

TX-5060RGBW15FC120-NUVCNG-02B

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under R:1000mA GBW:1200mA
- ◆High luminous output
- ◆No UV
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

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

Emitting Color:

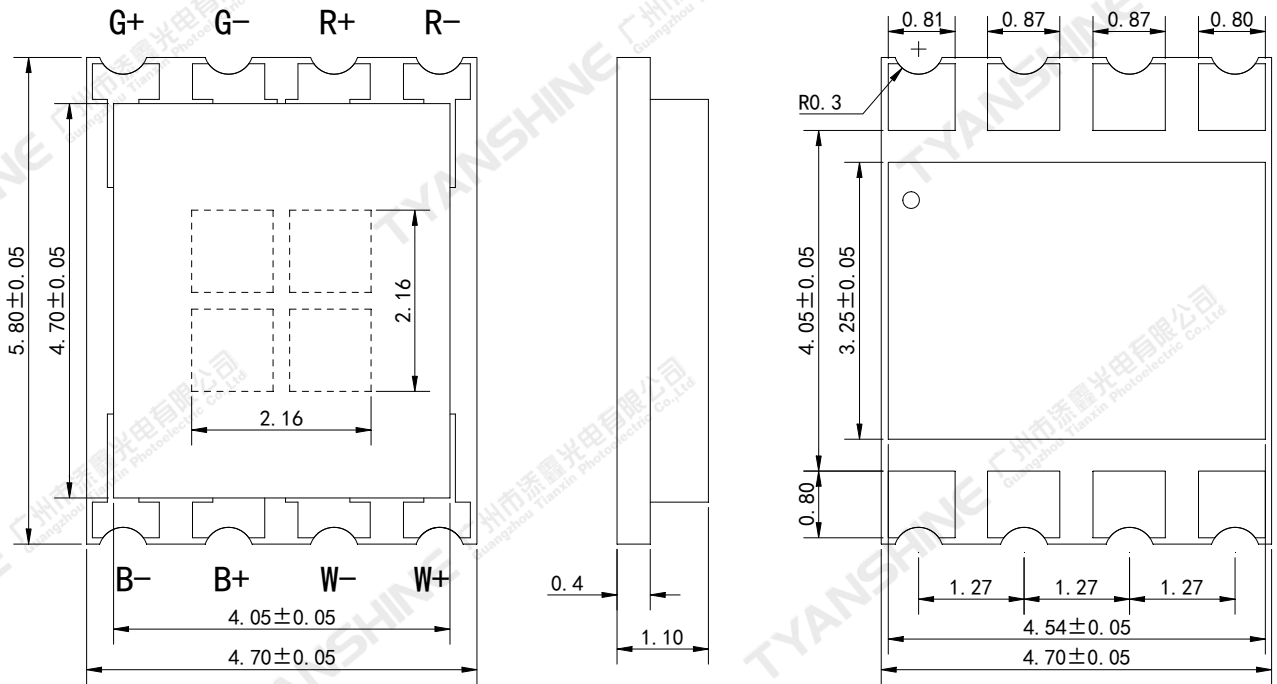
- ◆ Red
- ◆ Green
- ◆ Blue
- ◆ White

Applications:

- ◆Auxiliary lighting
- ◆Ambient lighting
- ◆Architectural lighting
- ◆Entertainment lighting

Part No.	TX-5060RGBW15FC120-NUVCNG-02B	Spec No.	WKF-BE0241	Page	1 of 9
----------	-------------------------------	----------	------------	------	--------

Package Dimensions:



Notes:

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

Part No.	TX-5060RGBW15FC120-NUVCNG-02B	Spec No.	WKF-BE0241	Page	2 of 9
----------	-------------------------------	----------	------------	------	--------

