

## ARPL-9W RGB/6-pin (RGBF93)



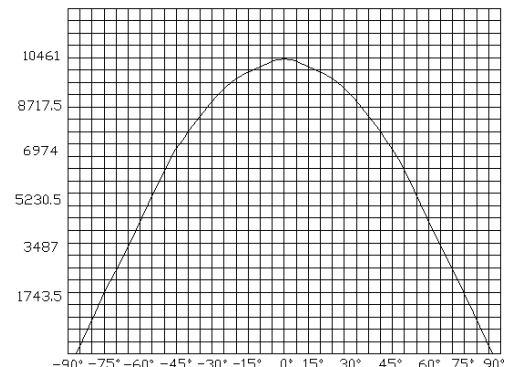
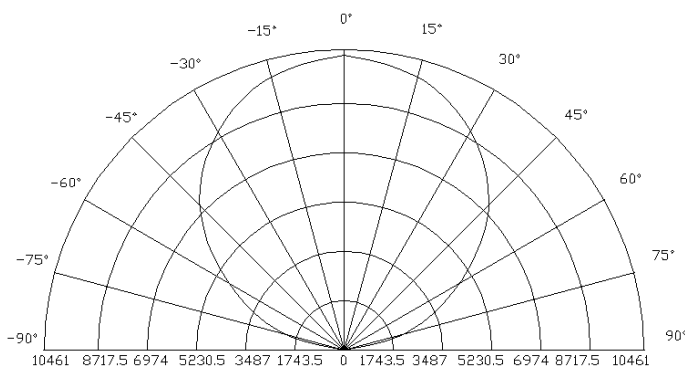
### FEATURES

- Long operating life
- Highest flux
- Available in Full color
- 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 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-Turn, CHMSL, Mirror Side Repeat)
- Traffic signaling / Beacons / Rail-Crossing and Wayside

### RADIATION PATTERN



### ELECTRICAL / OPTICAL CHARACTERISTICS AT TA=25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$ (R)	IF=800mA	2.0		3.0	V
	$V_F$ (G)		3.0		4.0	
	$V_F$ (B)		3.0		4.0	
Reverse Current	$I_R$	VR=5V	--	--	50	uA
50% Power Angle	$2\theta_{1/2}$	IF=800mA	120	--	140	deg
Luminous Intensity	$\phi_V$ (R)	IF=800mA	76.6	87.4		lm
	$\phi_V$ (G)		99.7	113.6		
	$\phi_V$ (B)		23.5	26.8		
Recommend Forward Current	$I_F$	- -	--	800	--	mA
Wave Length	$\lambda_d$ (R)	IF=800mA	620	630		nm
	$\lambda_d$ (G)		520	530		
	$\lambda_d$ (B)		460	470		

#### Notes:

1. Tolerance of measurement of forward voltage  $\pm 0.1V$ .
2. Tolerance of measurement of peak Wavelength  $\pm 2.0nm$ .
3. Tolerance of measurement of luminous intensity  $\pm 15\%$ .

## 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	$P_D$	3x3000	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

