



## 5W HIGH POWER LED

### OF-HPW-5EL WHITE



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



#### Features

- Long operating life
- Highest flux
- Wide range of colors:2500K-25000K
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Instant light (less than 100ns )
- Fully dimmable
- No UV
- Superior ESD protection
- Eutectic die bonding
- RoHS compliant

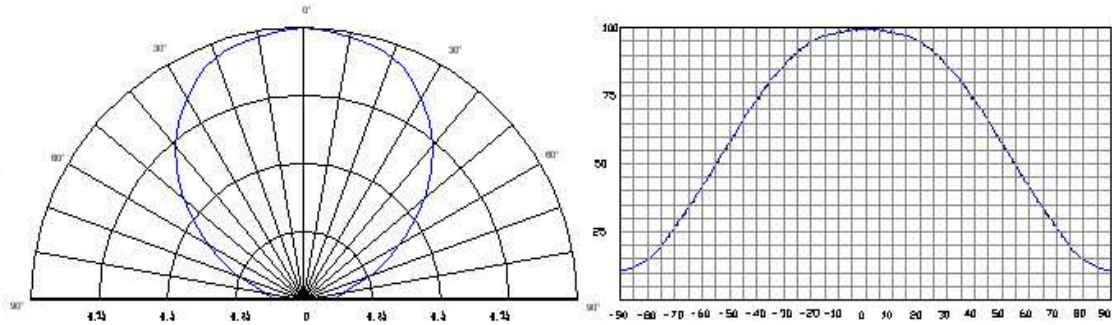
#### Applications

- Reading lights (car, bus, aircraft)
- LCD Backlights/light Guides
- Fiber optic alternative/ Decorative / Entertainment
- Mini-accent/Up lighters/Down lighters/Orientation
- Indoor/Outdoor commercial and Residential Architectural
- Cove/Under shelf/Task
- Bollards/Security/Garden
- Portable (flashlight, bicycle)
- Edge-lit signs (Exit, point of sale)
- Automotive Exit (Stop-Tail-Turn,CHMSL, Mirror Side Repeat)
- Traffic signaling / Beacons / RailCrossing and Wayside

#### ■ Radiation Pattern



## 5W HIGH POWER LED



### ■ Typical Optical/ Electrical Characteristics @ $T_a=25^{\circ}\text{C}$

Item	Symbol	Condition	Min.	Typ.	Mix.	Unit
Forward Voltage	$V_F$	$I_F=1.2\text{A}$	3.4	3.6	4.0	V
Reverse Current	$I_R$	$V_R=5\text{v}$	--	--	50	$\mu\text{A}$
50% Power Angle	$2\theta_{1/2}$	$I_F=1.2\text{A}$	--	140	--	deg
Luminous Intensity	$\phi_V$	$I_F=1.2\text{A}$	168.4	175	218.9	lm
Recommend Forward Current	$I_F$	--	--	1.2	--	A
Chromaticity	$T_C$	$I_F=1.2\text{A}$	5000	6000	7000	K
Chromaticity Coordinates	X	$I_F=1.2\text{A}$	--	--	--	--
	Y	$I_F=1.2\text{A}$	--	--	--	
Thermal Resistance, Junction to Case	$R_{JP}$	$I_F=1.2\text{A}$	--	15	--	K/W

**Notes:** 1. Tolerance of measurement of forward voltage  $\pm 0.1\text{V}$ .  
 2. Tolerance of measurement of peak Wavelength  $\pm 2.0\text{nm}$ .  
 3. Tolerance of measurement of luminous intensity  $\pm 15\%$ .