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Max Ratings	Unit
Forward Current	R	1000	mA
	G	1200	
	B	1200	
	W	1200	
Reverse Voltage	V _R	Not designed for reverse operation	V
Power Dissipation	R	2700	mW
	G	5400	
	B	5400	
	W	5400	
Junction Temperature	R	115	°C
	G	150	
	B	150	
	W	150	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature	T _{stg}	-20~70	°C
Operation Temperature	T _{opr}	-30~100	

Notes:

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

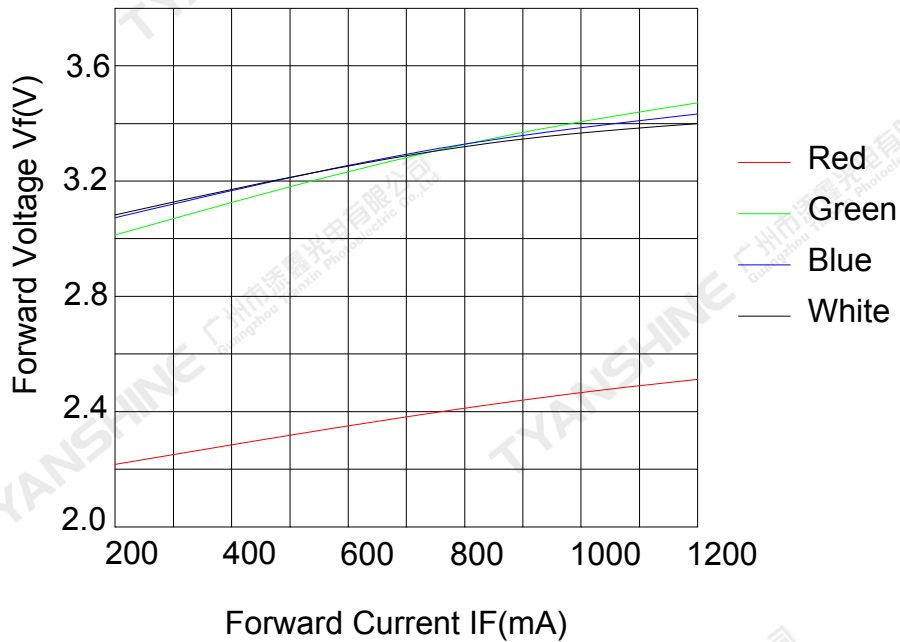
Electrical Optical Characteristics (Tc=25°C)

Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	If=750mA	R	70	85	100	lm
			G	170	185	200	
			B	26	32	40	
			W	200	220	240	
Dominant Wavelength	λ_d		R	619	624	629	nm
			G	520	525	530	
			B	450	455	460	
Correlated Colour Temperature	CCT		W	6000	7000	8000	K
Peak-emission Wavelength	λ_p		R	630	635	640	nm
			G	514	519	524	
			B	446	451	456	
Spectral Line Half-Width	$\Delta\lambda$		R	13	16	19	nm
		G	29	34	39		
		B	18	21	24		
		W	27	35	43		
Forward Voltage	V_f	R	2.1	2.4	2.7	V	
		G	3.0	3.3	3.6		
		B	3.0	3.3	3.6		
		W	3.0	3.3	3.6		
Reverse Current	I_R	$V_R=10V$	R	—	—	2	μA
		$V_R=7V$	G	—	—	2	
			B	—	—	2	
		—	W	Not designed for reverse operation			
Viewing Angle at 50% IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	—	—	0.8	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$	If=750mA	R	—	-2.2	—	mV/°C
			G	—	-6.5	—	
			B	—	-1.7	—	
			W	—	-3.3	—	

