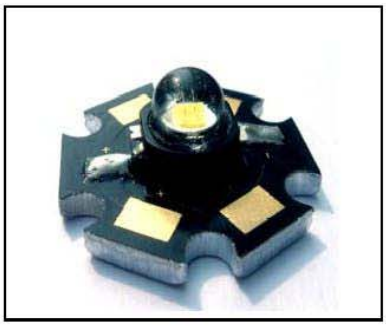
Under Development	
Mass production	●

Hight Power Star LED

P/N: EWJ85E-1 (White)

Rev: 03

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



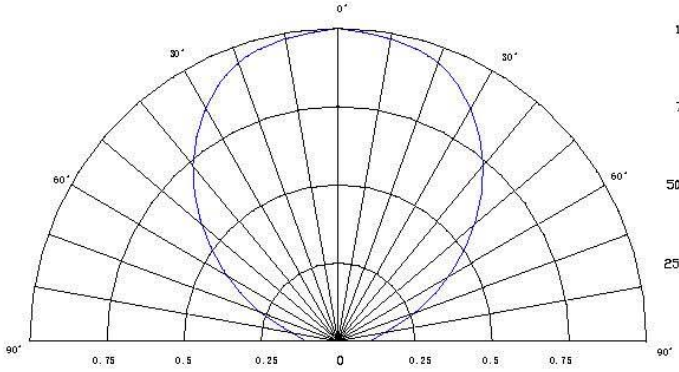
Features

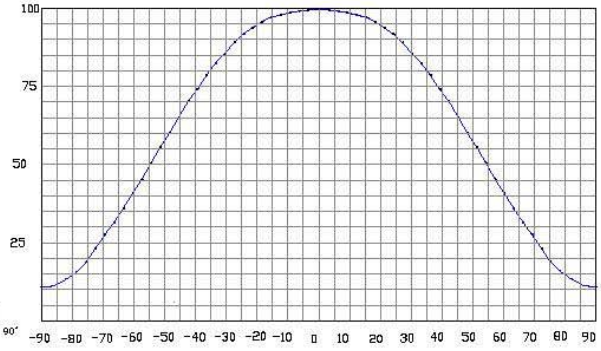
- Highest flux per LED family in the world
- Very long operating life (up to 100k hours)
- Available in White:2500K-25000K
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Fully dimmable
- No UV
- Superior ESD protection
- Eutectic die band
- RoHS compliant—lead-free
- Instant light (less than 100ns)

Applications

- Portable (flashlight, bicycle)
- Reading lights(car, bus, aircraft)
- Orientation
- Mini-accent
- Decorative
- Fiber optic alternative
- Appliance
- Sign and channel letter
- Architectural detail
- Cove lighting
- Automotive exterior (Stop-Tail-turn, CHMSL, Mirror side repeat)
- Edge-lit signs(Exit, point of sale)

■ Radiation Pattern





■Typical Optical/ Electrical Characteristics @T_a=25℃

Item	Symbol	Condition	Min.	Typ.	Mix.	Unit
Forward Voltage	V_F	IF=1.2A	3.2	3.38	4.0	V
Reverse Current	I_R	VR=5v	--	--	50	uA
50% Power Angle	2θ1/2	IF=1.2A	--	140	--	deg
Luminous Intensity	Φ_V	IF=1.2A	147.7	168	192	lm
Recommend Forward Current	I_F	- -	--	1.2	--	A
Chromaticity	Tc	IF=1.2A	5000	6000	7000	k
Chromaticity Coordinates	X	IF=1.2A	--	--	--	--
	Y		--	--	--	
Thermal Resistance,Junction to Case	R_{JP}	IF=1.2A	--	20	--	℃/W

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 intensity±15%.

■Absolute Maximum Rating

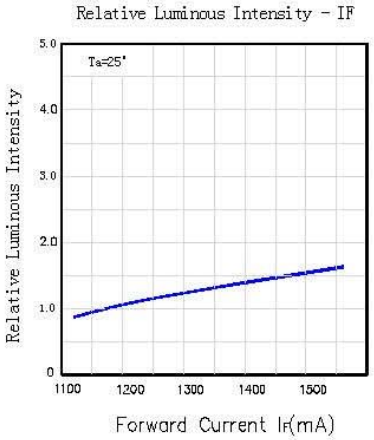
Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	1.2	A
Peak Forward Current*	I_{FP}	1.3	A
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	5	W
Electrostatic discharge	E_{SD}	±4500	V
Operation Temperature	T_{OPR}	-40~+80	℃
Storage Temperature	T_{STG}	-40~+100	℃
Lead Soldering Temperature*	T_{SOL}	Max. 260℃ for 6sec Max.	

