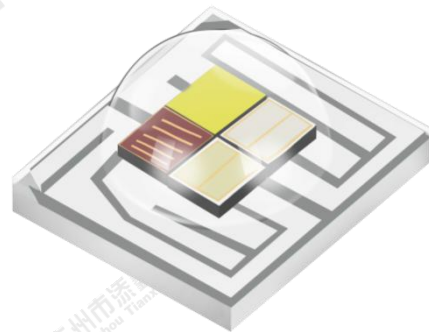


# TX-3535RGBW4FC120-OGVCND34-03BH80

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 350mA
- ◆ High luminous output
- ◆ No UV



### Chip Material:

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

### Lens Color:

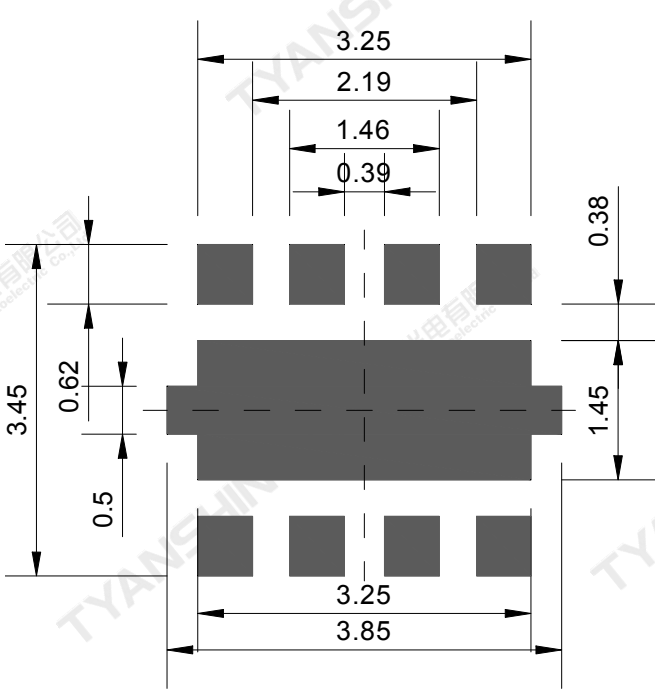
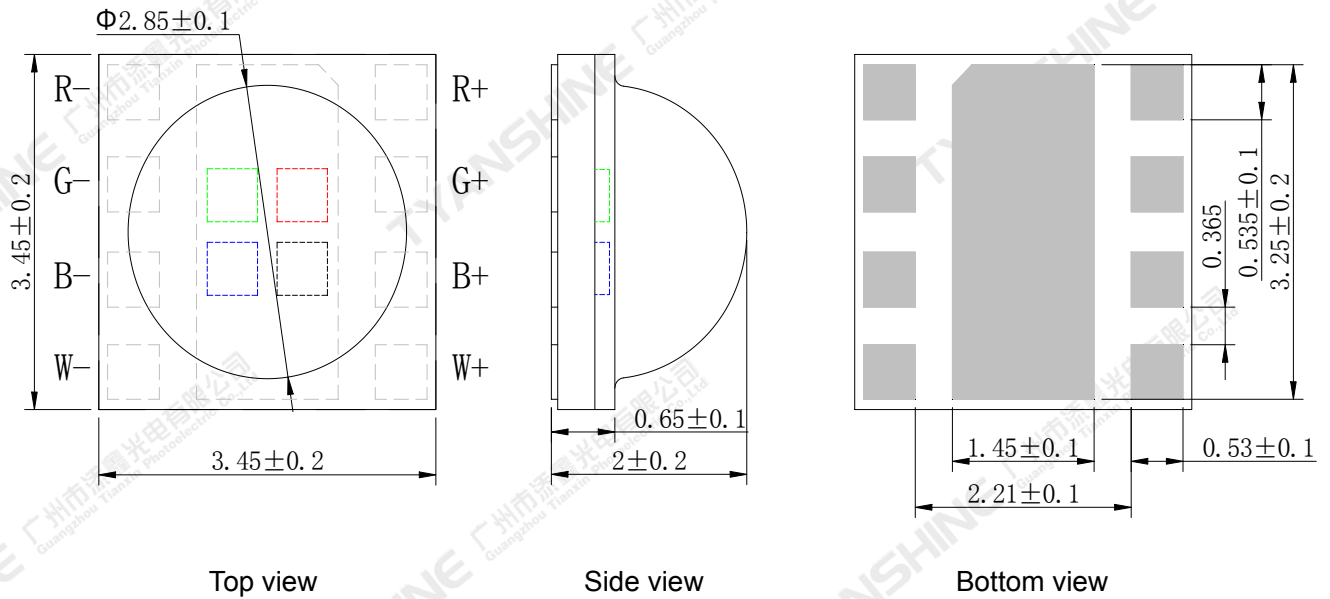
- ◆ Water clear