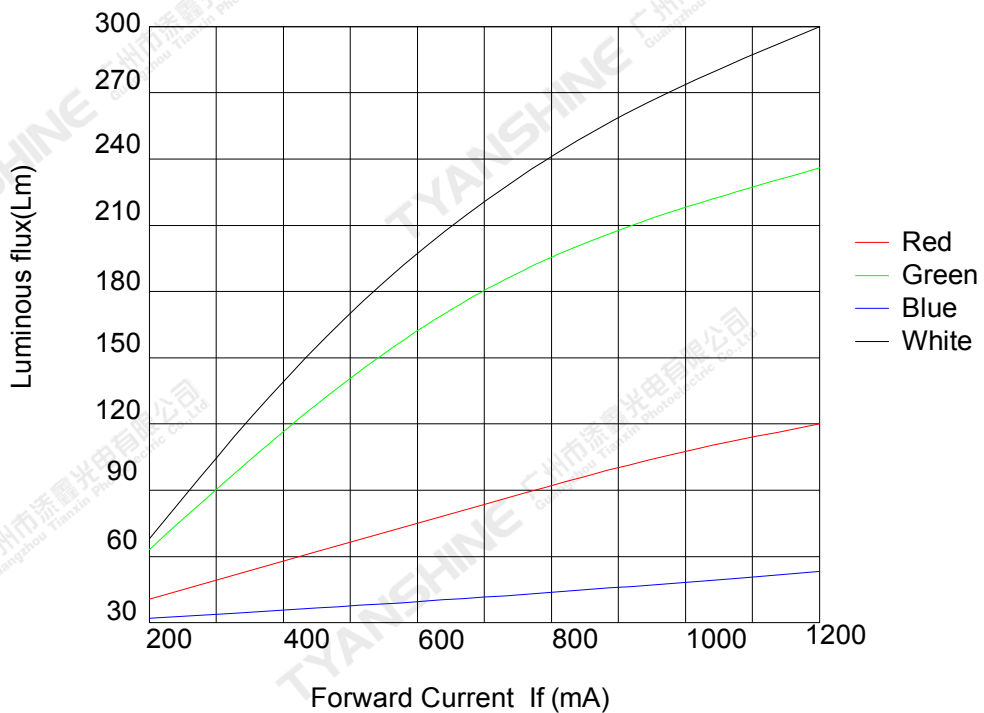
Typical Electrical/Optical Characteristics Curves

