ARPL-Star-1W Blue (14B1N)

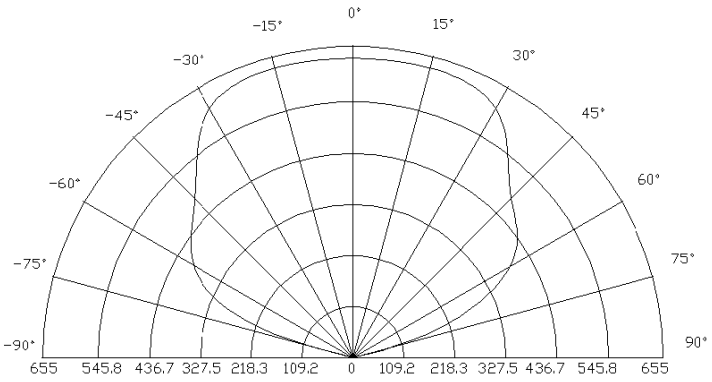
FEATURES

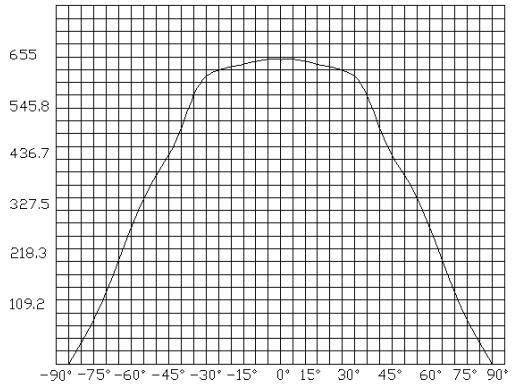
- Long operating life
- Highest flux
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Instant light (less than 100ns)
- Fully dimmable
- No UV
- Superior ESD protection
- RoHS compliant

APPLICATIONS

- Fiber optic altemative/Decorative/enter-tainment
- Mini-accet/Up lighters/Down lighters/Orien-tation
- 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-Tum, Chmsl, Mirror Side Repeat)
- Traffic signaling/Beacons/RailCrossing and Wayside

RADIATION PATTERN





ELECTRICAL / OPTICAL CHARACTERISTICS AT TA=25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F (R)	IF=350mA	3.0	--	3.8	V
Reverse Current	I_R	VR=5V	--	--	30	uA
50% Power Angle	2θ1/2	IF=350mA	120		140	deg
Luminous Intensity	φ_V(R)	IF=350mA	18.1	23.5		lm
Recommend Forward Current	I_F	- -	--	--	350	mA
Wave Length	λ_d	IF=350mA	460	--	470	nm
Thermal Resistance,Junction to Case	RJP	IF=350mA	--	10	--	°C/w

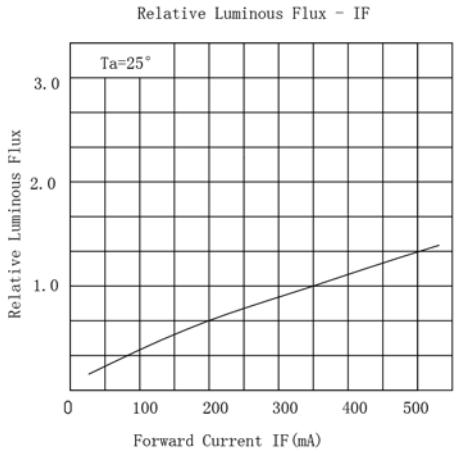
Notes:
1.Tolerance of measurement of forward voltage±0.1V.
2.Tolerance of measurement of peak Wavelength±2.0nm.
3.Tolerance of measurement of luminous intensity±15%.

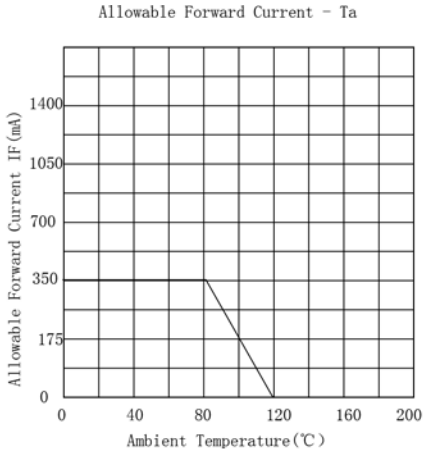
ABSOLUTE MAXIMUM RATING

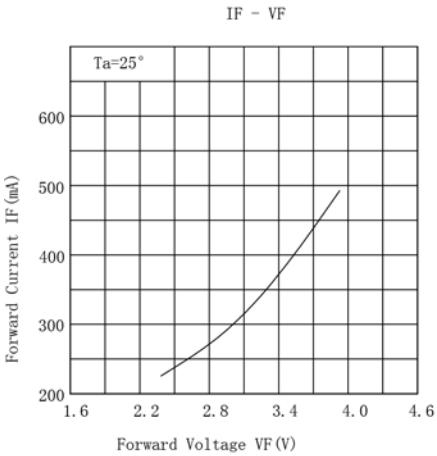
Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	350	mA
Peak Forward Current*	I_{FP}	500	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	1000	mW
Electrostatic discharge	E_{SD}	±2000	V
Operation Temperature	T_{OPR}	-40~+80	°C
Storage Temperature	T_{STG}	-40~+100	°C
Lead Soldering Temperature*	T_{SOL}	Max. 260°C for 3sec Max.	

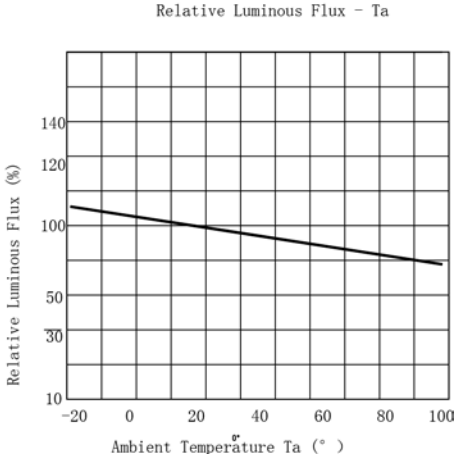
**IFP Conditions: Pulse Width≤10msec duty≤1/10*
** All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a ap-propriate heat dissipation equipment.*
** 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.*

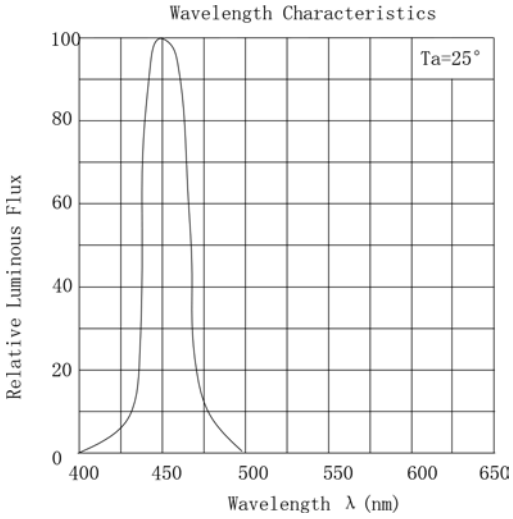
TYPICAL OPTICAL/ELECTRICAL CHARACTERISTICS CURVES
(Ta=25°C Unless Otherwise Noted)










Wavelength Characteristics
Ta=25°
Relative Luminous Flux
100
80
60
40
20
0
400
450
500
550
600
650
Wavelength λ (nm)