### Applications:

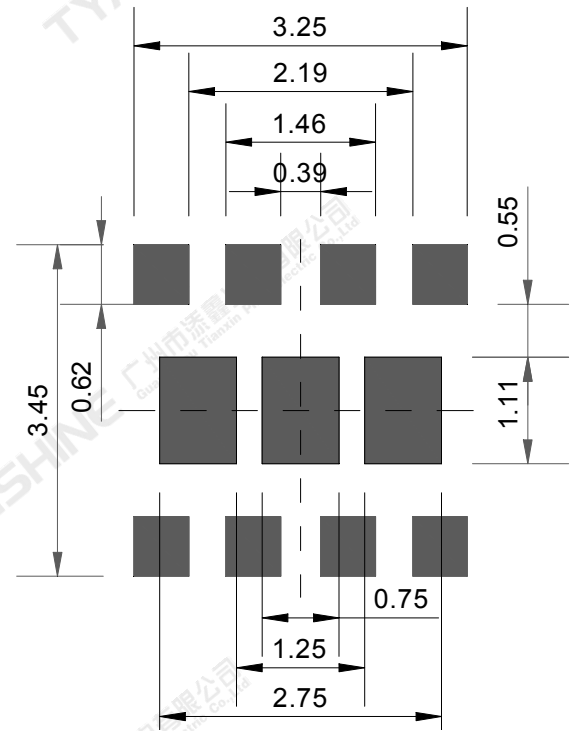
- ◆ Portable flashlight
- ◆ Garden lighting
- ◆ General lighting

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**Package Dimensions:**



Recommended solder pad



Recommended stencil pattern

**Notes:**

1. All dimensions are in millimeters .
2. Tolerances unless otherwise mentioned are  $\pm 0.1$ mm .

**Absolute Maximum Ratings (Tc=25°C)**

Parameter	Symbol	Max Ratings	Unit	
Forward Current	IF	350	mA	
Reverse Voltage	V <sub>R</sub>	Not designed for reverse operation	V	
Power Dissipation	P <sub>D</sub>	R	910	mW
		G	1190	
		B	1190	
		W	1190	
Junction Temperature	T <sub>j</sub>	R	115	°C
		G	150	
		B	150	
		W	150	
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V	
Storage Temperature	T <sub>stg</sub>	-40~70	°C	
Operation Temperature	T <sub>opr</sub>	-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)**

