

ARPL-3W RED (3R3N)

FEATURES

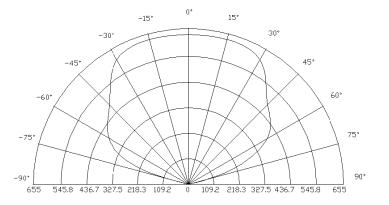
- Long operating life
- Highest flux
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Instant light (less than 100ns)
- Fully dimmable
- No UV
- Superior ESD protection
- RoHS compliant

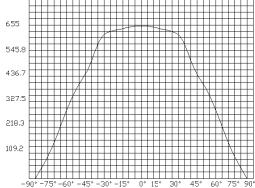
RADIATION PATTERN



APPLICATIONS

- Fiber optic alternative/Decorative/entertainment
- Mini-accet/Up lighters/Down lighters/Orientation
- Indoor/Outdoor commercial and Residential 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





ELECTRICAL / OPTICAL CHARACTERISTICS AT TA=25°C

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
Forward Voltage	V _F (R)	IF=700mA	2.2		2.4	V
Reverse Current	I _R	VR=5V			30	uA
50% Power Angle	201/2	IF=700mA	120		140	deg
Luminous Intensity	φ _v (R)	IF=700mA	100		110	lm
Recommend Forward Current	I _F				700	mA
Wave Length	λ_{d}	IF=700mA	620		630	nm
Thermal Resistance, Junction to Case	RJP	IF=700mA		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	700	mA	
Peak Forward Current*	\mathbf{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	°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

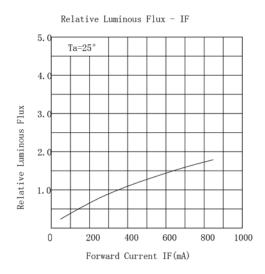
* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a ap-propriate heat dissipation equipment.

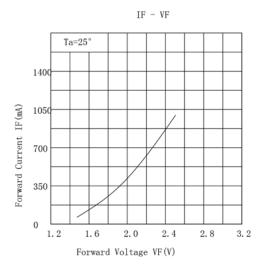
* Re-flow, wave peak and soak-stannum soldering etc. is not suitable for this products.

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

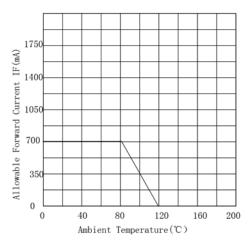
* Can use invariable-temperature searing-iron with soldering condition: ≤260 degree less than 3 seconds.

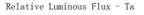
TYPICAL OPTICAL/ELECTRICAL CHARACTERISTICS CURVES (Ta=25°C Unless Otherwise Noted)

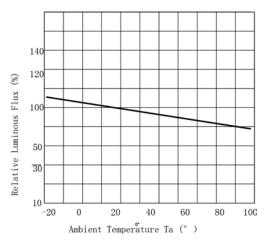




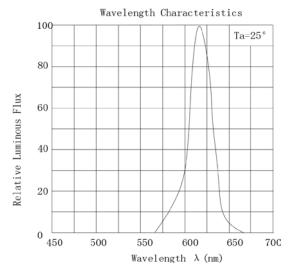
Allowable Forward Current - Ta



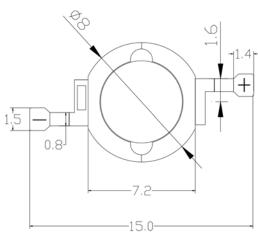


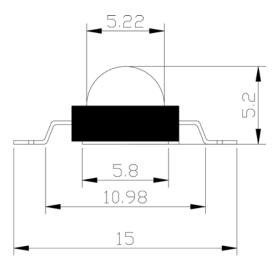






PACKAGE DIMENSIONS





Notes:

1. All dimension units are millimeters.

2. All dimension tolerance is $\pm 0.2mm$ unless otherwise noted.

