

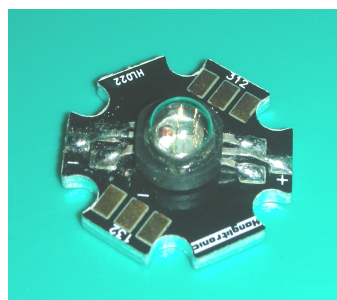
High Power Star LED

P/N: ERGBF71EM8-7(Full Colors)

Rev: 03



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



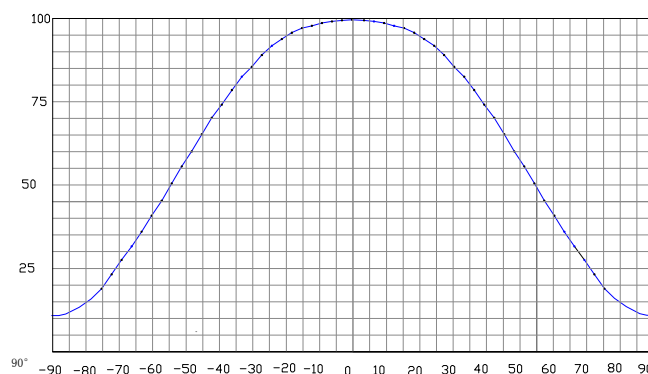
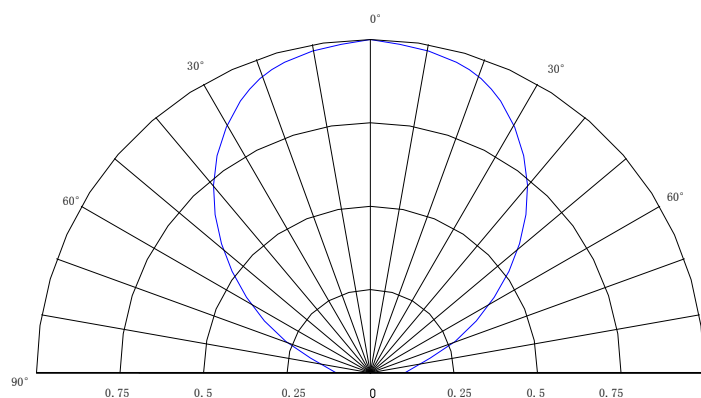
Features

- Highest flux per LED family in the world
- Very long operating life (up to 100k hours)
- Available in Full Colors
- 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



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■ Typical Optical/ Electrical Characteristics @T_J=25°C

Item	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	V _F (R)	IF=350mA	2.0	--	2.8	V
	V _F (G)		3.0	--	3.8	
	V _F (B)		3.0	--	3.8	
Reverse Current	I _R	VR=5v	--	--	50	uA
50% Power Angle	2θ1/2	IF=350mA	110	--	140	deg
Recommend Forward Current	I _F	--	--	350	--	mA
Luminous Intensity	φ _V (R)	IF=350mA	18.1	--	34.9	lm
	φ _V (G)		45.3	--	76.6	
	φ _V (B)		6.3	--	18.1	
Wave Length	λ d(R)	IF=350mA	620	--	630	nm
	λ d(G)		520	--	530	
	λ d(B)		460	--	470	

- 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	350	mA
Peak Forward Current*	I _{FP}	500	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	1000	mW
Electrostatic discharge	E _{SD}	±4500	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.

*Re-flow,wave peak and soak-stannum soldering etc.is not suitable for this products.