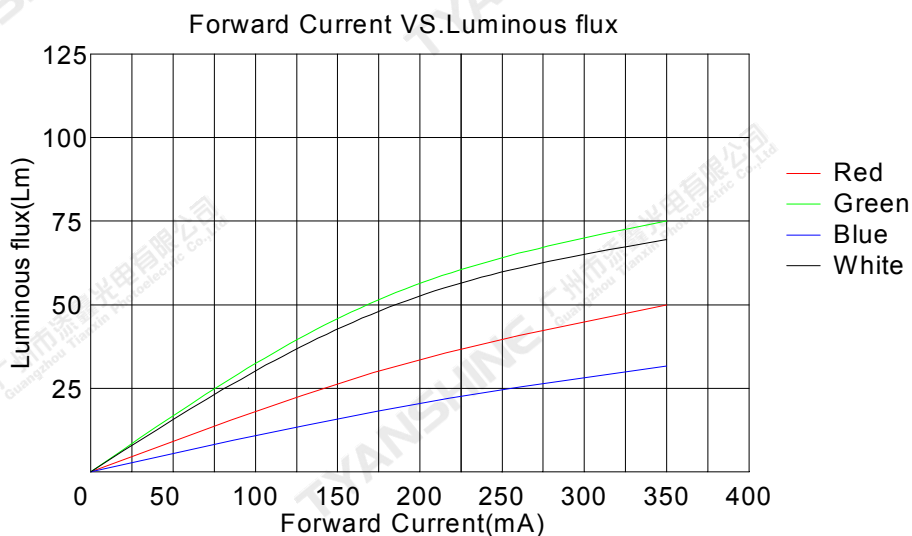
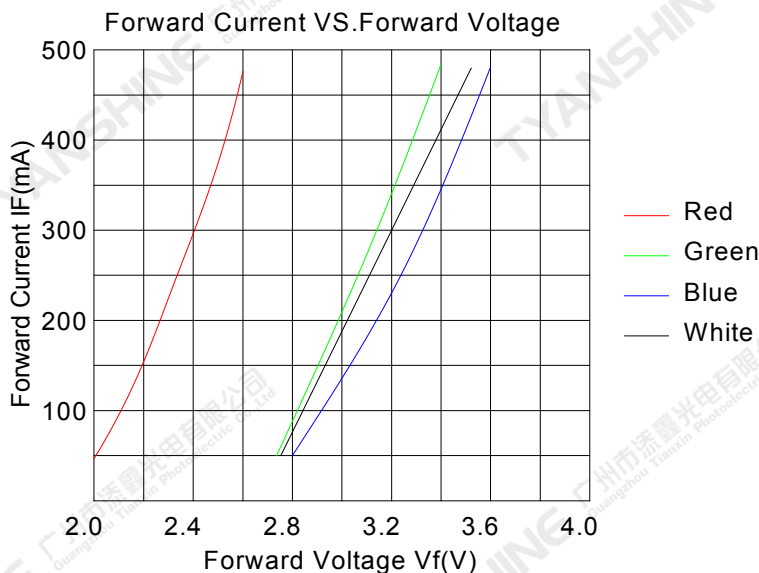
Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	$\Phi_v$	If=300mA	R	40	45	55	lm
			G	65	75	85	
			B	20	26	32	
			W	65	70	85	
Dominant Wavelength	$\lambda_d$		R	618	623	627	nm
			G	518	525	532	
			B	464	470	476	
Color Rendering Index	Ra		W	80	82.5	85	—
Peak-emission Wavelength	$\lambda_p$		R	624	630	632	nm
			G	513	520	525	
			B	459	465	471	
Spectral Line Half-Width	$\Delta\lambda$		R	15	17.5	20	nm
		G	30	35	40		
		B	16	19	22		
		W	17	20	23		
Forward Voltage	$V_f$	R	2.0	2.3	2.6	V	
		G	2.9	3.2	3.6		
		B	2.9	3.2	3.6		
		W	2.8	3.2	3.5		
Correlated Colour Temperature	CCT	—	W	3650	4000	4300	K
				4800	5150	5750	
				5500	6000	6500	
Reverse Current	$I_R$	$V_R=5V$	R	—	—	5	$\mu A$
			G	—	—	5	
			B	—	—	5	
			W	—	—	5	
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	—	15	—	
			B	—	15	—	
			W	—	15	—	
Temperature Coefficient of Voltage	$V\Delta F/T$	—	R	—	-2.7	—	mV/°C
			G	—	-3.9	—	
			B	—	-1.6	—	
			W	—	-1.6	—	

