

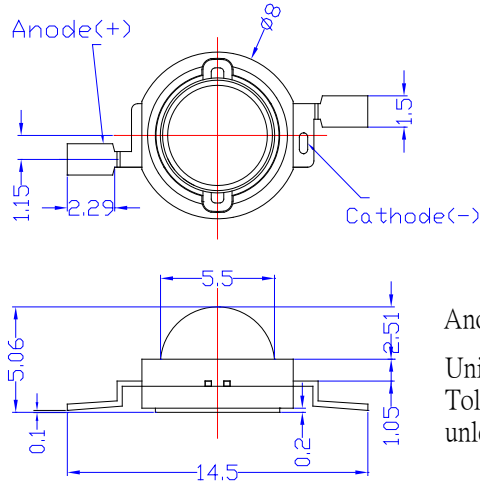
■Features

- High Radiant Power
- Super energy efficiency
- Very long operating life
- Superior ESD protection

■Applications

- Night Vision
- Camera
- Outdoor/Indoor applications

■Outline Dimension



Anode  Cathode

Unit:mm
Tolerance:±0.20mm
unless otherwise noted

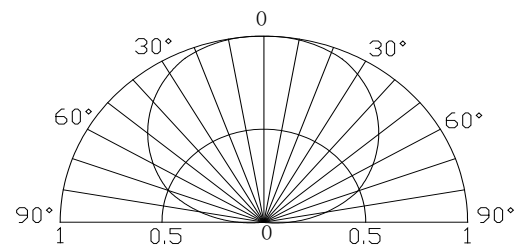
■Absolute Maximum Rating

(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 | 1700 | mW |
| Operating Temperature | T _{opr} | -30 ~ +85 | °C |
| Storage Temperature | T _{stg} | -40 ~ +100 | °C |
| Manual Soldering Temperature | T _{sol} | 260°C/5sec | - |

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

■Directivity



■Electrical -Optical Characteristics

(Ta=25°C)

| Item | Symbo | Condition | Min. | Typ. | Max. | Unit |
|----------------------|-------------------|-----------------------|------|------|------|-------|
| DC Forward Voltage*1 | V _F | I _F =350mA | - | 1.5 | 1.7 | V |
| DC Reverse Current | I _R | V _R =5V | - | - | 10 | μA |
| Peak Wavelength*2 | λ _p | I _F =350mA | - | 850 | - | nm |
| Radiant Power*3 | P _O | I _F =350mA | 165 | 180 | - | mW |
| Radiant Intensity*4 | E _e | I _F =350mA | 150 | 160 | - | mW/Sr |
| 50% Power Angle | 2θ _{1/2} | I _F =350mA | - | 140 | - | deg |

*1 Tolerance of measurements of forward voltage is ±0.1V

*2 Tolerance of measurements of peak wavelength is ±1nm

*3 Tolerance of measurements of Radiant Power is ±15%

*4 Tolerance of measurements of radiant intensity is ±15%

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. |

