

# LAS-2844RGBS40C14

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 900mA.
- ◆ Mixing any two colors of light, there will be no partial color and color spots uneven phenomenon.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ Red: AlGaInP
- ◆ Green: GaInN
- ◆ Blue: GaN
- ◆ Warm White: GaN

### Emitting Color:

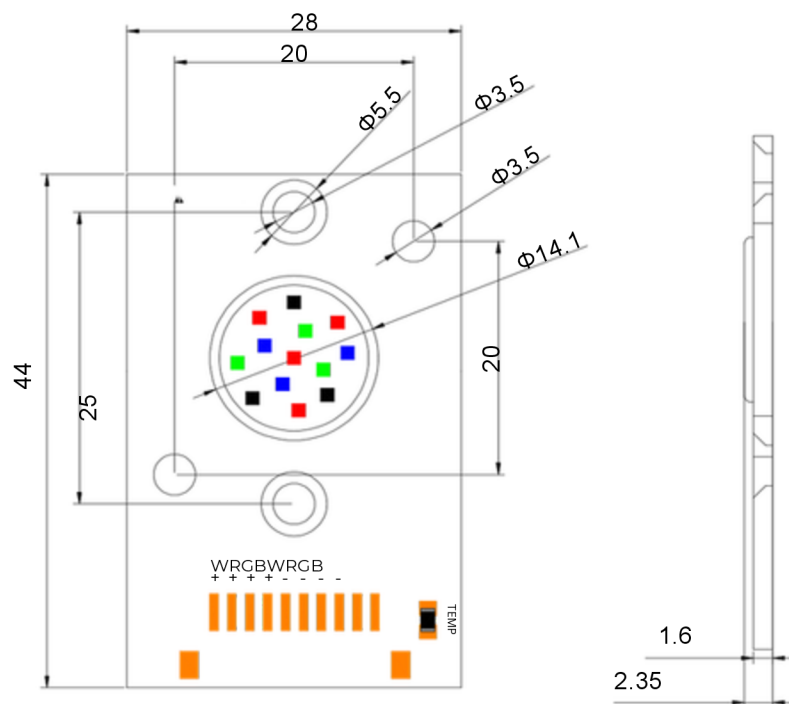
- ◆ Red
- ◆ Green
- ◆ Blue
- ◆ Warm White

### Applications:

- ◆ Entertainment lighting
- ◆ Landscape lighting
- ◆ Commercial lighting
- ◆ Decorative lighting



## Package Dimensions:



■ R-Red (R); 
 ■ G-Green G (); 
 ■ B-Blue (B); 
 ■ W-Warm White (S)

### Notes:

1. All dimensions are in millimeters.
2. Tolerances unless otherwise mentioned are  $\pm 0.25\text{mm}$ .

## Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Rating s	Unit	
Forward Current	IF	R	900	mA
		G	900	
		B	900	
		S	900	
Reverse Voltage	VR	Not designed for reverse operation	V	
Power Dissipation	PD	R	9900	mW
		G	9900	
		B	9900	
		S	9900	
Junction Temperature	Tj	R	115	°C
		G	135	
		B	135	
		S	135	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V	
Storage Temperature	Tstg	-30~+70	°C	
Operation Temperature	Topr	-30~+80		

### Notes:

- 1.Specifications are subject to change without notice.
- 2.The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
- 3.Precautions for ESD:

STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED.

All devices,equipment and machinery must be properly grounded .



## Electrical Optical Characteristics (Tc=25°C)

Parameter	Symbol	Condition	Emitting Color Symb	Min.	Typ.	Max.	Unit s	
Luminous Flux	$\phi_v$	If=900mA	R	400	500	—	lm	
			G	520	620	—		
			B	100	130	—		
			S	500	600	—		
Dominant Wavelength	$\lambda_d$		R	620	625	628	nm	
			G	522	527	530		
			B	452	456	460		
Peak-emission Wavelength	$\lambda_p$		R	630	635	640	nm	
			G	516	521	526		
			B	448	452	456		
Correlated Colour Temperature	CRCT			S	2800	—	3000	K
Spectral Line Half-Width	$\Delta\lambda$		R	15	20	25	nm	
		G	25	30	35			
		B	15	20	25			
Forward Voltage	$V_f$	R	8	9.5	11	V		
		G	8	9.5	11			
		B	8	9.5	11			
		S	8	9.5	11			
Viewing Angle at 50 %IV	2- $\theta_{1/2}$	—	—	—	115	—	Deg	
Thermal Resistance Junction to Case	R $\theta_{J-C}$	If=900mA	—	—	0.8	—	K/W	

