temperature searing-iron with soldering condition:≤260 degree less than 3 seconds.

**Typical Optical/Electrical Characteristics Curves**  
**( $T_a=25^{\circ}\text{C}$  Unless Otherwise Noted )**



## Package Dimensions



### Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is  $\pm 0.2\text{mm}$  unless otherwise noted.

## Tape Specifications(Units:mm)

