FLYING ELECTRONICS

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TEL:+86-574-88136626
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High Power Emitter LED P/N: **NFL-EK3W3EAF(White)**

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

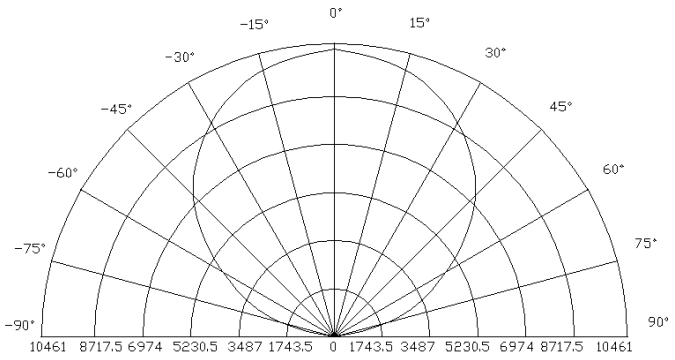
Features

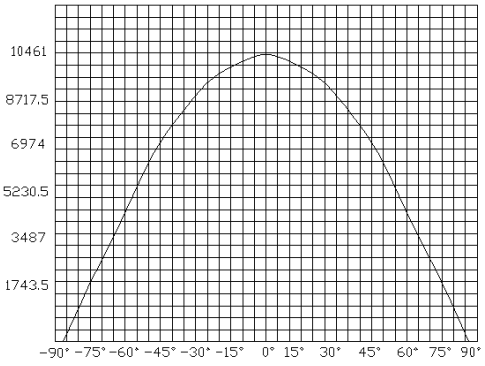
- Long operating life
- Highest flux
- Available in White:2500K-25000K
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Instant light (less than 100ns)
- Fully dimmable
- No UV
- Superior ESD protection
- 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 commerclal and Residentlal 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





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Typical Optical/ Electrical Characteristics @T_J=25℃

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	IF=800mA	3.2	--	4.2	V
Reverse Current	I_R	VR=5v	--	--	50	uA
50% Power Angle	2θ1/2	IF=800mA	110	--	140	deg
Luminous Intensity	Φv	IF=800mA	129.5	147.7	--	lm
Recommend Forward Current	I_F	- -	--	800	--	mA
Chromaticity	Tc	IF=800mA	5000	--	10000	k
Thermal Resistance,Junction to Case	R_{JP}	IF=800mA	--	10	--	℃/w
The sample delivers goods data						
Item	Symbol	Condition	Min.	Avg.	Max.	Unit
Luminous Intensity	Φv	IF=800mA	163	--	168.3	lm
50% Power Angle	2θ1/2		--	--	--	deg
Forward Voltage	V_F		3.6	--	4.0	v
Chromaticity	Tc		6100	--	6500	k
White Color Region	--					
ChromaticityCoordinates	X=--			Y=--		

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	800	mA
Peak Forward Current*	I_{FP}	1000	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	3000	mW
Electrostatic discharge	E_{SD}	± 2000	V
Operation Temperature	T_{OPR}	-40~+80	℃
Storage Temperature	T_{STG}	-40~+100	℃
Lead Soldering Temperature*	T_{SOL}	Max. 260℃ 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℃ less than 3 seconds.

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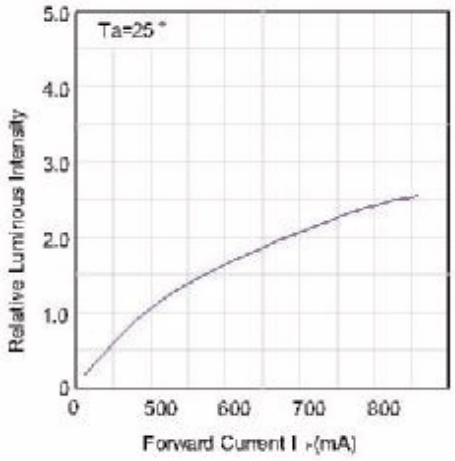
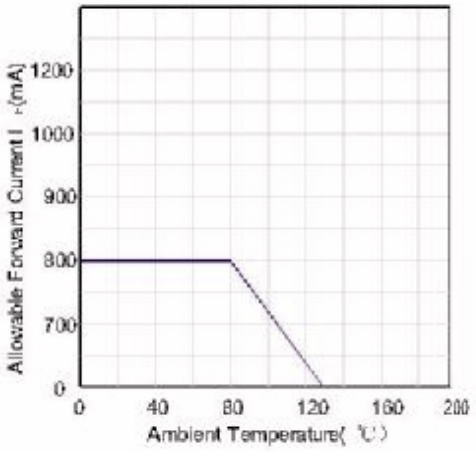
High Power Emitter LED P/N: **NFL-EK3W3EAF(White)**

