

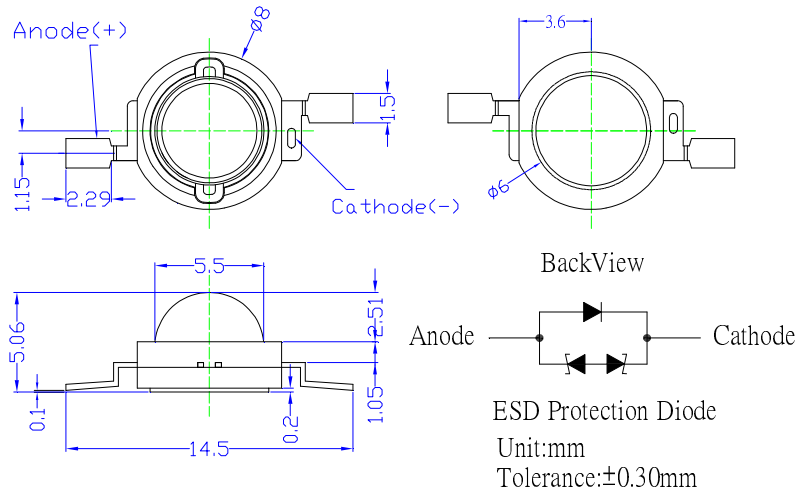
**■Features**

- Highest Luminous Flux
- Super energy efficiency
- Long Lifetime Operation
- Built-in Zener Diode For ESD Protection

**■Applications**

- Read lights (car, bus, aircraft)
- Portable (flashlight, bicycle)
- Bollards / Security / Garden
- Traffic signaling / Beacons
- In door / Out door Commercial lights
- Automotive Ext

**■Outline Dimension**



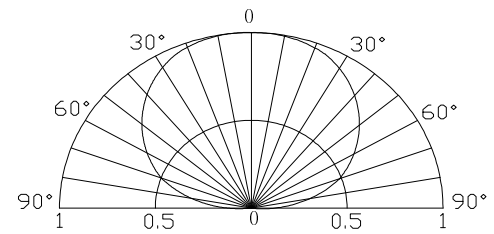
**■Absolute Maximum Rating**

(Ta=25°C)

| Item                       | Symbol          | Value      | Unit |
|----------------------------|-----------------|------------|------|
| DC Forward Current         | I <sub>F</sub>  | 400        | mA   |
| Pulse Forward Current*     | I <sub>FP</sub> | 500        | mA   |
| Reverse Voltage            | V <sub>R</sub>  | 5          | V    |
| Power Dissipation          | P <sub>D</sub>  | 1600       | mW   |
| Operating Temperature      | Topr            | -30 ~ +85  | °C   |
| Storage Temperature        | Tstg            | -40~ +100  | °C   |
| Lead Soldering Temperature | Tsol            | 260°C/5sec | -    |

\*Pulse width Max.10ms Duty ratio max 1/10

**■Directivity**

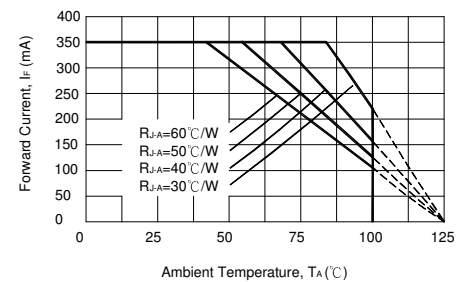


**■Electrical -Optical Characteristics**

(Ta=25°C)

| Item               | Symbol            | Condition             | Min. | Typ. | Max. | Unit |
|--------------------|-------------------|-----------------------|------|------|------|------|
| DC Forward Voltage | V <sub>F</sub>    | I <sub>F</sub> =350mA | 3.0  | 3.3  | 4.0  | V    |
| DC Reverse Current | I <sub>R</sub>    | V <sub>R</sub> =5V    | -    | -    | 10   | μA   |
| Dom. Wavelength    | λ <sub>D</sub>    | I <sub>F</sub> =350mA | 455  | 460  | 465  | nm   |
| Luminous Flux      | Φ <sub>v</sub>    | I <sub>F</sub> =350mA | 15   | 20   | -    | lm   |
| 50% Power Angle    | 2θ <sub>1/2</sub> | I <sub>F</sub> =350mA | -    | 140  | -    | deg  |

**■Forward Operating Current (DC)**



Note: Don't drive at rated current more than 5s without heat sink for Xeon 1 emitter series.

■ **Soldering Heat Reliability :**

Reflow soldering Profile

- Reflow soldering should not be done more than two times.
- When soldering, do not put stress on the LEDs during heating.
- After soldering, do not warp the circuit board.
- Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the **characteristics of the LEDs will or will not be damaged by repairing.**

| Solder  |
|---|
| Average ramp-up rate = 3°C/sec. max.                      |
| Preheat temperature: 150°~180°C                           |
| Preheat time = 120 sec. max.                              |
| Ramp-down rate = 6°C/sec. max.                            |
| Peak temperature = 220°C max.                             |
| Time within 3°C of actual peak temperature = 25 sec. max. |
| Duration above 200°C is 40 sec. max.                      |

