

TX-3535RGBW8VSD1-NG4DC-01

PRODUCT SPECIFICATION

Features:

- ◆ Excellent transiting heat from LED chip operating under 600mA
- ◆ High luminous output
- ◆ No UV

Chip Material:

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

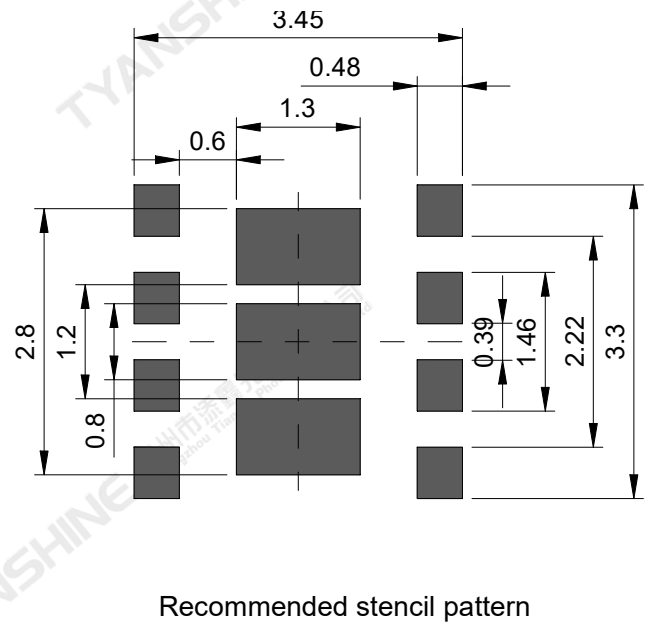
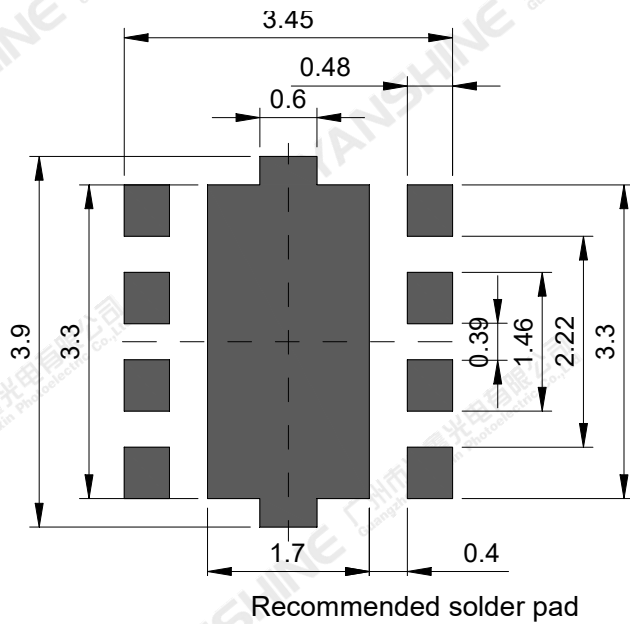
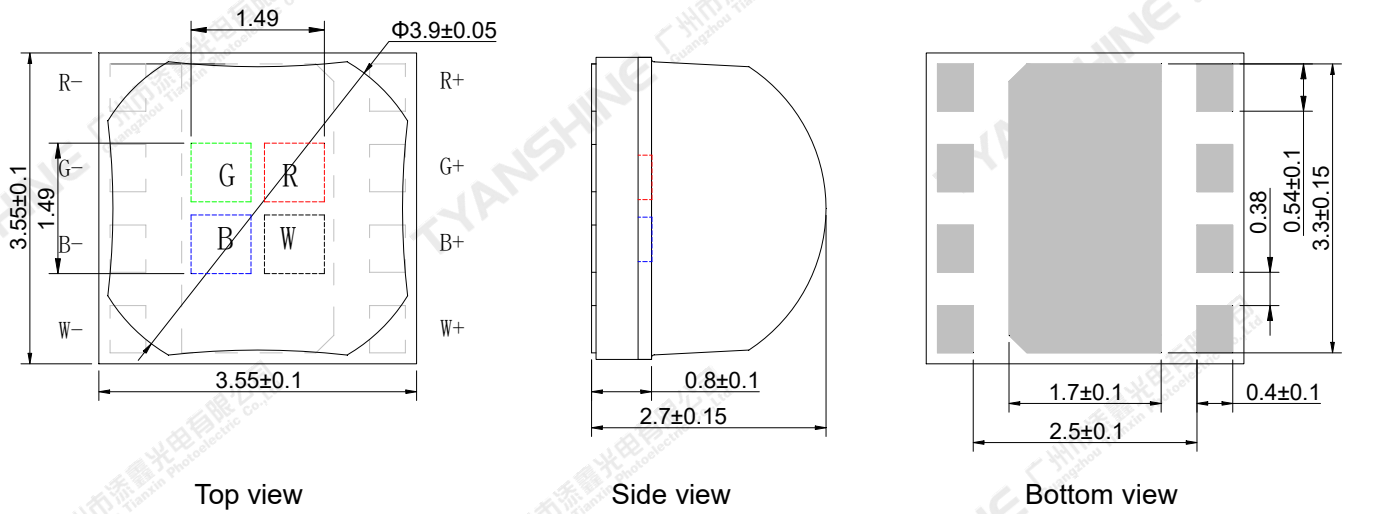
Emitting Color:

- ◆ Red (R)
- ◆ Green (G)
- ◆ Blue (B)
- ◆ White (W)

Applications:

- ◆ Portable flashlight
- ◆ Garden lighting
- ◆ General lighting

Package Dimensions:



Notes:

1. All dimensions are in millimeters .
2. Tolerances unless otherwise mentioned are ± 0.1 mm .

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Max Ratings	Unit	
Forward Current	IF	600	mA	
Peak Forward Current (Note 1)	IFP	800		
Reverse Voltage	VR	5	V	
Power Dissipation	PD	R	1620	mW
		G	2160	
		B	2100	
		W	2160	
Junction Temperature	Tj	R	125	°C
		G	150	
		B	150	
		W	150	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V	
Storage Temperature	Tstg	-40~70	°C	
Operation Temperature	Topr	-30~85		

Note: 1.Pulse width ≤0.1 msec, duty ≤1/10.

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, IF=500mA)

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	R	72	80	90	lm
		G	130	140	150	
		B	20	28	35	
		W	135	155	175	
Correlated Colour Temperature	CCT	W	6000	6500	7000	K
Dominant Wavelength	λ_d	R	618	623	628	nm
		G	519	524	529	
		B	451	456	461	
Peak-emission Wavelength	λ_p	R	625	630	635	nm
		G	514	519	524	
		B	447	452	457	
Spectral Line Half-Width	$\Delta\lambda$	R	14	16	18	nm
		G	30	35	40	
		B	18	21	24	
		W	21	24	27	
Forward Voltage	V_f	R	2.0	2.4	2.7	V
		G	2.9	3.2	3.6	
		B	2.8	3.1	3.5	
		W	2.9	3.2	3.6	
Reverse Current	I_R	$V_R=5V$	—	—	2	μA
Viewing Angle at 50% IV	$2\theta_{1/2}$	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R_{\theta_{j-c}}$	R	—	14	—	K/W
		G	—	14	—	
		B	—	14	—	
		W	—	14	—	
Temperature Coefficient of Voltage	$V\Delta F/T$	R	—	-2.0	—	mV/°C
		G	—	-5.8	—	
		B	—	-1.6	—	
		W	—	-1.6	—	

Notes:

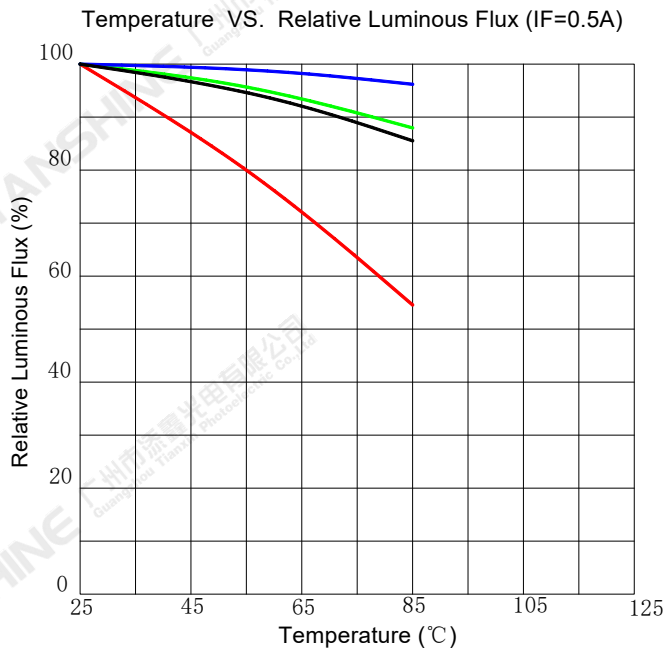
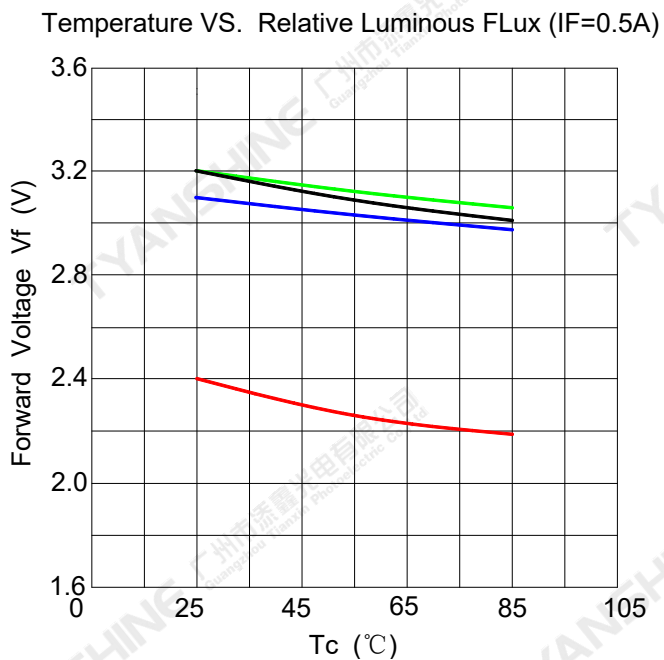
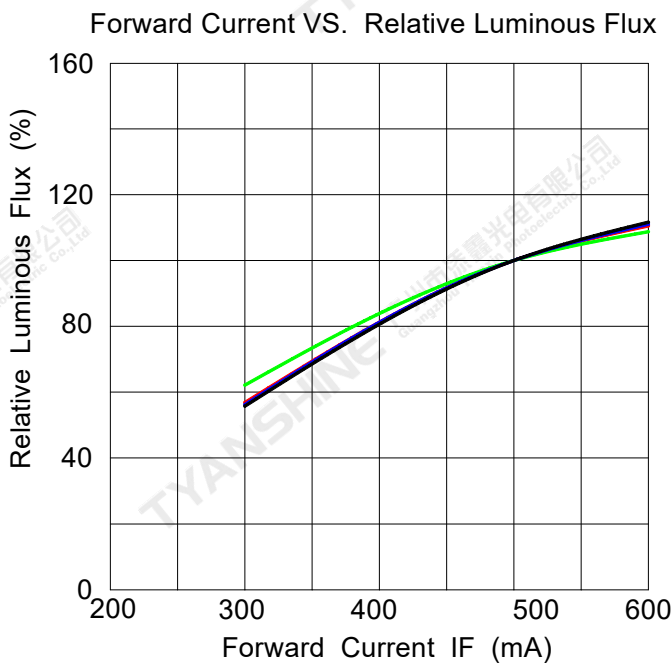
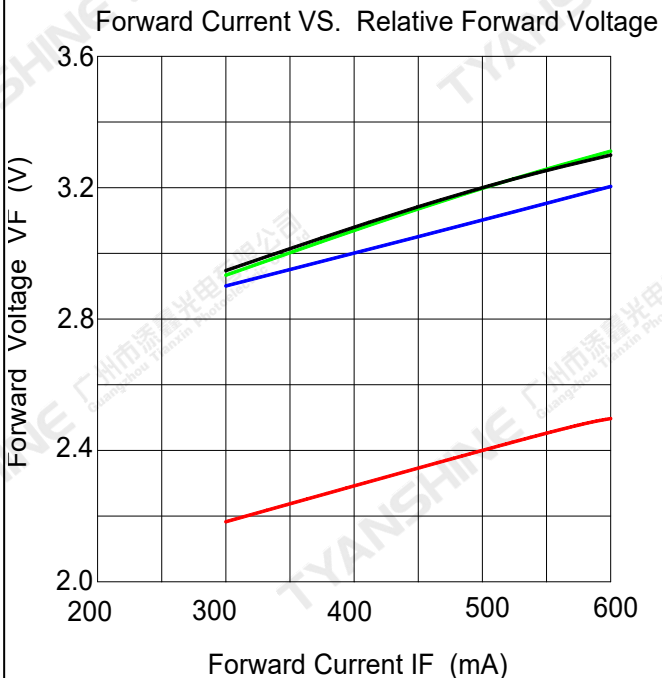
- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- Luminous flux measurement tolerance: $\pm 10\%$.