**Notes:**

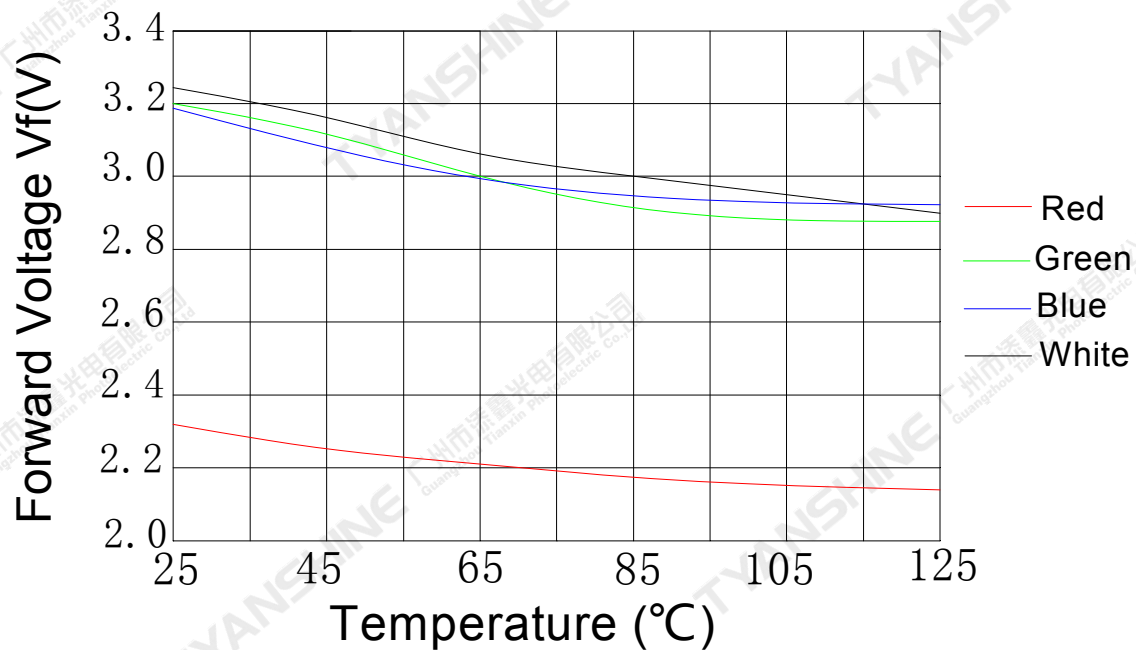
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4.Luminous flux measurement tolerance:  $\pm 15\%$ .
- 5.Forward voltage measurement tolerance:  $\pm 0.15V$ .