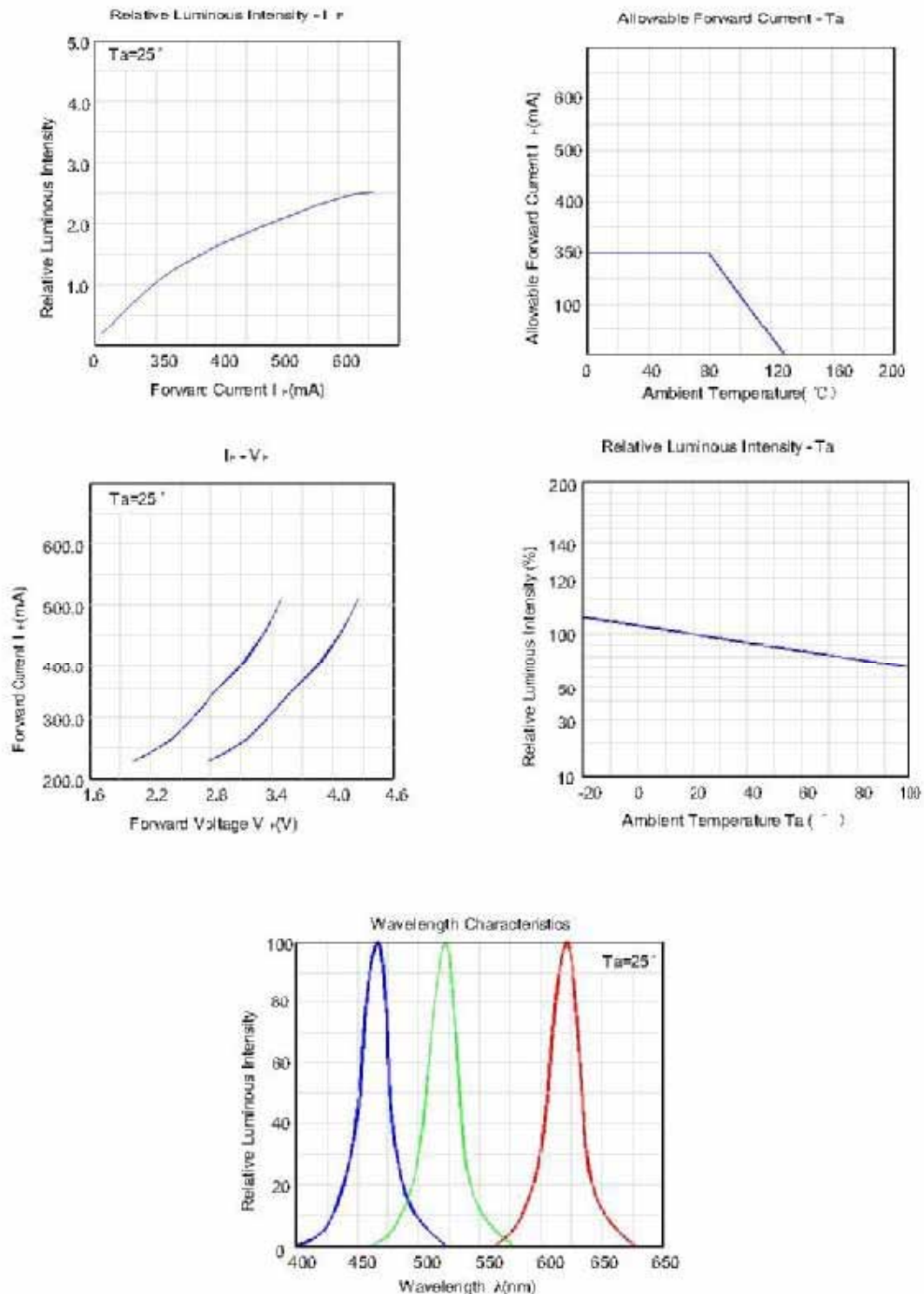
\* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment.

\*Please don't add or change wires,while LEDS is running

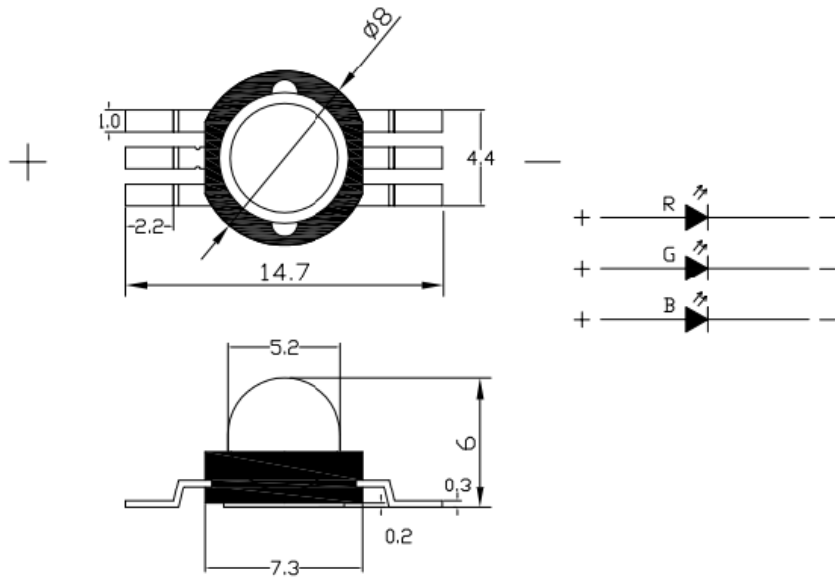
\* The LED of this a series can lead the heat reflux of 250 Celsius degrees Han but be free from damage.

## TYPICAL OPTICAL/ELECTRICAL CHARACTERISTICS CURVES

( $T_a=25^\circ\text{C}$  Unless Otherwise Noted)



# PACKAGE DIMENSIONS



**Notes:**

- 1. All dimension units are millimeters.
- 2. All dimension tolerance is  $\pm 0.2\text{mm}$  unless otherwise noted.