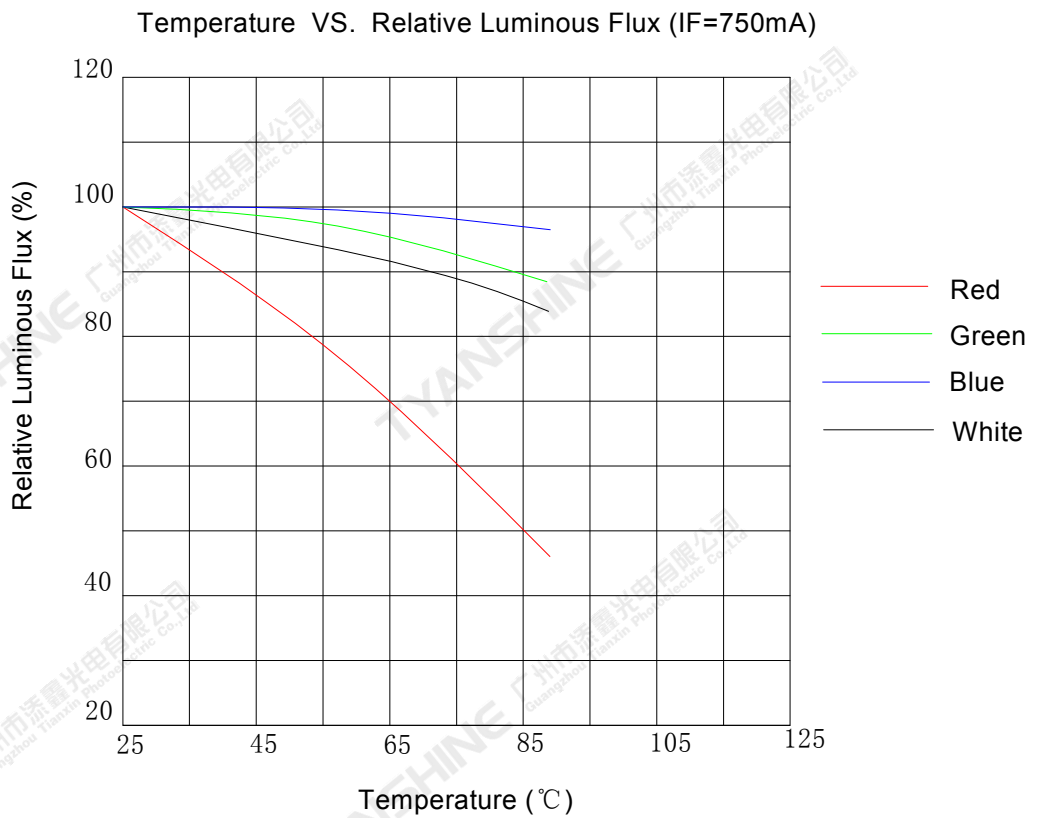
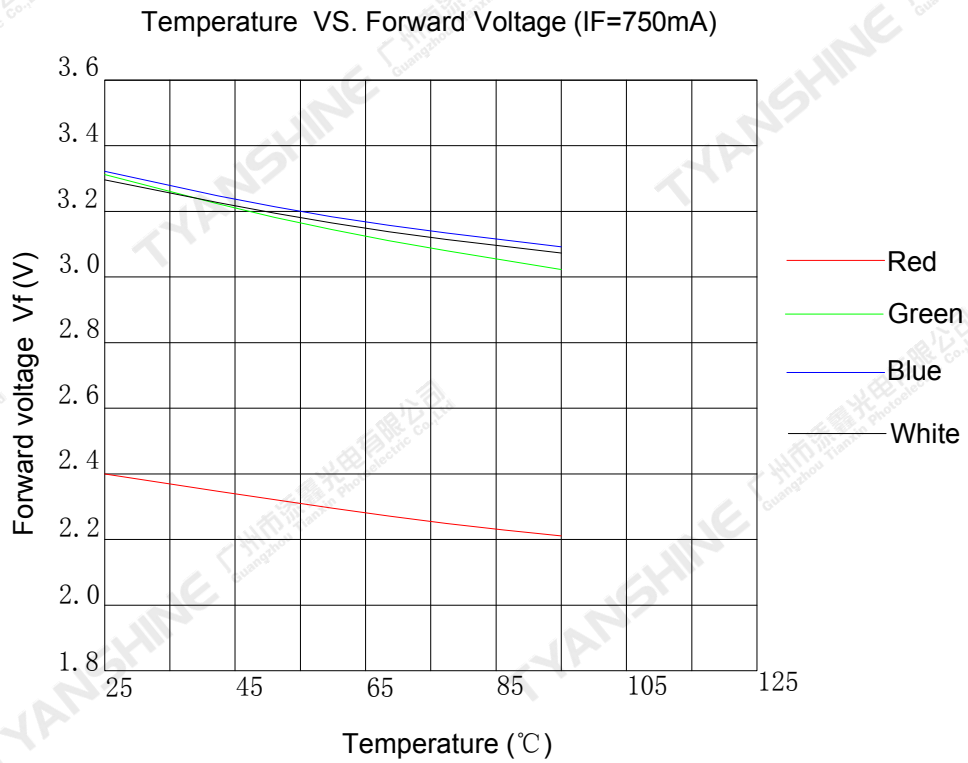
(25°C Ambient Temperature Unless Otherwise Noted)