**Typical Electrical/Optical Characteristics Curves**

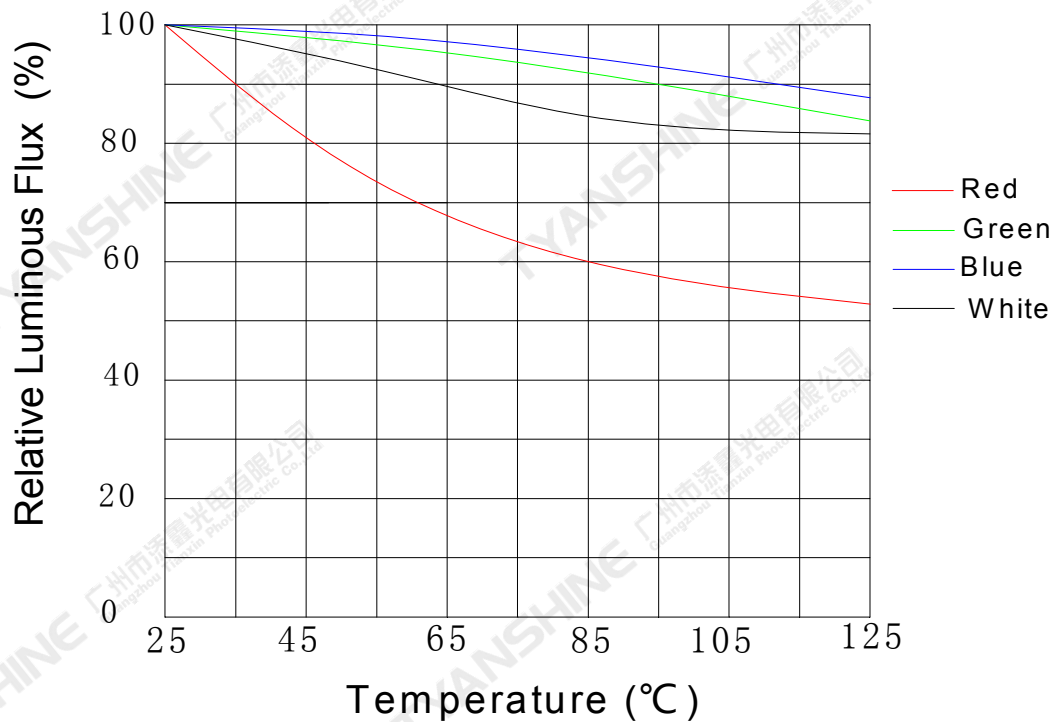
(25°C Ambient Temperature Unless Otherwise Noted)



Temperature VS. Forward Voltage (IF=300mA)

