

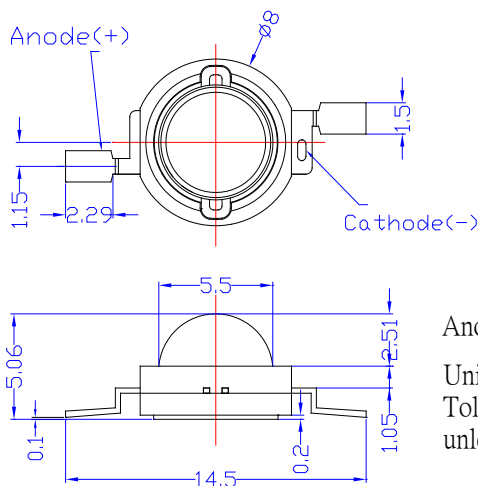
## ■Features

- 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

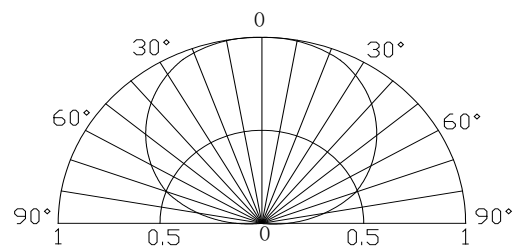
## ■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Current	I <sub>F</sub>	1,000	mA
Pulse Forward Current#	I <sub>FP</sub>	2,000	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
Manual 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*1	V <sub>F</sub>	I <sub>F</sub> =700mA	-	1.6	2.0	V
DC Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	10	μA
Peak Wavelength*2	λ <sub>P</sub>	I <sub>F</sub> =700mA	-	940	-	nm
Radiant Intensity*3	I <sub>e</sub>	I <sub>F</sub> =700mA	260	280	-	mW/Sr
Radiant Power*4	P <sub>o</sub>	I <sub>F</sub> =700mA	160	180	-	mW
50% Power Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =700mA	-	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 Intensity is ±15%

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

Note: Don't drive at rated current more than 5s without heat sink for Xeon 2 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.

