

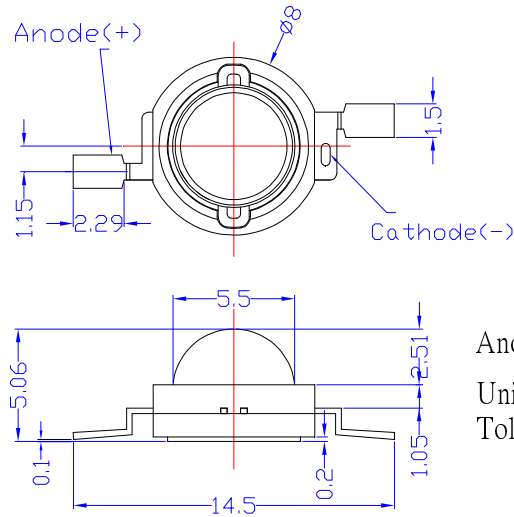
**■Features**

- Highest luminous flux
- Super energy efficiency
- Very long operating life
- Superior ESD protection

**■Applications**

- Night Vision
- Camera
- Outdoor./Indoor applications

**■Outline Dimension**



Unit:mm  
Tolerance:±0.30mm

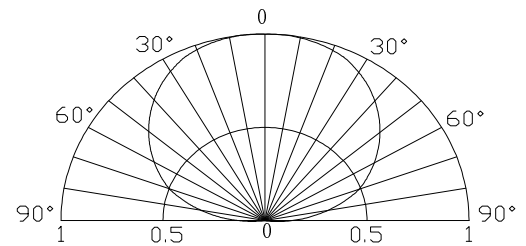
**■Absolute Maximum Rating**

(Ta=25°C)

| Item                       | Symbol           | Value      | Unit |
|----------------------------|------------------|------------|------|
| DC Forward Current         | I <sub>F</sub>   | 1,000      | mA   |
| Pulse Forward Current*     | I <sub>FP</sub>  | 7,000      | mA   |
| Reverse Voltage            | V <sub>R</sub>   | 5          | V    |
| Power Dissipation          | P <sub>D</sub>   | 2,000      | mW   |
| Operating Temperature      | T <sub>opr</sub> | -30 ~ +85  | °C   |
| Storage Temperature        | T <sub>stg</sub> | -40~ +100  | °C   |
| Lead Soldering Temperature | T <sub>sol</sub> | 260°C/5sec | -    |

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

**■Directivity**



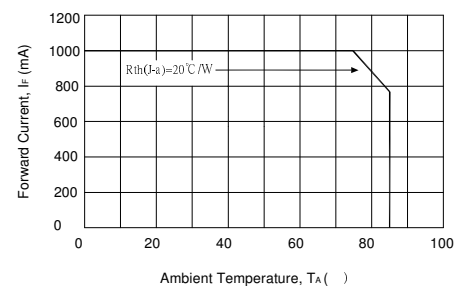
**■Electrical -Optical Characteristics**

(Ta=25°C)

| Item               | Symbol            | Condition             | Min. | Typ. | Max. | Unit  |
|--------------------|-------------------|-----------------------|------|------|------|-------|
| DC Forward Voltage | V <sub>F</sub>    | I <sub>F</sub> =700mA | 1.2  | 1.5  | 2.0  | V     |
| DC Reverse Current | I <sub>R</sub>    | V <sub>R</sub> =5V    | -    | -    | 10   | μA    |
| Peak Wavelength    | λ <sub>p</sub>    | I <sub>F</sub> =700mA | -    | 940  | -    | nm    |
| Radiant Intensity  | I <sub>e</sub>    | I <sub>F</sub> =700mA | 50   | 68   | -    | mW/Sr |
| 50% Power Angle    | 2θ <sub>1/2</sub> | I <sub>F</sub> =700mA | -    | 140  | -    | deg   |

Note: Advises please attach heat sink to use if Power Dissipation is more than 0.5W.

**■Forward Operating Current (DC)**



■ **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.**

| <b>Solder</b>   |
|---|
| 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.                      |

