



Under Development	
Mass production	●



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



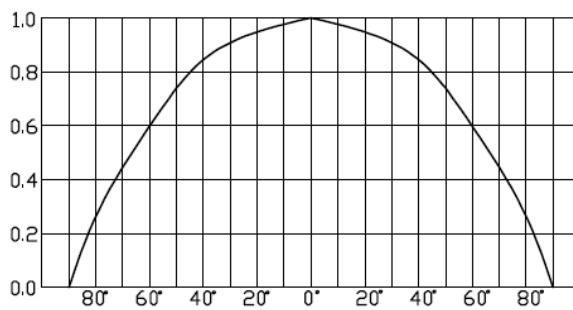
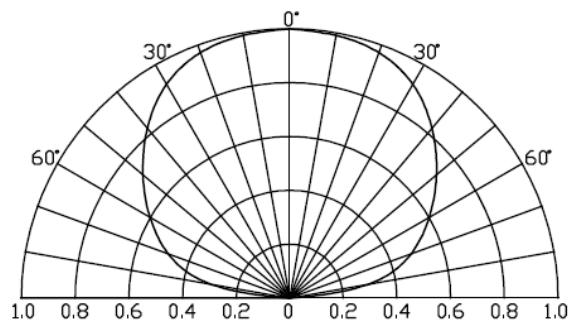
Features

- Long operating life
- Highest flux
- Available in Red
- 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
- RoHS compliant

Applications

- Lamps for plant growing
- Decorative and Entertainment lighting
- Indoor/Outdoor commercial lighting
- General use

Radiation Pattern





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Typical Optical/ Electrical Characteristics @T_a=25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	IF=700mA	2.0		2.8	V
Reverse Current	I _R	VR=10V	--	--	10	uA
50% Power Angle	2θ _{1/2}	IF=700mA	--	120	--	deg
Luminous flux	Φ _V	IF=700mA	80	90	--	lm
Recommend Forward Current	I _F	--	--	—	350	mA
Wave Length	λ _D	IF=700mA	620		630	nm
Thermal Resistance,Junction to Case	R _{JP}	IF=700mA	--	10	--	°C/W

The sample delivers goods data

Item	Symbol	Condition	Min.	Avg.	Max.	Unit
Luminous flux	Φ _V	IF=700mA				lm
50% Power Angle	2θ _{1/2}					deg
Forward Voltage	V _F					V
Wave Length	λ _D					nm

Notes:

- 1.Tolerance of measurement of forward voltage±0.1V.
- 2.Tolerance of measurement of peak Wavelength±2.0nm.
- 3.Tolerance of measurement of luminous flux±15%.

Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I _F	700	mA
Peak Forward Current*	I _{FP}	1000	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	1000	mW
Electrostatic discharge	E _{SD}	±2000	V
Operation Temperature	T _{OPR}	-40~+80	°C
Storage Temperature	T _{STG}	-40~+100	°C
Lead Soldering Temperature*	T _{SOL}	Max. 260°C for 3sec Max.	

*IFP Conditions : Pulse Width≤10msec duty≤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.

wave peak and soak-stannum soldering etc.is not suitable for this products.

Reflow soldering should not be done more than two times.The reflow temperature we recommend is 210°C

* Suggest to solder it by professional high power LED soldering machine.

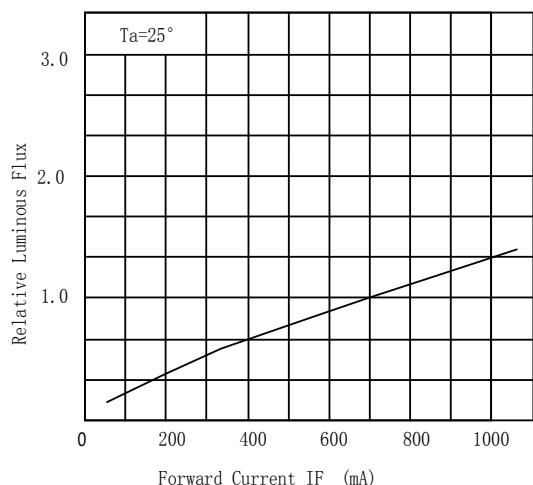
* Can use invariable-temperature searing-iron with soldering condition:≤260 degree less than 3 seconds.