Forward Current VS.Forward Voltage



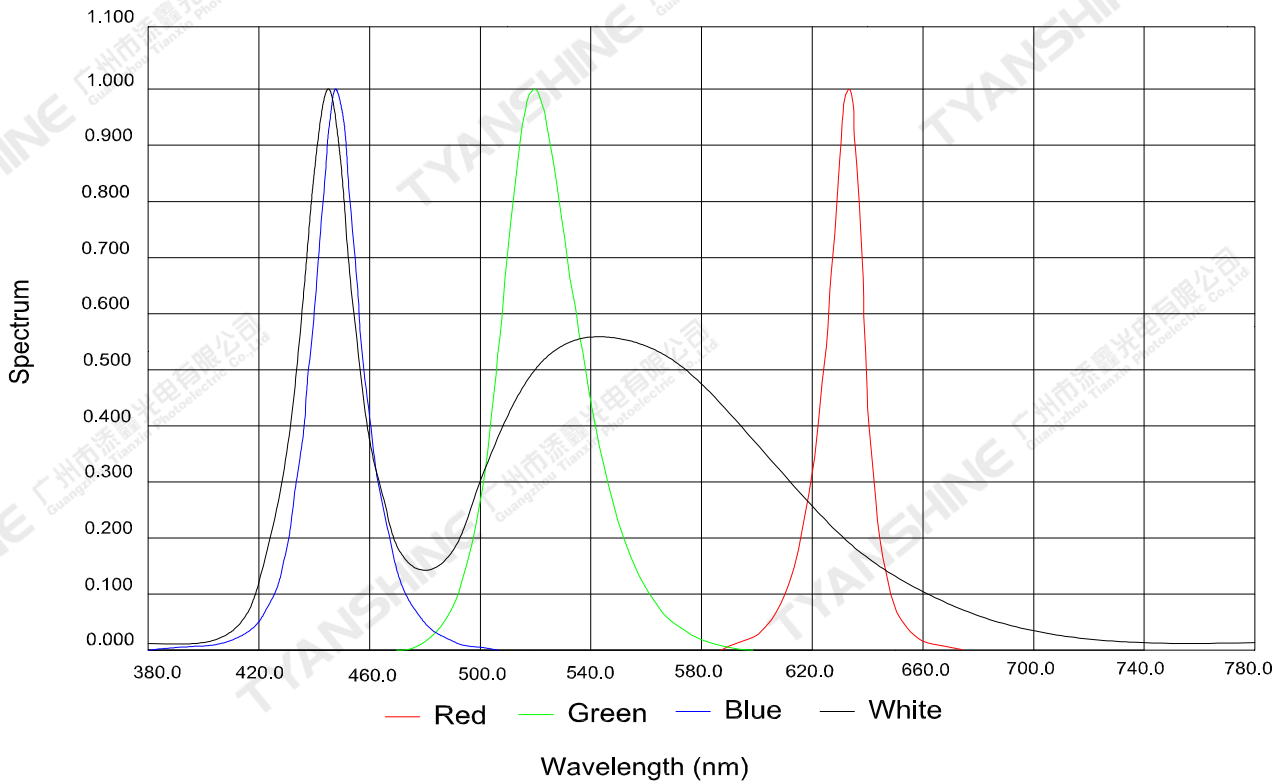
Forward Current VS.Luminous flux



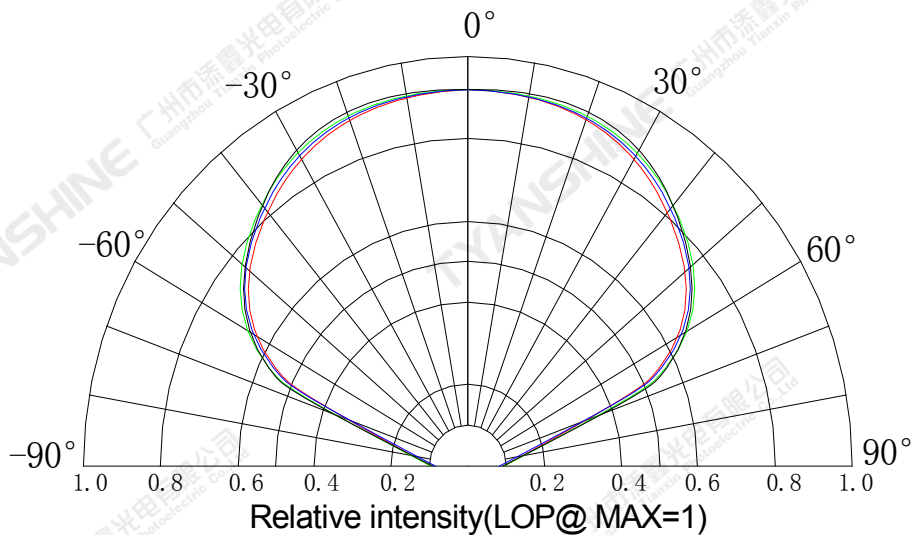


Relative Spectral Distribution