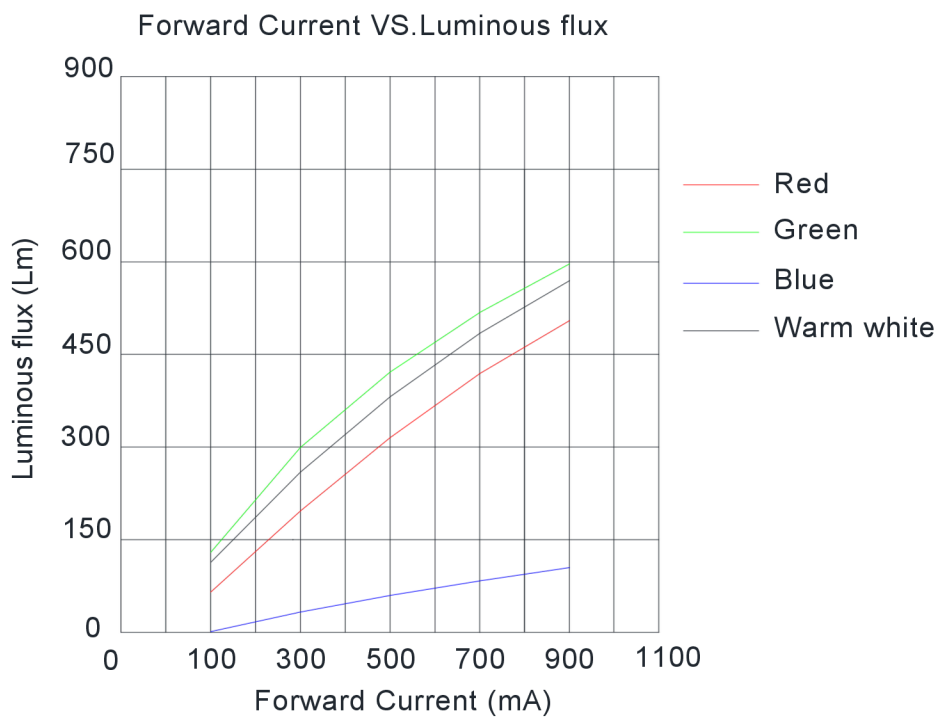
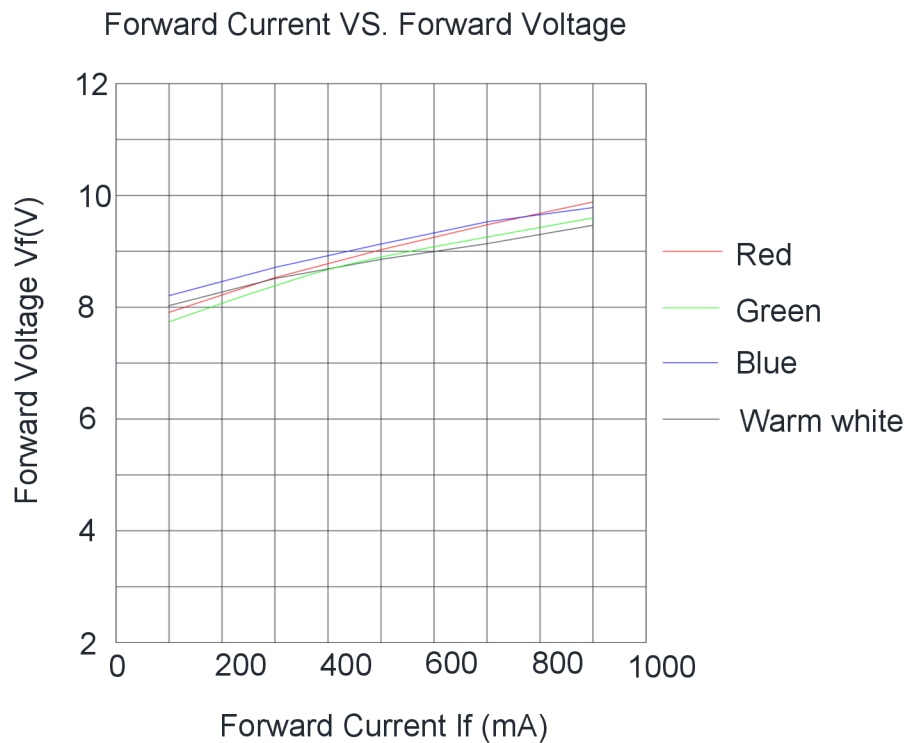
### Notes:

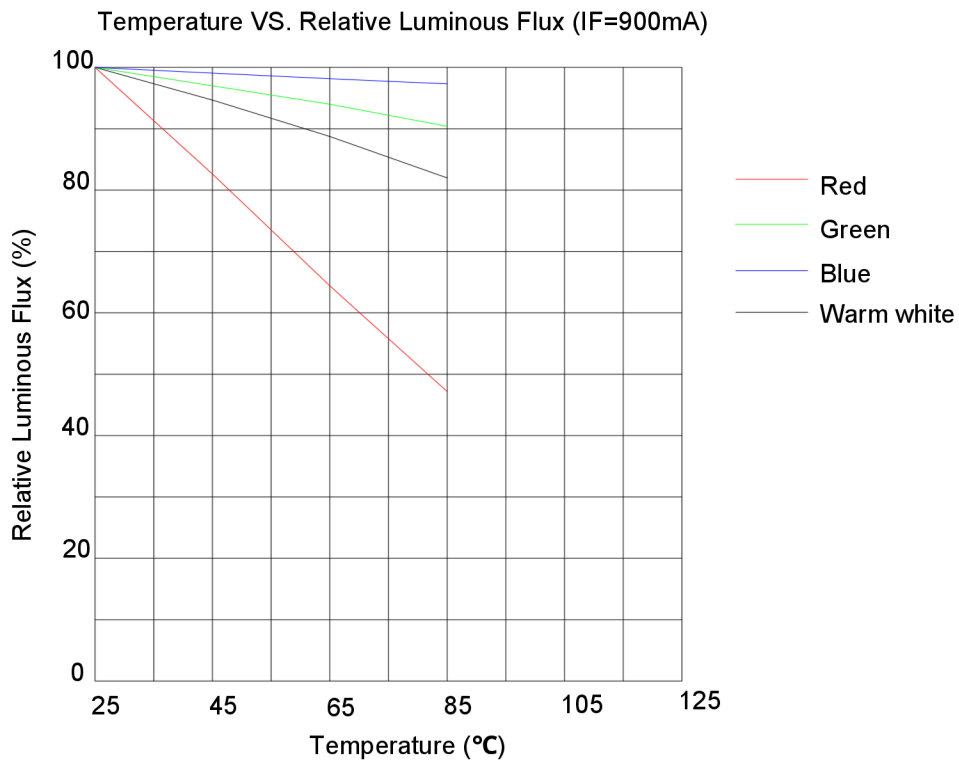
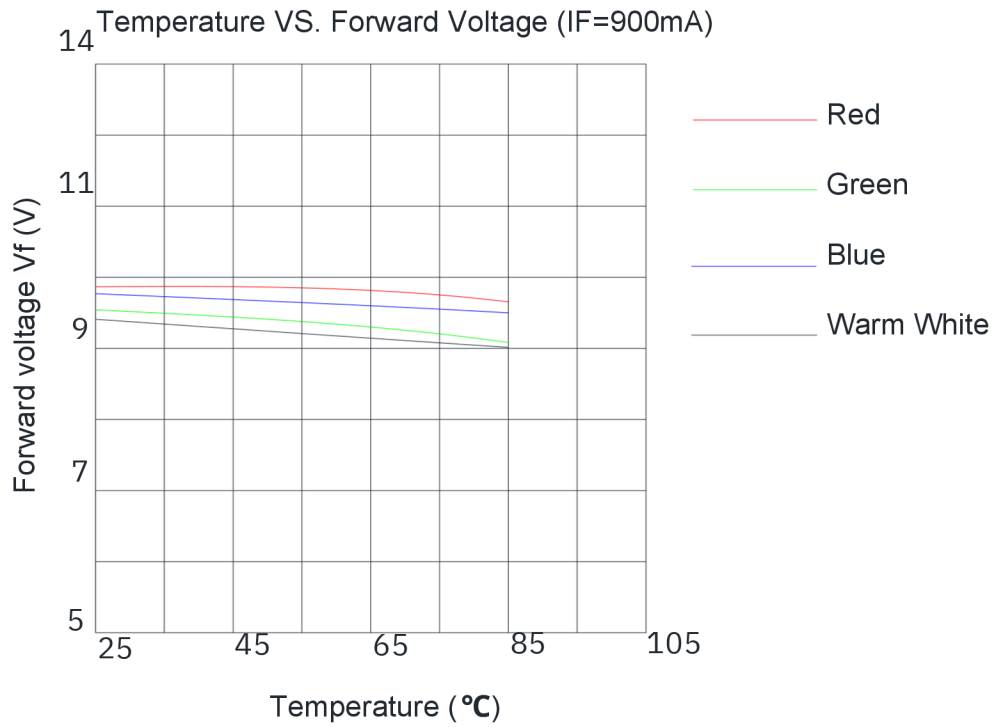
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance:  $\pm 15\%$ .
- 4.Forward voltage measurement tolerance:  $\pm 3\%$ .



