

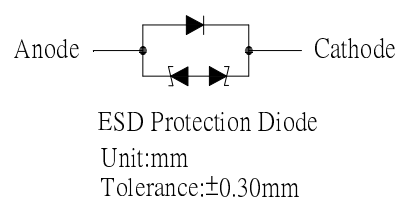
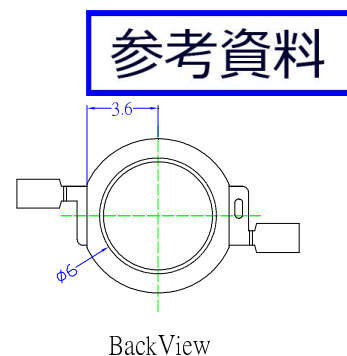
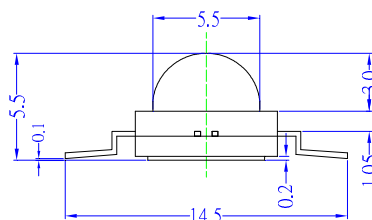
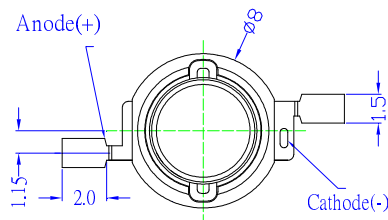
■Features

- Highest Luminous Flux
- Super Energy Efficiency
- Long Lifetime Operation
- Superior ESD protection
- Superior UV Resistance

■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_F | 400 | mA |
| Pulse Forward Current* | I_{FP} | 500 | mA |
| Reverse Voltage | V_R | 5 | V |
| Power Dissipation | P_D | 1600 | 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

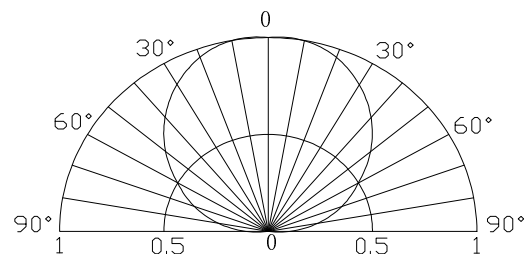
■Electrical -Optical Characteristics

(Ta=25°C)

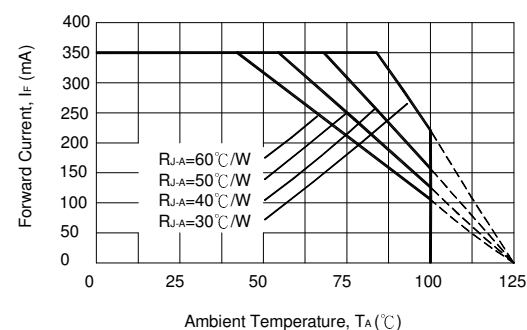
| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---------------------------|-----------------|-------------|------|------|------|------|
| DC Forward Voltage | V_F | $I_F=350mA$ | 3.0 | 3.3 | 4.0 | V |
| DC Reverse Current | I_R | $V_R=5V$ | - | - | 10 | μA |
| Luminous Flux | Φ_v | $I_F=350mA$ | 90 | 100 | - | lm |
| Color Temperature | CCT | $I_F=350mA$ | - | 6500 | - | K |
| Chromaticity Coordinates* | x | $I_F=350mA$ | - | 0.31 | - | - |
| | y | $I_F=350mA$ | - | 0.33 | - | - |
| 50% Power Angle | $2\theta_{1/2}$ | $I_F=350mA$ | - | 120 | - | deg |

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

■Directivity



■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. |