## 5W HIGH POWER LED

### ■ Absolute Maximum Rating

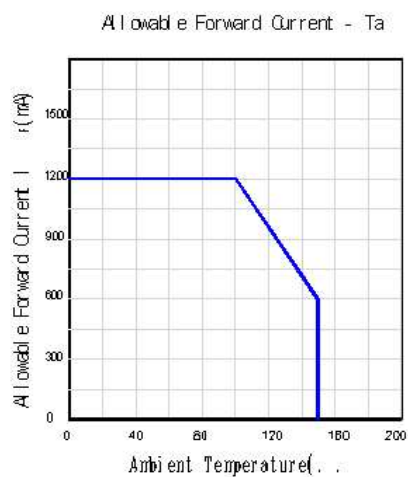
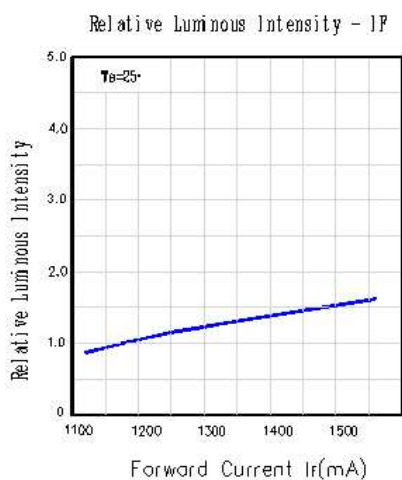
Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	$I_F$	1.2	A
Peak Forward Current*	$I_{FP}$	1.5	A
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	5	W
Electrostatic discharge	$E_{SD}$	$\pm 4500$	V
Operation Temperature	$T_{OPR}$	-40~+80	□
Storage Temperature	$T_{STG}$	-40~+100	□
Lead Soldering Temperature*	$T_{SOL}$	Max. 260□ for 6sec Max.	

\*IFP Conditions □ Pulse Width  $\leq 10$  msec duty  $\leq 1/10$

\* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment.

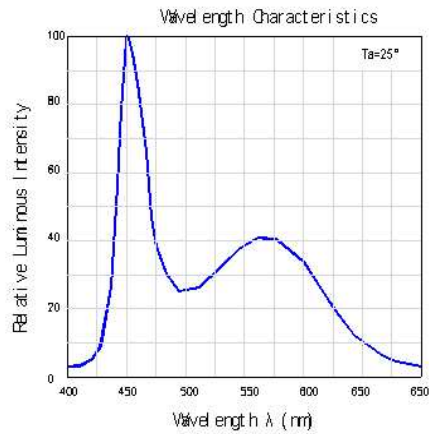
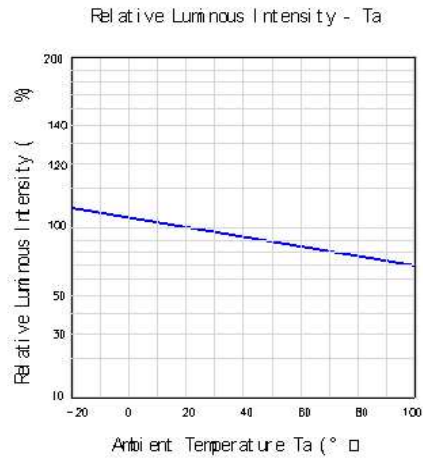
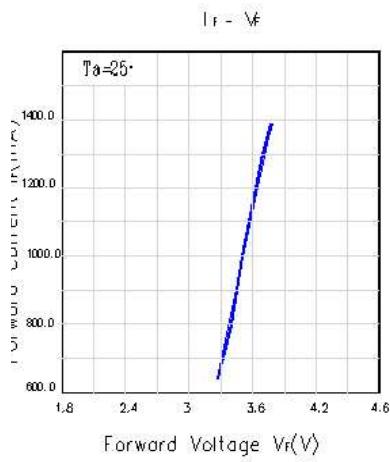
### ■ Typical Optical/Electrical Characteristics Curves

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

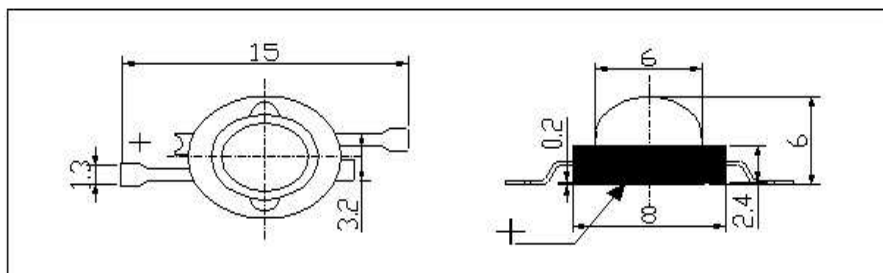




# 5W HIGH POWER LED



## ■ Package Dimensions





## 5W HIGH POWER LED

- Notes:**
1. All dimension units are millimeters.
  2. All dimension tolerance is  $\pm 0.2\text{mm}$  unless otherwise noted.
  3. The brass column of heat sink of the high power LED is Anode. Please pay more attention to the necessary installation when installing The heat dissipate on equipments and connecting the electric circuit in avoid of short circuit and destroying.

### ■Tape Specifications (Units : mm)