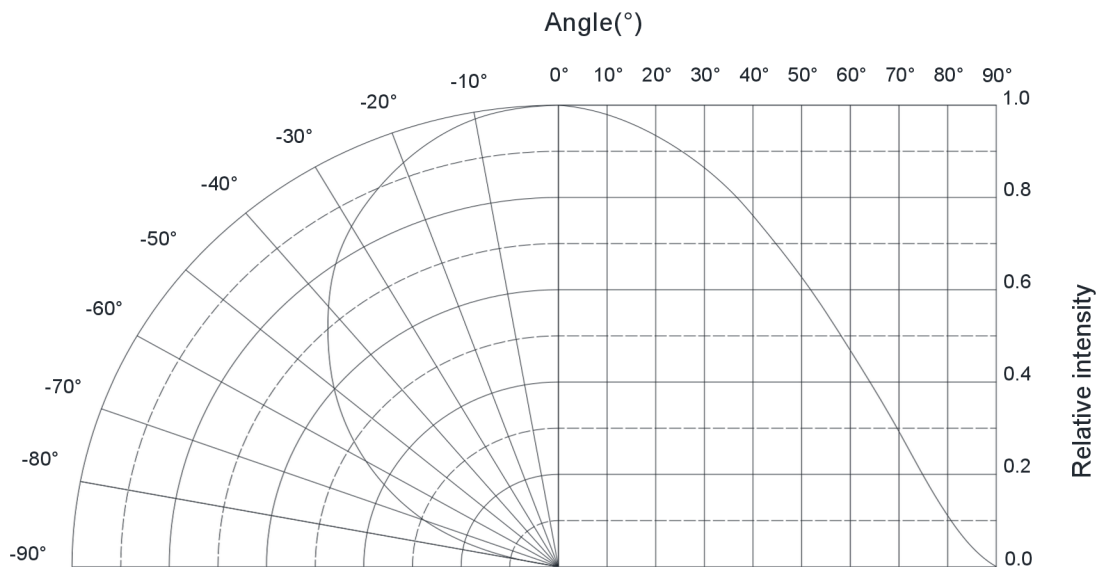
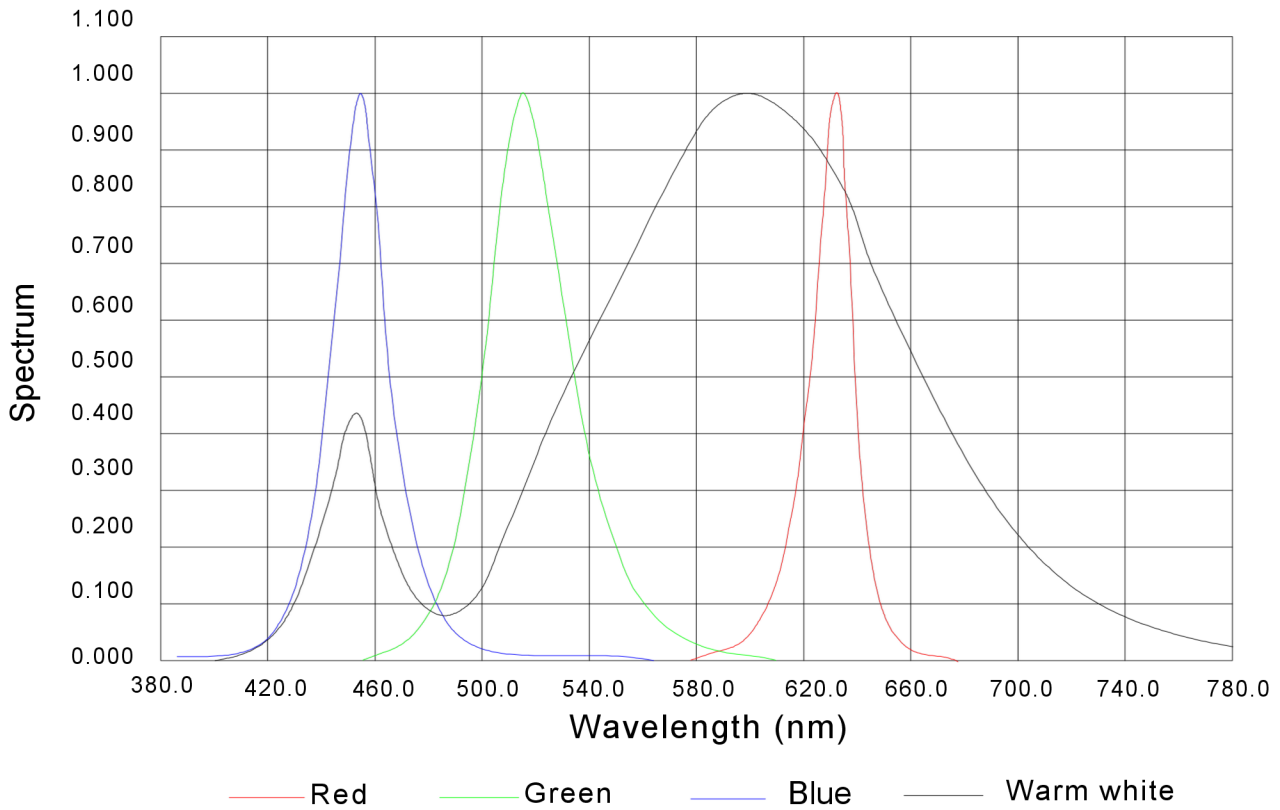
## Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)





