

## ■Features

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

## ■Applications

- Green House Applications
- Red : Blue LED Iv Ratio is 8:1\*

\*The ratio is summarized by the photosynthesis test on  
Phalaenopsis and provided from plant workshop in Taiwan.

## ■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Current	I <sub>F</sub>	700	mA
Pulse Forward Current#	I <sub>FP</sub>	800	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	2450	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> =700mA	-	2.8	3.5	V
DC Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	10	μA
Peak Wavelength*	λ <sub>P</sub>	I <sub>F</sub> =700mA	650	660	670	nm
Radiant Power*	P <sub>o</sub>	I <sub>F</sub> =700mA	200	270	-	mW
50% Power Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =700mA	-	140	-	deg

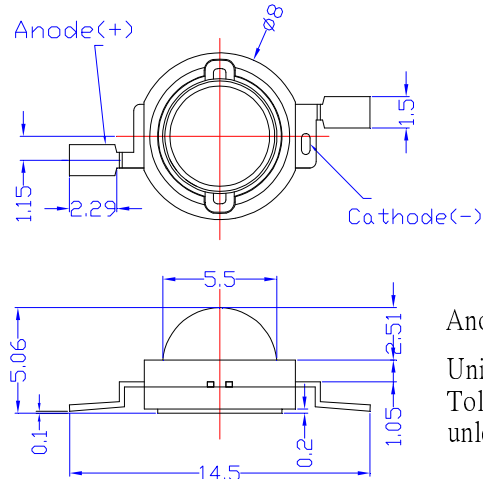
\*1 Tolerance of measurements of Peak wavelength is ±1nm

\*2 Tolerance of measurements of Radiant Power is ±15%

\*3 Tolerance of measurements of forward voltage is ±0.1V

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

## ■Outline Dimension

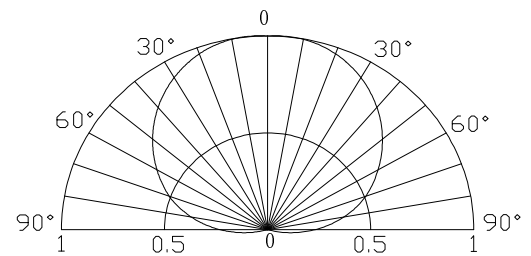


Anode —> Cathode

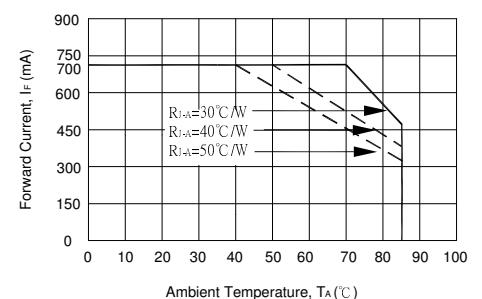
Unit:mm

Tolerance:±0.20mm  
unless otherwise noted

## ■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.

