

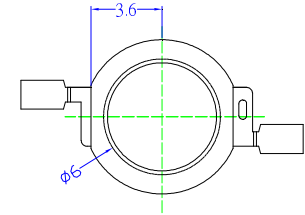
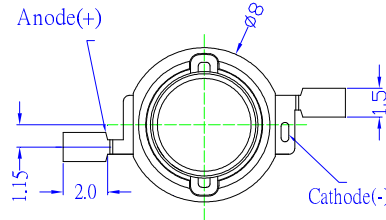
**■Features**

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

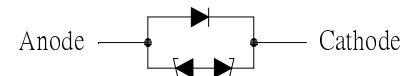
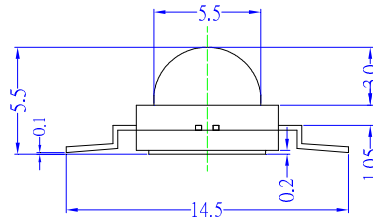
**■Applications**

- Read lights (car, bus, aircraft)
- Portable (flashlight, bicycle)
- Bollards / Security / Garden
- Traffic signaling / Beacons
- In door / Out door Commercial lights
- Automotive Ext

**■Outline Dimension**



Back View



ESD Protection Diode  
Unit:mm  
Tolerance:±0.30mm

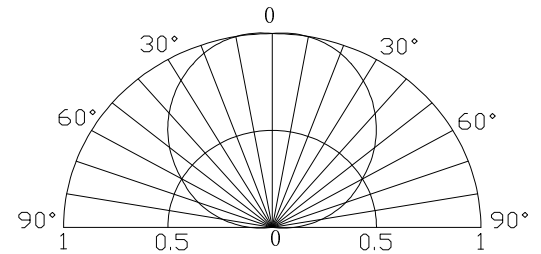
**■Absolute Maximum Rating**

( $T_a=25^{\circ}\text{C}$ )

Item	Symbol	Value	Unit
DC Forward Current	$I_F$	200	mA
Pulse Forward Current*	$I_{FP}$	250	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	800	mW
Operating Temperature	$T_{opr}$	-30 ~ +85	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$	-40~ +100	$^{\circ}\text{C}$
Lead Soldering Temperature	$T_{sol}$	260 $^{\circ}\text{C}$ /5sec	-

\*Pulse width Max.10ms Duty ratio max 1/10

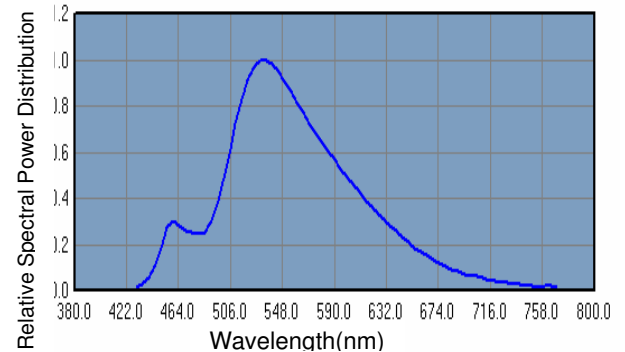
**■Directivity**



**■Electrical -Optical Characteristics**

( $T_a=25^{\circ}\text{C}$ )

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage	$V_F$	$I_F=150\text{mA}$	3.0	3.3	4.0	V
DC Reverse Current	$I_R$	$V_R=5\text{V}$	-	-	10	$\mu\text{A}$
Luminous Flux	$\Phi_v$	$I_F=150\text{mA}$	30	35	-	lm
Chromaticity Coordinates*	x	$I_F=150\text{mA}$	-	0.35	-	-
	y	$I_F=150\text{mA}$	-	0.50	-	-
50% Power Angle	$2\theta_{1/2}$	$I_F=150\text{mA}$	-	120	-	deg



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.