Spectral Radiance: Red Peak@635nm Green Peak@519nm Blue Peak@451nm



Beam Pattern



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

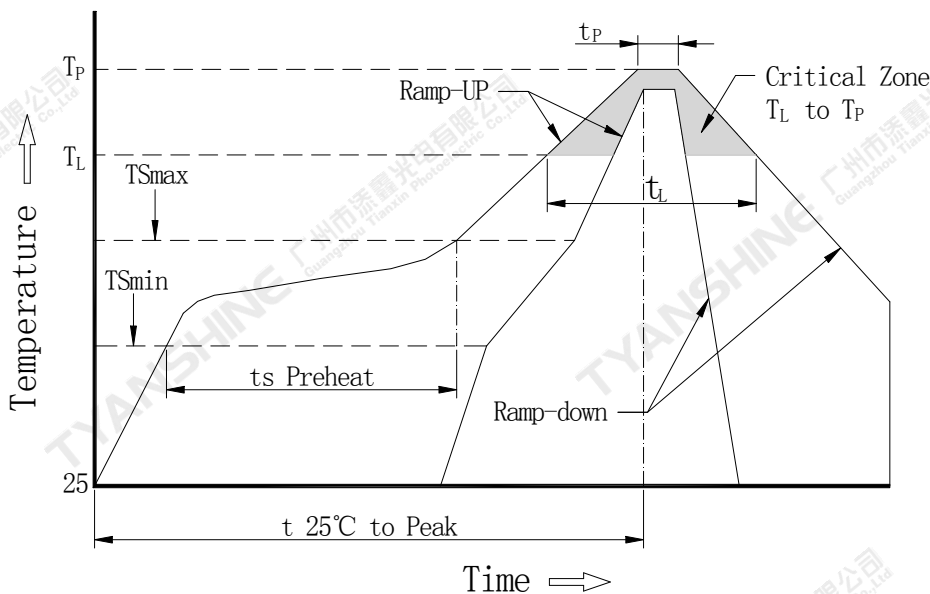
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