4. Forward voltage measurement tolerance: $\pm 10\%V$.

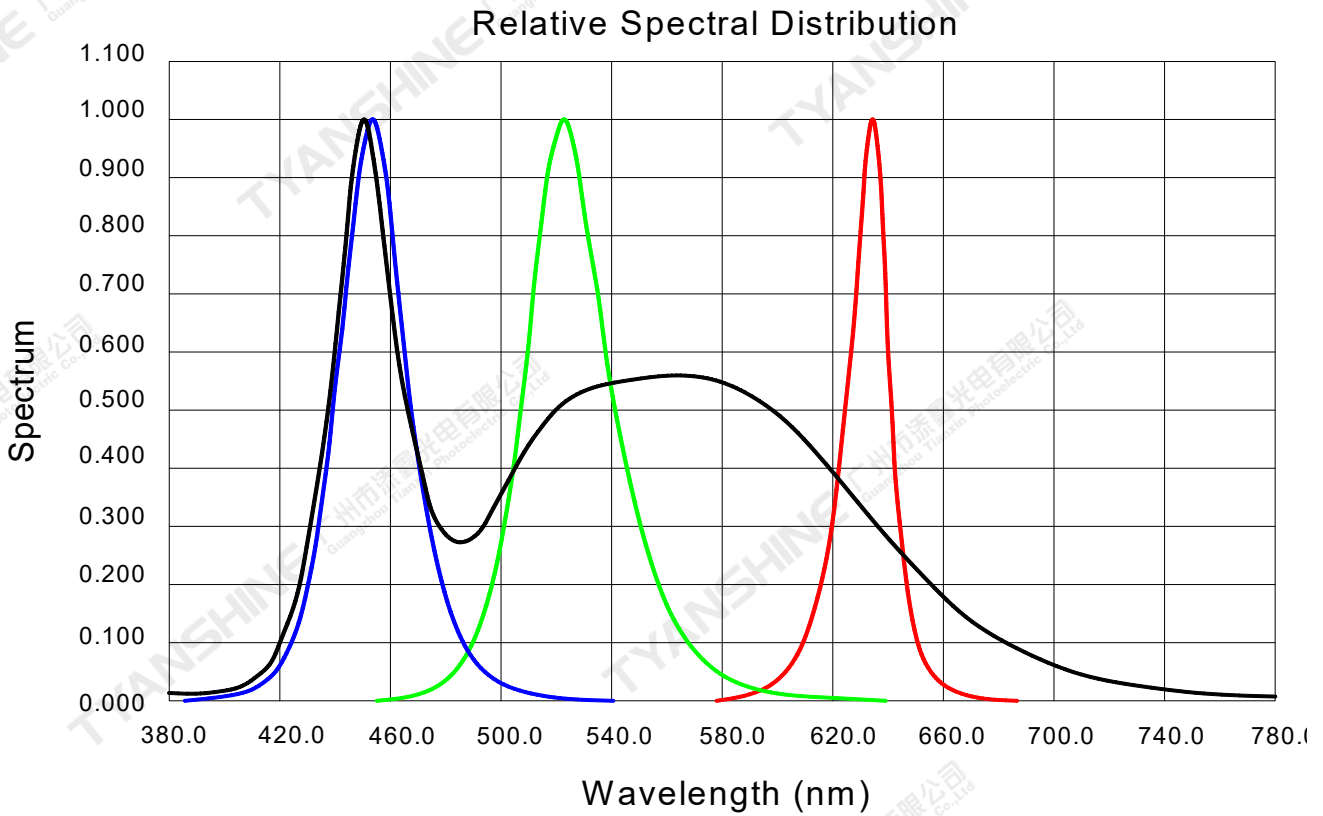
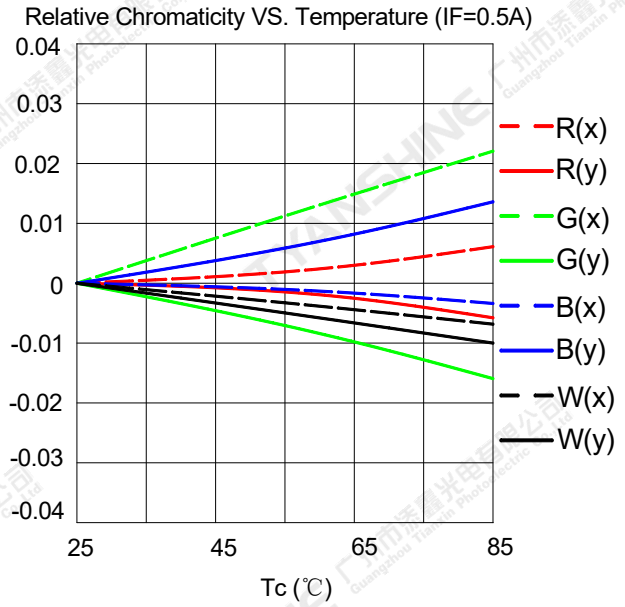
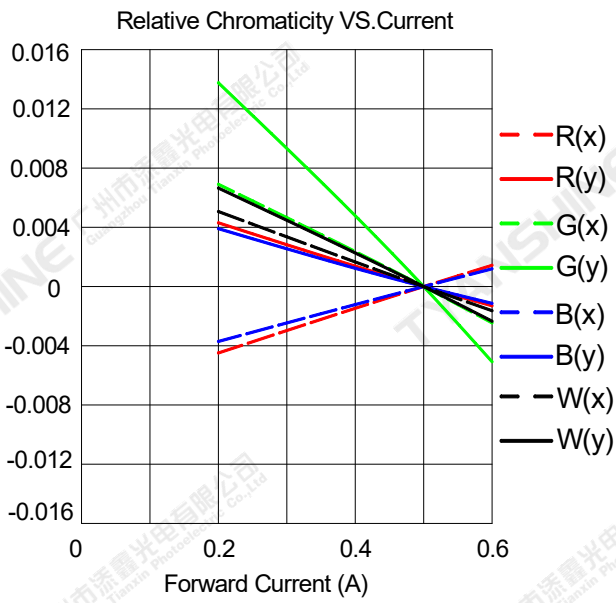
5. Ra measurement tolerance: ± 2 .