Typical Optical/Electrical Characteristics Curves
(T_J=25℃ Unless Otherwise Noted)

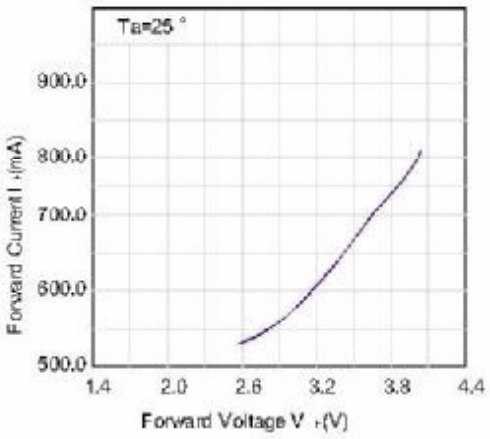
Relative Luminous Intensity - IF



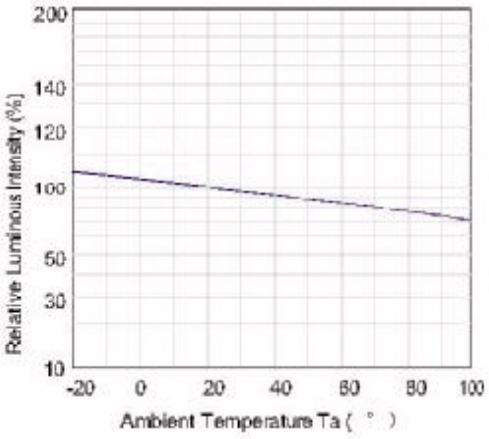
Allowable Forward Current - Ta



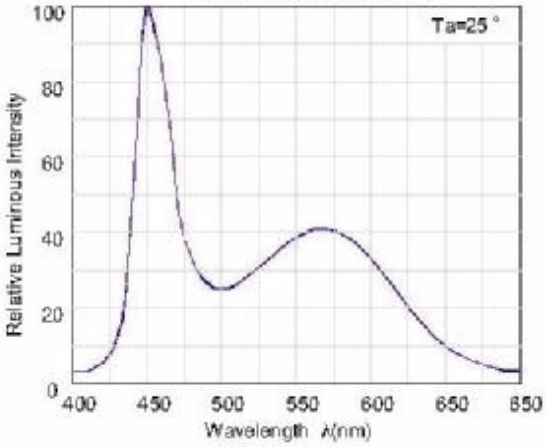
IF - VF



Relative Luminous Intensity - Ta



Wavelength Characteristics



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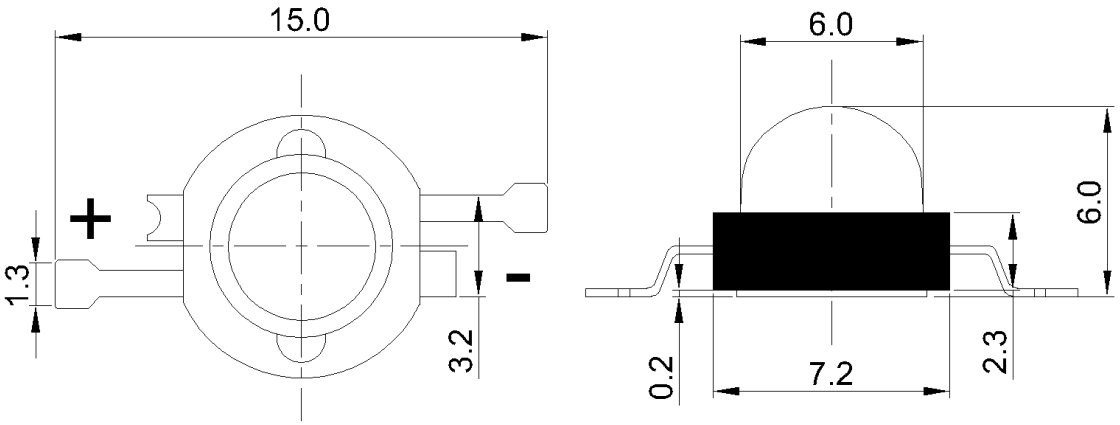
Package Dimensions



Notes:
1. All dimension units are millimeters.
2. All dimension tolerance is ± 0.2mm unless otherwise noted.

Tape Specifications (Units: mm)