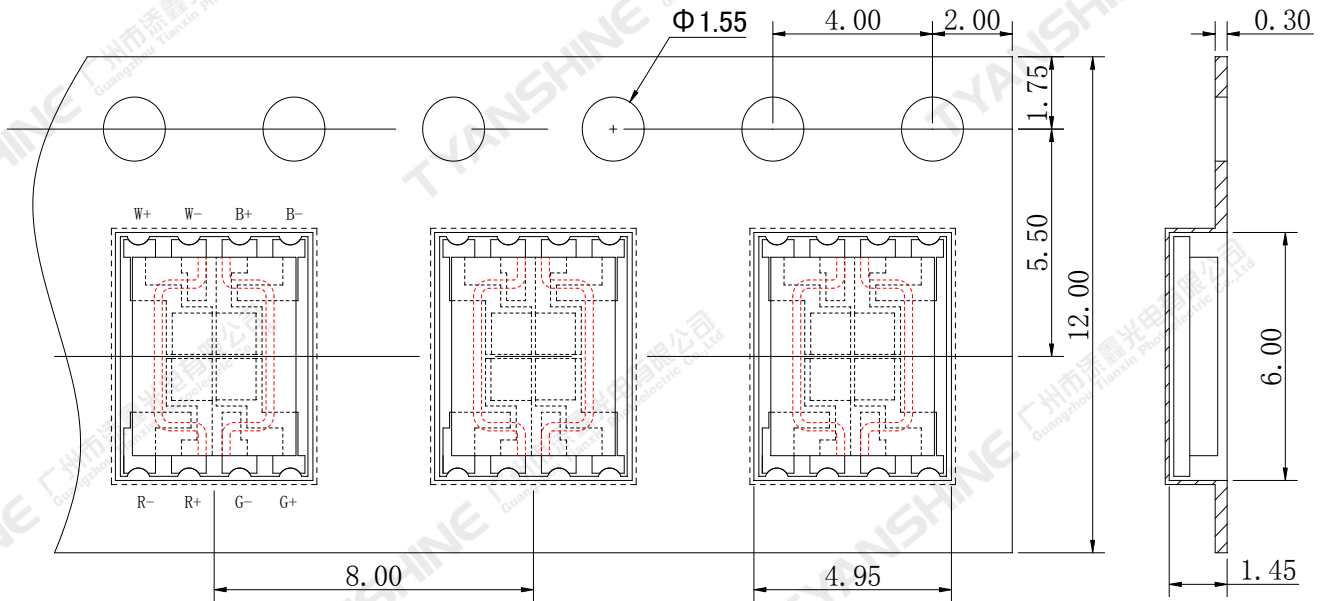
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (TSmax to TP)	3°C/second max.
Preheat: Temperature Min (TSmin)	100°C
Preheat: Temperature Max (TSmax)	150°C
Preheat: Time (TSmin to TSmax)	60-120 seconds
Time Maintained Above: Temperature (TL)	183°C
Time Maintained Above: Time (TL)	60-150 seconds
Peak/Classification Temperature (TP)	225°C
Time Within 5°C of Actual Peak Temperature (TP)	10-30 seconds
Ramp-Down Rate	6°C/second max.
Time 25°C to Peak Temperature	6 minutes max.

Note:

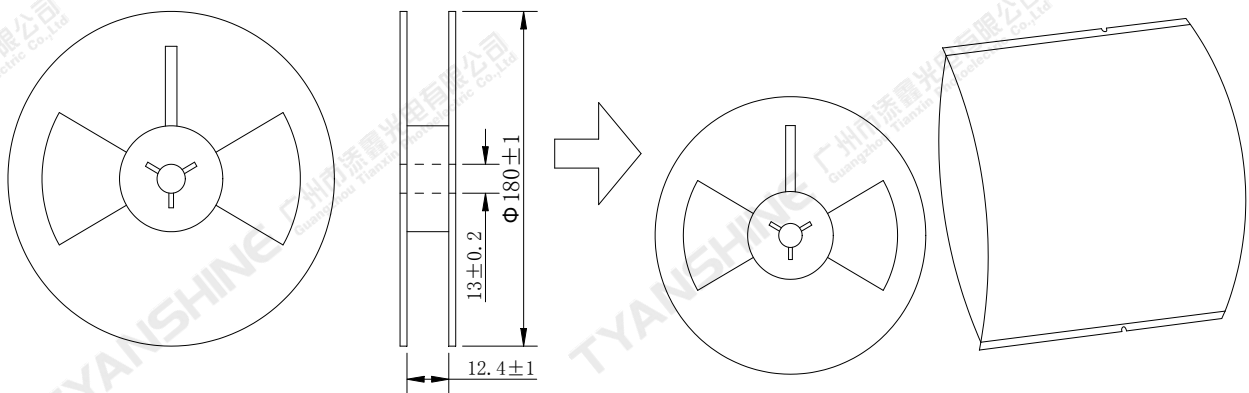
All temperatures refer to topside of the package, measured on the package body surface.

Dimensions For Cannulation And Packaging

Quantity: 500PCS



Package method(units:mm):



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-5060RGBW15FC120-NUVCNG-02B	Spec No.	WKF-BE0241	Page	9 of 9
----------	-------------------------------	----------	------------	------	--------