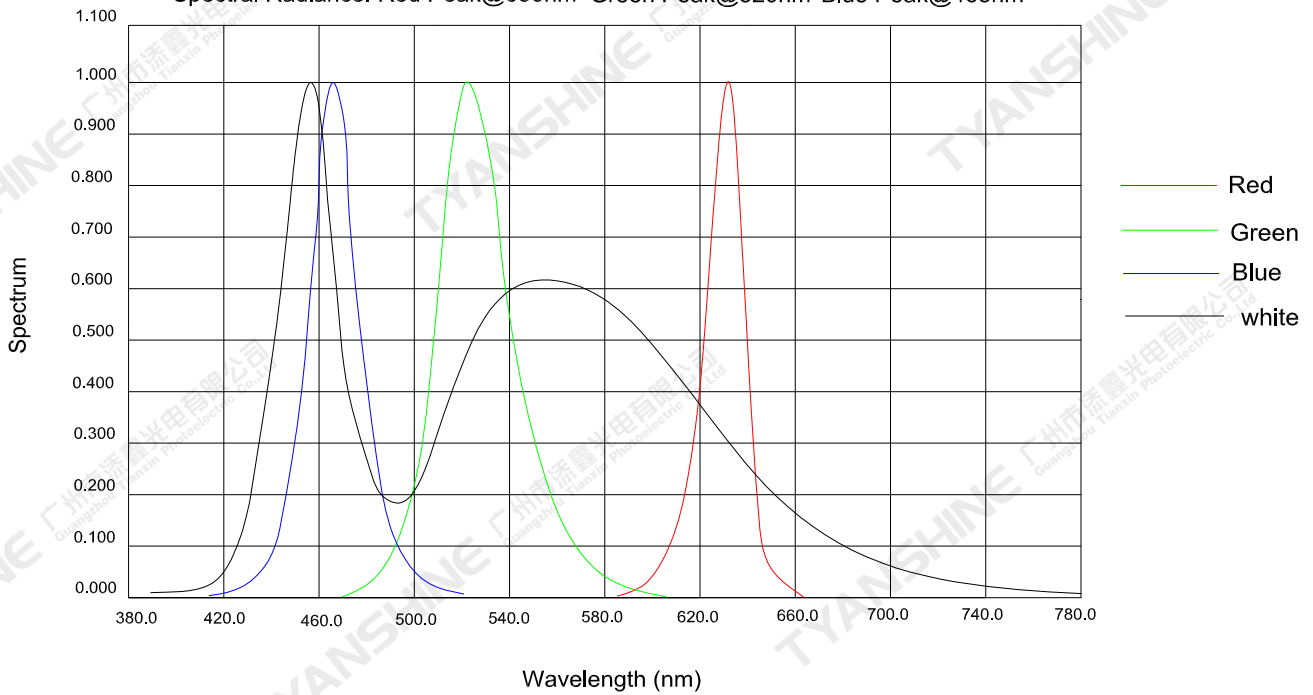


Temperature VS. Relative Luminous Flux (IF=300mA)

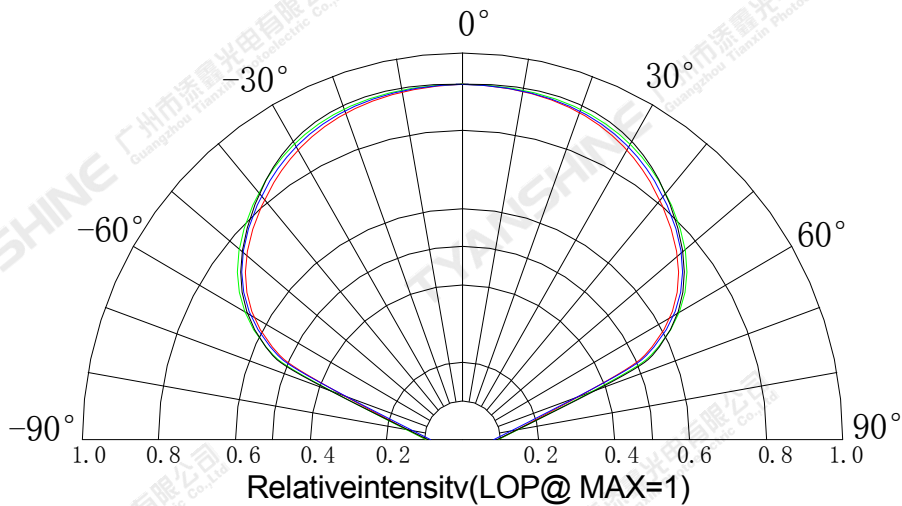


**Relative Spectral Distribution**

Spectral Radiance: Red Peak@630nm Green Peak@520nm Blue Peak@465nm



**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

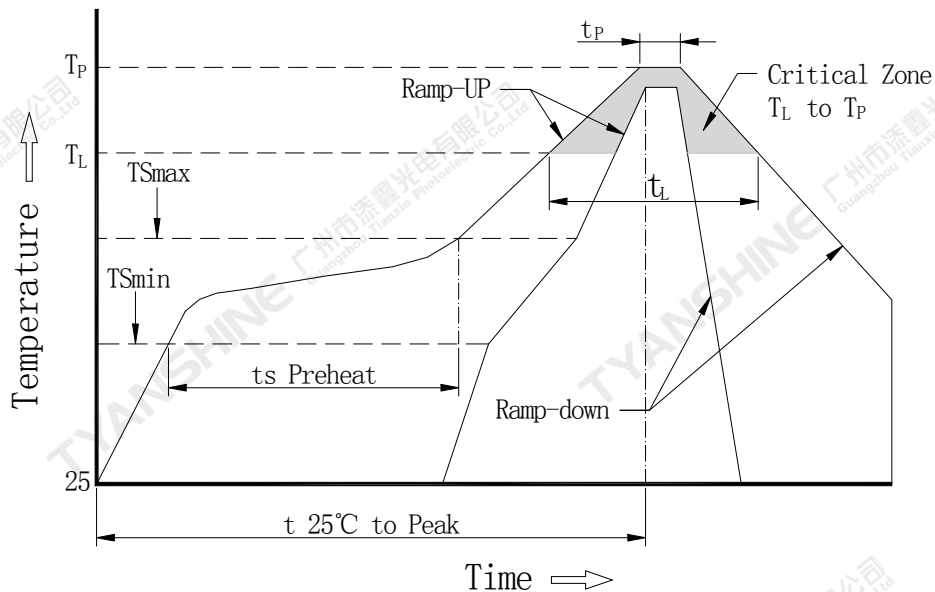
### Storage Environment Condition

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.