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Notes: — Red (R) ; — Green (G) ; — Blue (B) ; — White (W) ;



Notes: ■ Red (R) ; ■ Green (G) ; ■ Blue (B) ; ■ White (W) ;

Notes:

1. $2\theta_{1/2}$ is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is $\pm 5^\circ$.

Usage Precautions

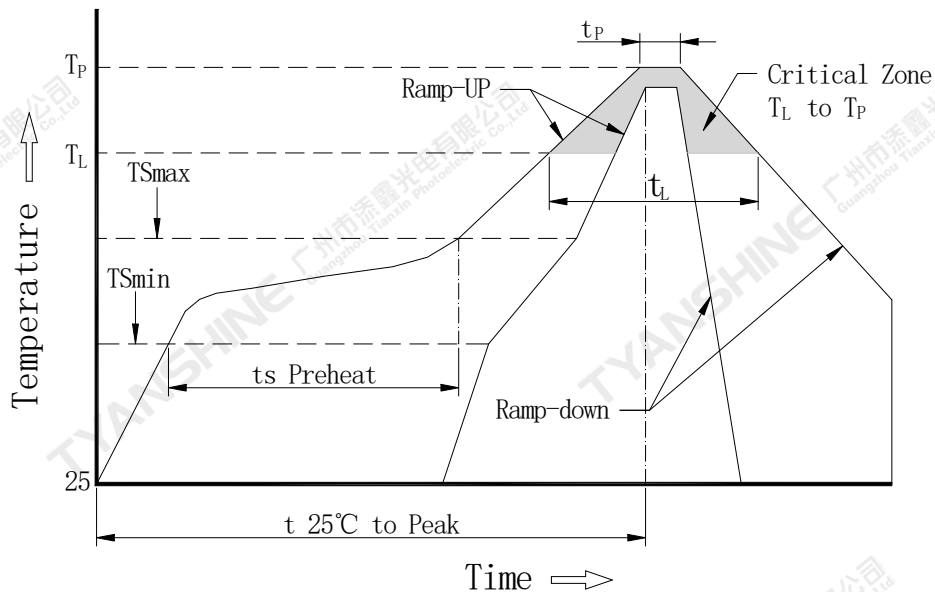
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