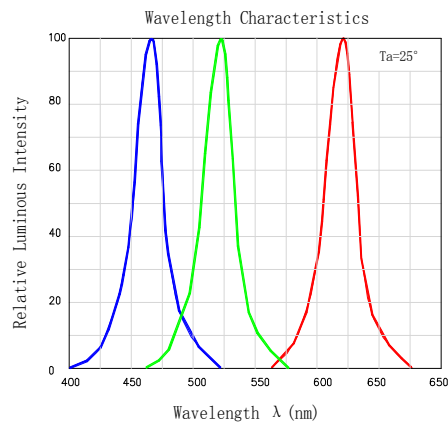
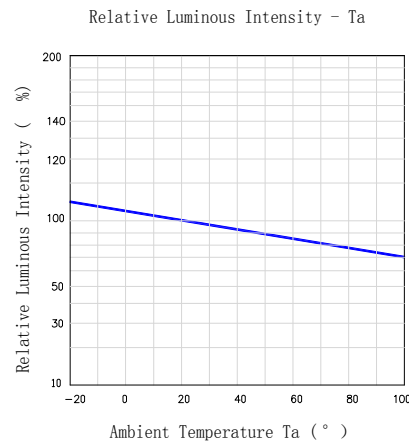
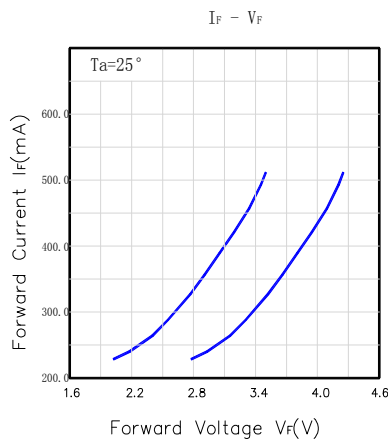
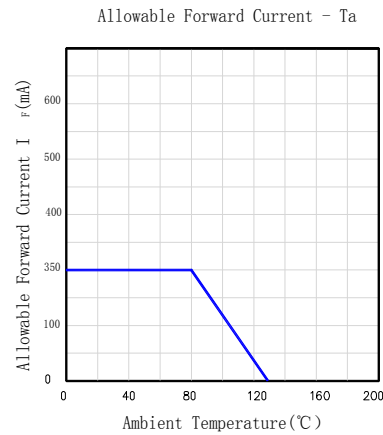
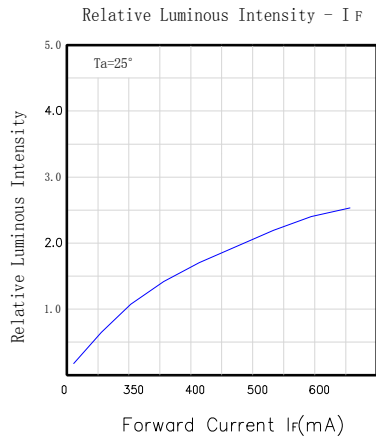
*Suggest to solder it by professional high power LED soldering machine.

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

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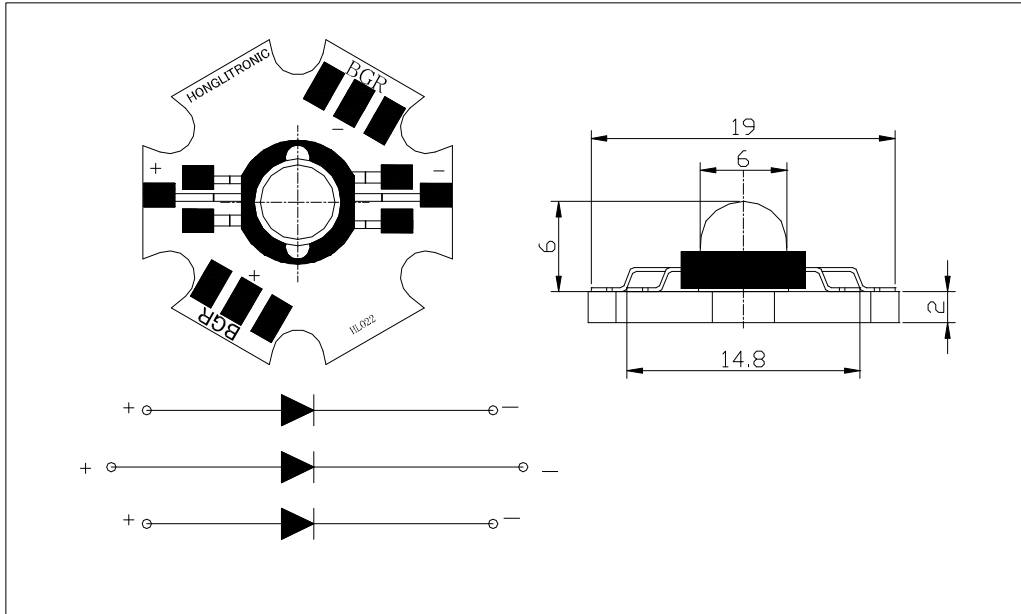
■ Typical Optical/Electrical Characteristics Curves
 (T_J=25°C Unless Otherwise Noted)



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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.

■ Package Adhesive Pipe (Units : mm)