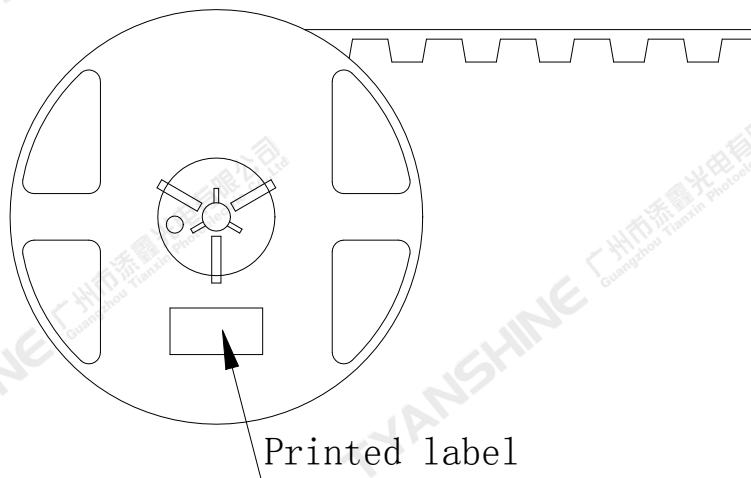
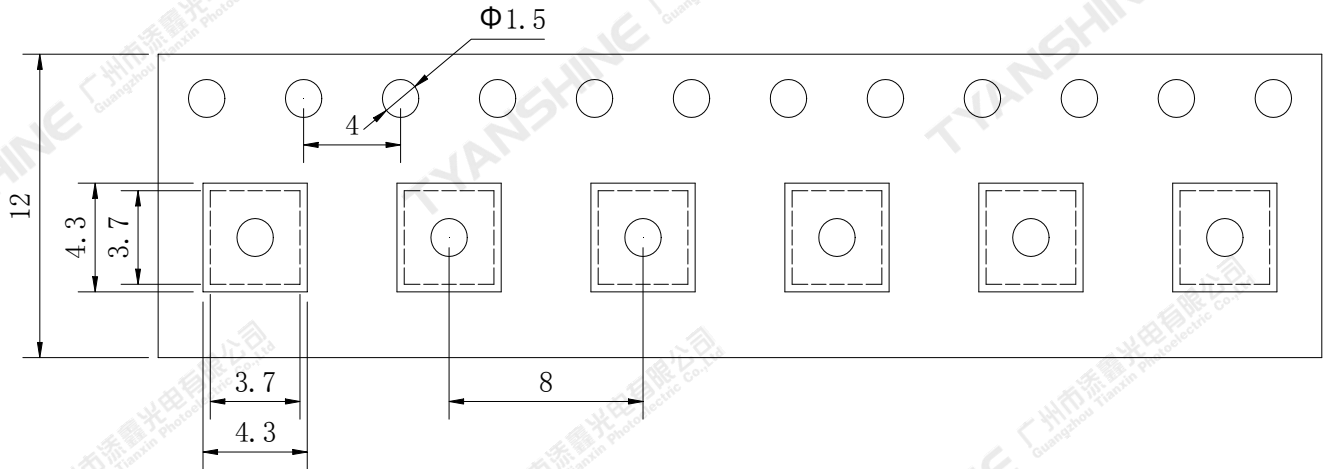
### Note:

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



**Dimensions For Cannulation And Packaging**

**Quantity: 1000PCS**



**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.

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