## Relative Spectral Distribution

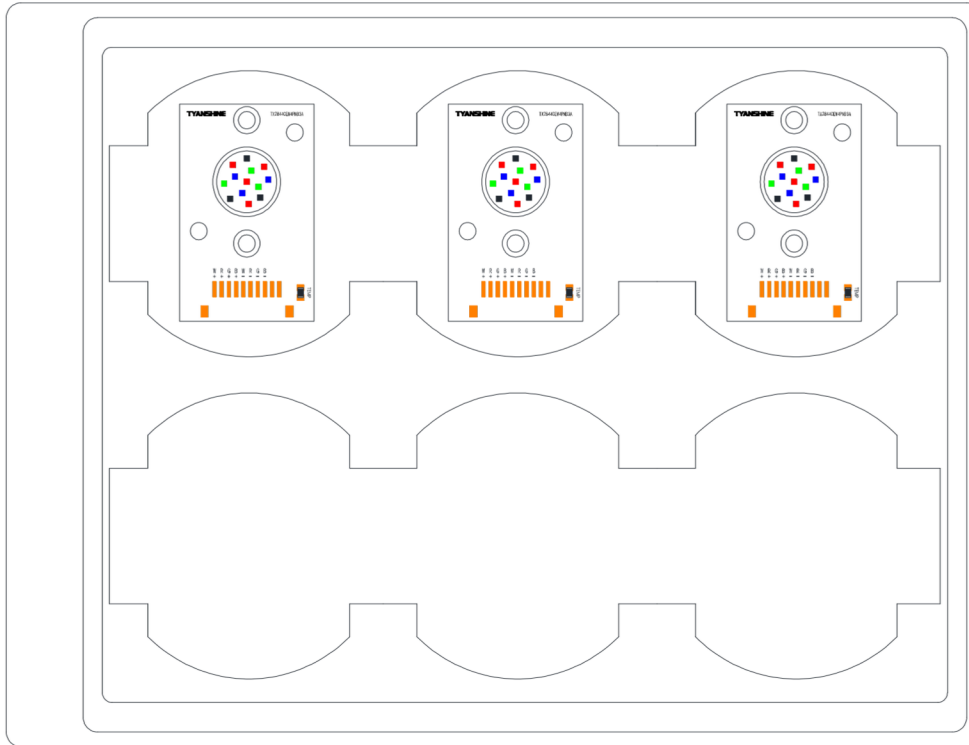


### Notes:

1. 2θ<sub>1/2</sub> is the off-axis angle from lamp center line where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is ± 5°.



## Dimensions For Cannulation And Packaging Quantity: 6PCS



### Notes:

1. All dimensions are in millimeters.
2. Tolerances are  $\pm 2.0$  mm unless otherwise noted.
3. The products are packaged together with silica gel, Transport, not to the weight of welding LED light-emitting area, As a result of the weight of LED light-emitting zone in the quality of, Irresponsible of the Company.