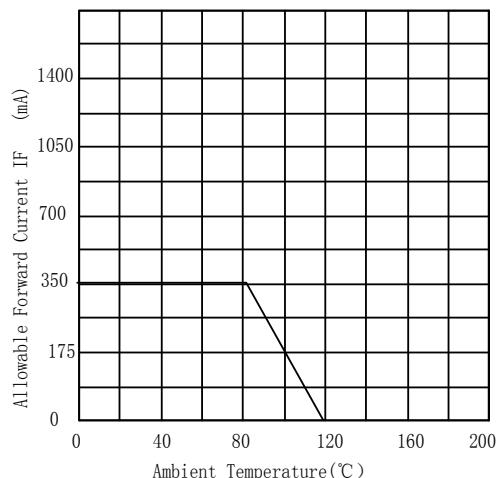
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Typical Optical/Electrical Characteristics Curves ($T_a=25^\circ\text{C}$ Unless Otherwise Noted)

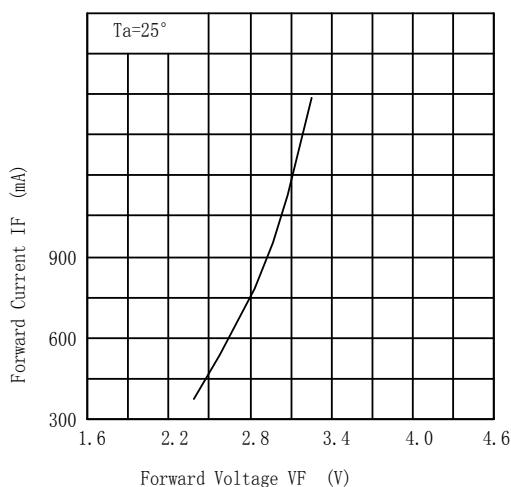
Relative Luminous Flux - IF



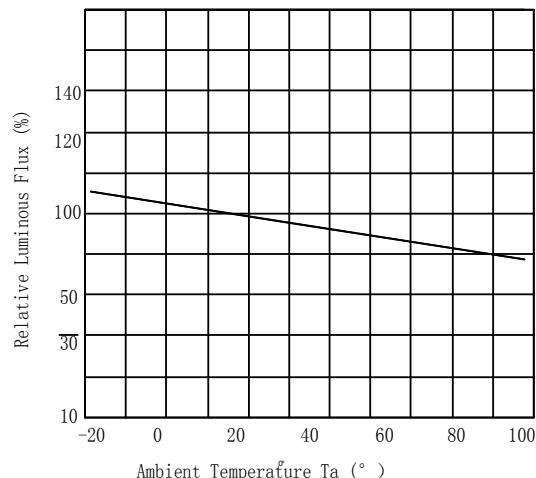
Allowable Forward Current - Ta



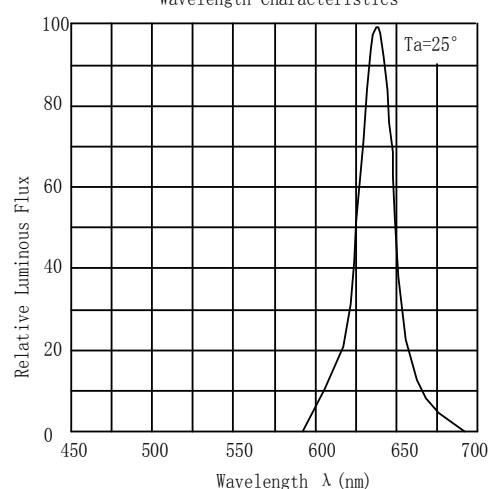
IF - VF



Relative Luminous Flux - Ta



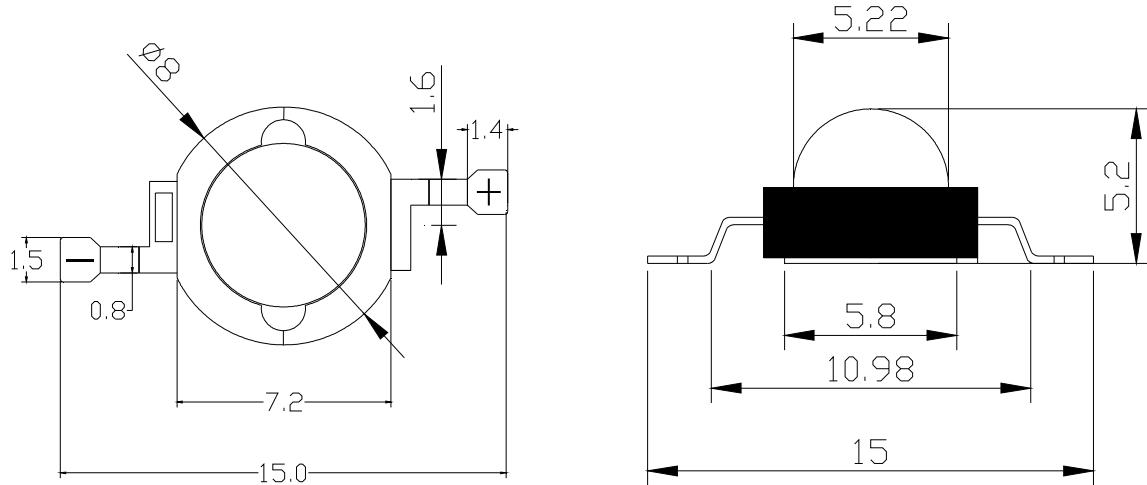
Wavelength Characteristics





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Package Dimensions



Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is $\pm 0.2\text{mm}$ unless otherwise noted.

Tape Specifications(Units:mm)