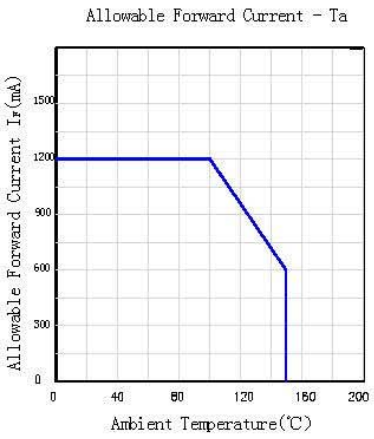
*IFP Conditions：Pulse Width≤10msec duty≤1/10

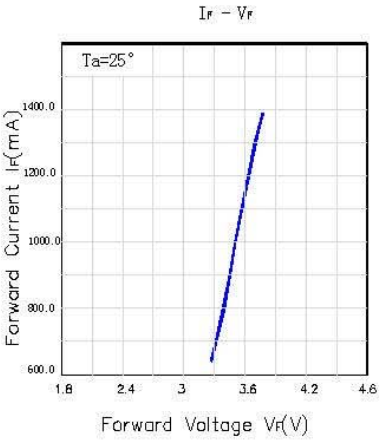
* Our MCPCB is usual use for installation and connection during application, but the ability of heat dissipation is not enough. If lighted, our high power stars will need better another type heat dissipation equipment. So we recommend the working time is not over 5-10 seconds without any heat dissipation equipment.

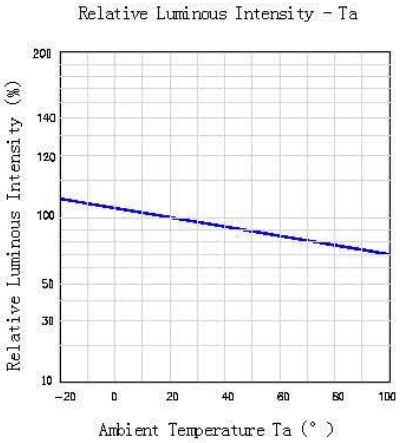
■Typical Optical/Electrical Characteristics Curves

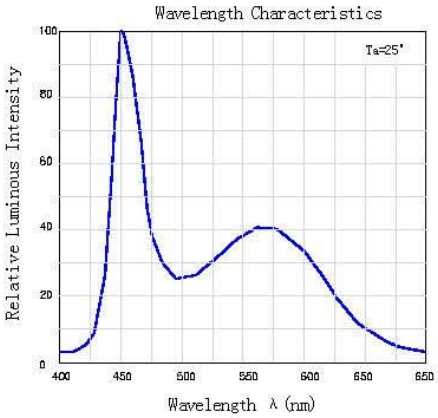
(Ta=25℃ Unless Otherwise Noted)



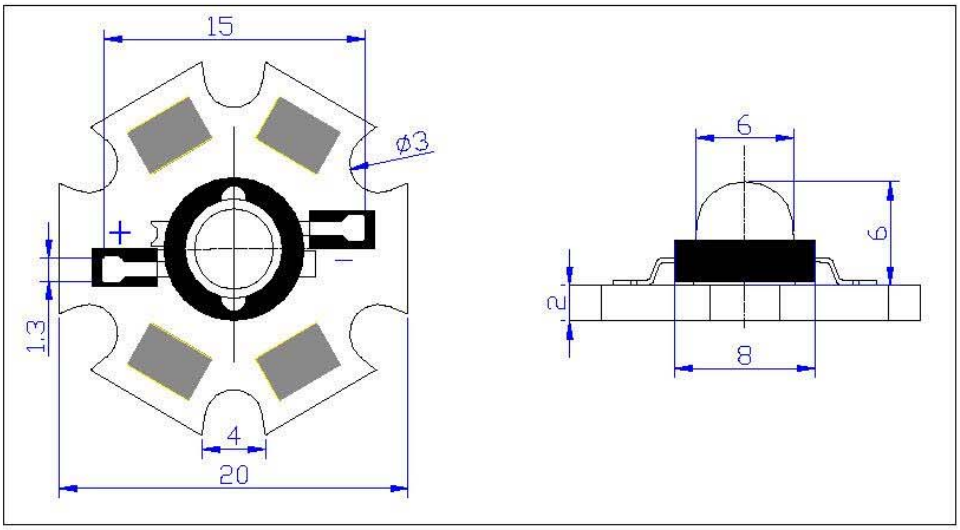








Package Dimensions



Notes: 1. All dimension units are millimeters.

2. All dimension tolerance is ±0.2mm unless otherwise noted.

■Tape Specifications (Units : mm)