

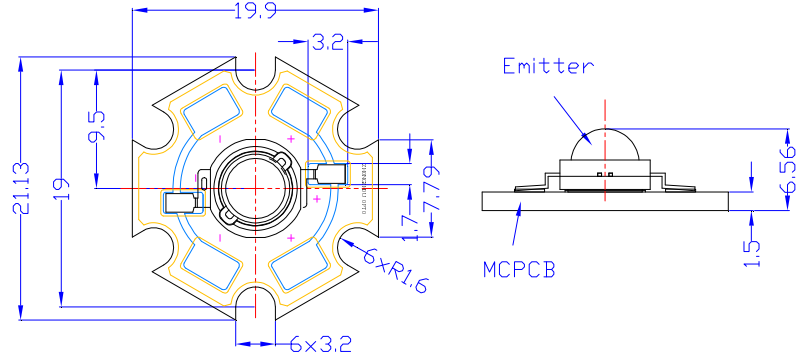
**■Features**

- 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**



Unit:mm  
Tolerances are for reference only

**■Absolute Maximum Rating**

(Ta=25°C)

| Item                       | Symbol           | Value      | Unit |
|----------------------------|------------------|------------|------|
| DC Forward Current         | I <sub>F</sub>   | 800        | mA   |
| Pulse Forward Current#     | I <sub>FP</sub>  | 1000       | mA   |
| Reverse Voltage            | V <sub>R</sub>   | 5          | V    |
| Power Dissipation          | P <sub>D</sub>   | 3200       | 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

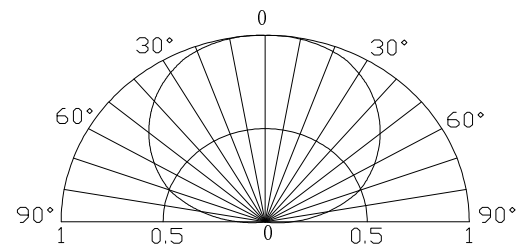
**■Electrical -Optical Characteristics**

(Ta=25°C)

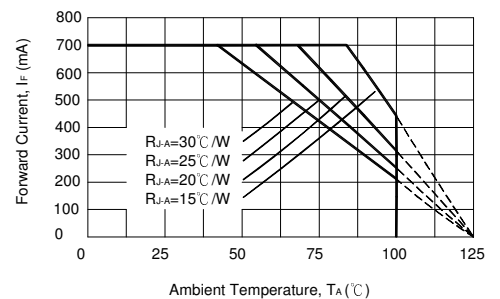
| Item                | Symbol            | Condition             | Min. | Typ. | Max. | Unit |
|---------------------|-------------------|-----------------------|------|------|------|------|
| DC Forward Voltage* | V <sub>F</sub>    | I <sub>F</sub> =350mA | 3.0  | 3.3  | 4.0  | V    |
|                     |                   | I <sub>F</sub> =700mA | 3.5  | 3.8  | 4.5  | V    |
| DC Reverse Current  | I <sub>R</sub>    | V <sub>R</sub> =5V    | -    | -    | 10   | μA   |
| Domi. Wavelength*   | λ <sub>D</sub>    | I <sub>F</sub> =700mA | 520  | 525  | 530  | nm   |
| Luminous Flux*      | Φ <sub>v</sub>    | I <sub>F</sub> =700mA | 140  | 160  | -    | lm   |
| 50% Power Angle     | 2θ <sub>1/2</sub> | I <sub>F</sub> =700mA | -    | 140  | -    | deg  |

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

**■Directivity**



**■Forward Operating Current (DC)**



■ **Soldering Heat Reliability (DIP):**

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.                      |

