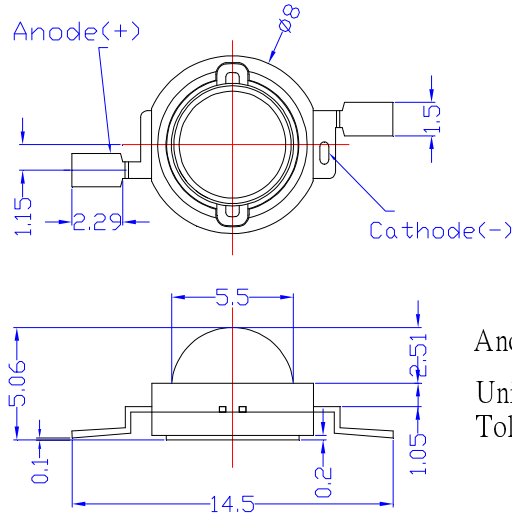


■Features

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

■Outline Dimension



■Applications

- Night Vision
- Camera
- Outdoor./Indoor applications

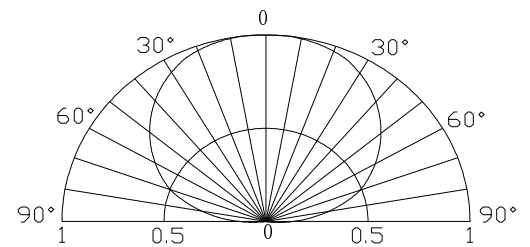
■Absolute Maximum Rating

(Ta=25°C)

| Item | Symbol | Value | Unit |
|----------------------------|------------------|------------|------|
| DC Forward Current | I _F | 1000 | mA |
| Pulse Forward Current* | I _{FP} | 2000 | mA |
| Reverse Voltage | V _R | 5 | V |
| Power Dissipation | P _D | 2000 | mW |
| Operating Temperature | T _{opr} | -30 ~ +85 | °C |
| Storage Temperature | T _{stg} | -40~ +100 | °C |
| Lead Soldering Temperature | T _{sol} | 260°C/5sec | - |

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

■Directivity



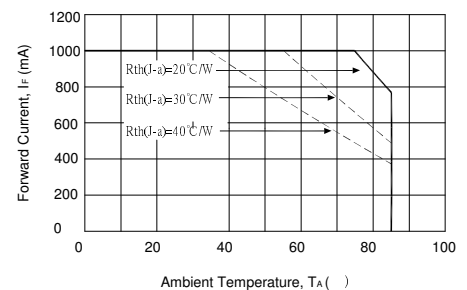
■Electrical -Optical Characteristics

(Ta=25°C)

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------|-------------------|-----------------------|------|------|------|------|
| DC Forward Voltage | V _F | I _F =700mA | - | 1.7 | 2.0 | V |
| DC Reverse Current | I _R | V _R =5V | - | - | 10 | μA |
| Peak Wavelength | λ _p | I _F =700mA | - | 850 | - | nm |
| Radiant Power | P _O | I _F =700mA | 200 | 250 | - | mW |
| 50% Power Angle | 2θ _{1/2} | I _F =700mA | - | 140 | - | deg |

Note: Don't drive at rated current more than 5s without heat sink for Xeon 3 emitter series.

■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.**

| 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. |