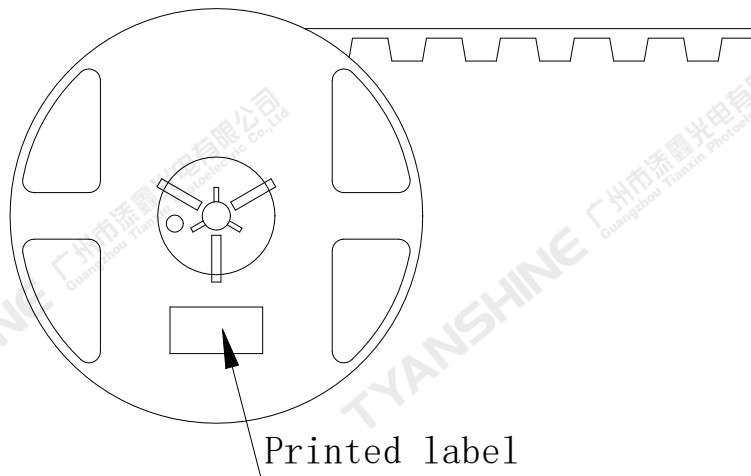
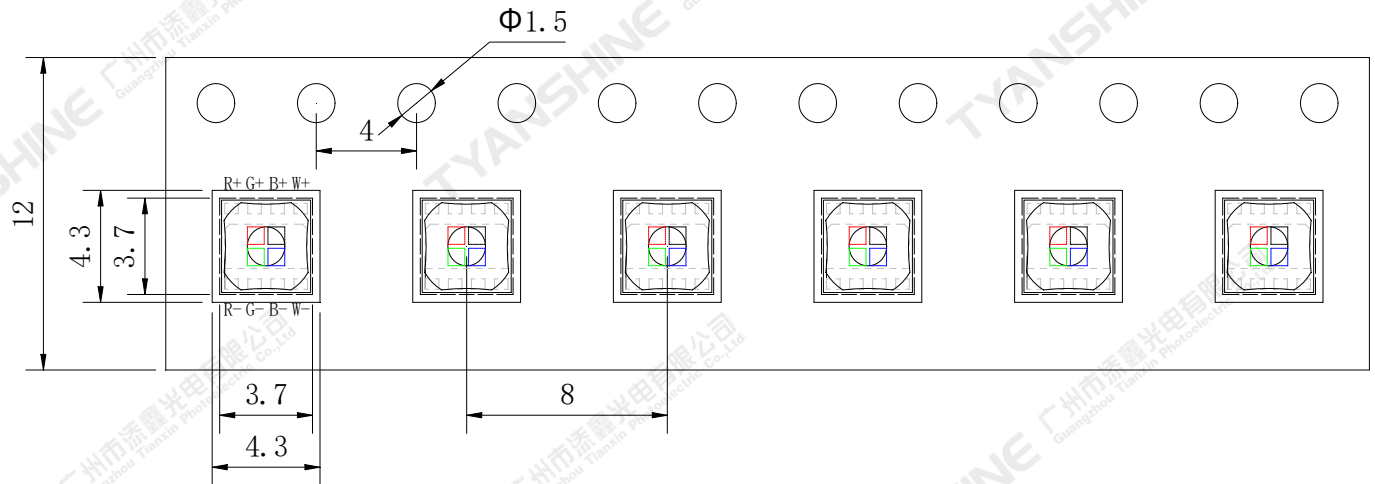
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (T _{Smax} to T _P)	3°C/second max.
Preheat: Temperature Min (T _{Smin})	130°C
Preheat: Temperature Max (T _{Smax})	190°C
Preheat: Time (T _{Smin} to T _{Smax})	120-180 seconds
Time Maintained Above: Temperature (T _L)	230°C
Time Maintained Above: Time (T _L)	60-150 seconds
Peak/Classification Temperature (T _P)	255°C
Time Within 5°C of Actual Peak Temperature (T _P)	10-35 seconds
Ramp-Down Rate	5°C/second max.
Time 25°C to Peak Temperature	7 minutes max.

Note:

All temperatures refer to topside of the package, measured on the package body surface.

Dimensions For Cannulation And Packaging

Quantity: 1000PCS



Notes:

1. All dimensions are in millimeters.
2. Tolerances are ± 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.

Part No.	TX-3535RGBW8VSD1-NG4DC-01	Spec No.	WKF-ED0131	Page	8 of 8
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