

TX-3535RGB1FC120-OGHCND34-01

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 160mA
- ◆High luminous output
- ◆No UV

Chip Material:

- ◆Red: AlGaInP
- ◆Green: GaN
- ◆Blue: GaN

Lens Color:

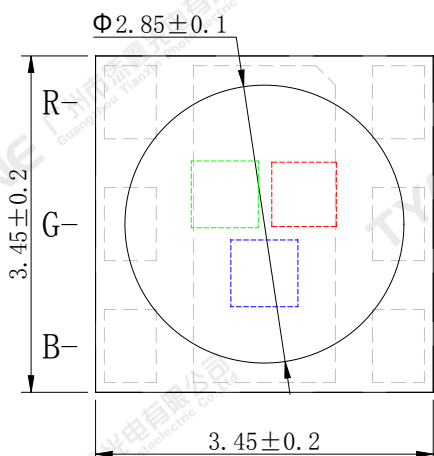
- ◆Water clear

Applications:

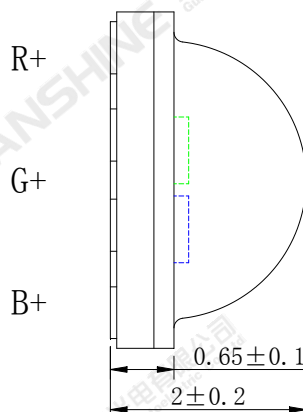
- ◆Stage lighting
- ◆Garden lighting
- ◆Landscape Lighting

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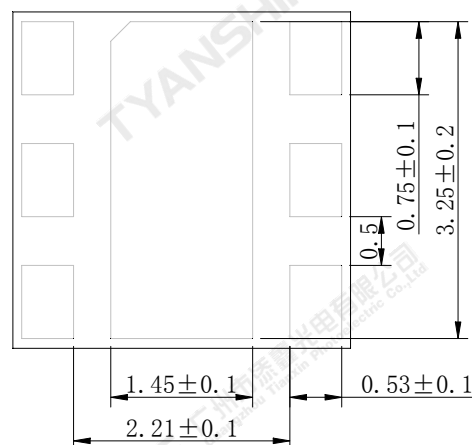
Package Dimensions:



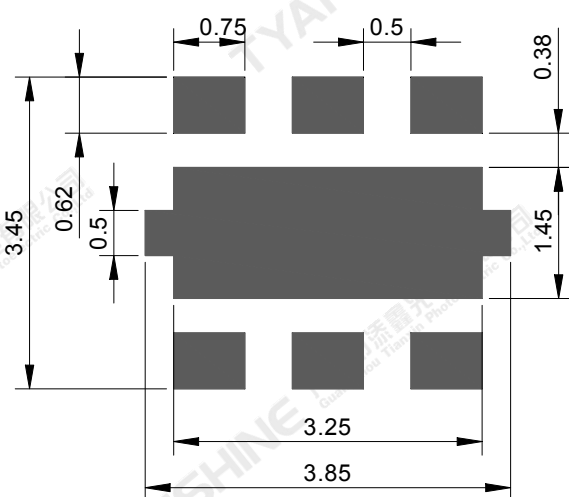
Top view



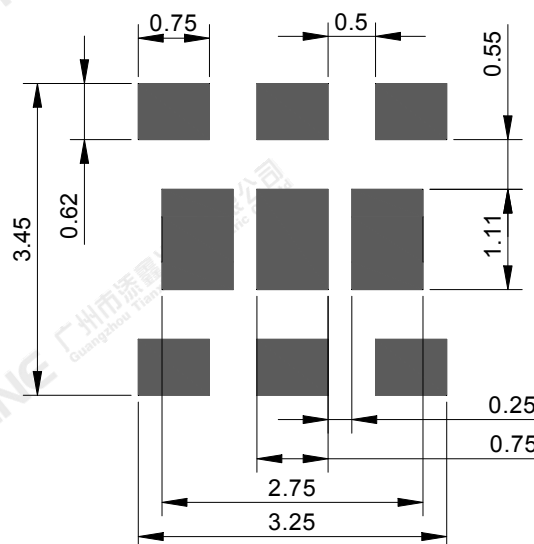
Side view



Bottom view



Recommended solder pad



Recommended stencil pattern

Notes:

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

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol		Max Ratings	Unit
Forward Current	IF		160	mA
Reverse Voltage	VR		5	V
Power Dissipation	PD	R	384	mW
		G	544	
		B	544	
Junction Temperature	Tj	R	115	℃
		G	150	
		B	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	Tstg		-40~70	℃
Operation Temperature	Topr		-30~85	

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=160mA	R	22	26	30	lm
			G	25	34	40	
			B	8	10	13	
Dominant Wavelength	λ_d		R	615	620	625	nm
			G	517	525	530	
			B	459	464	469	
Peak-emission Wavelength	λ_p		R	625	630	635	nm
			G	513	521	526	
			B	455	460	465	
Spectral Line Half-Width	$\Delta\lambda$		R	10	15	20	nm
			G	30	35	40	
			B	15	20	25	
Forward Voltage	V_f		R	1.8	2.2	2.4	V
			G	2.9	3.1	3.4	
			B	2.9	3.2	3.4	
Reverse Current	I_R	$V_R=5V$	R	—	—	2	μA
			G	—	—	2	
			B	—	—	2	
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	Total thermal resistance	—	7.7	—	
Temperature Coefficient of Voltage	$V\Delta F/T$	If=160mA	R	—	2	—	mV/°C
			G	—	-2	—	
			B	—	-2	—	

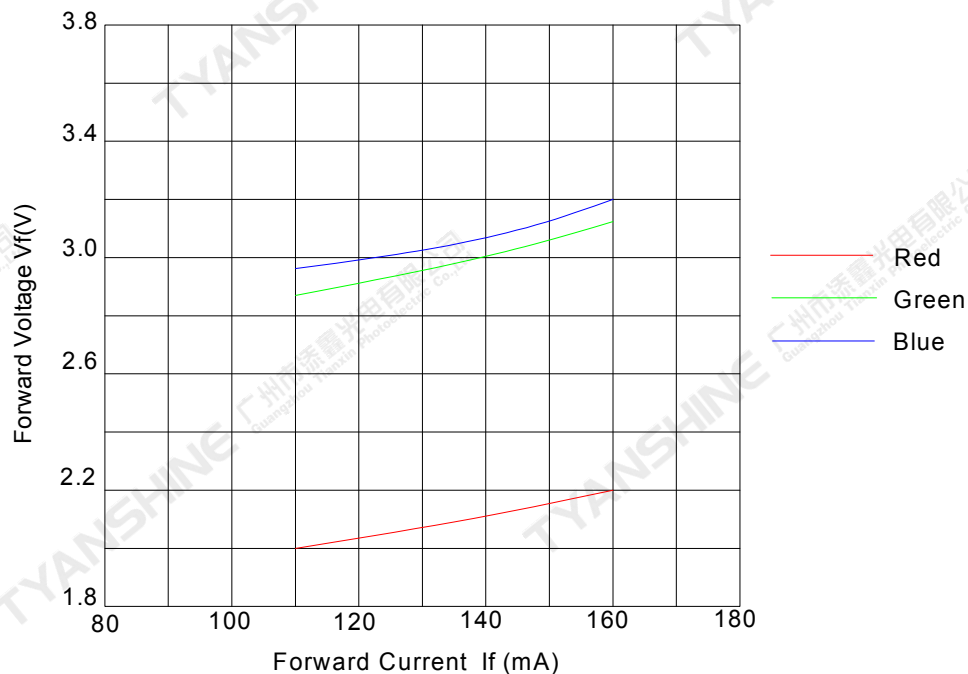
Notes:

- 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 (λ_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:±15%.
- 5.Forward voltage measurement tolerance:±0.15V.

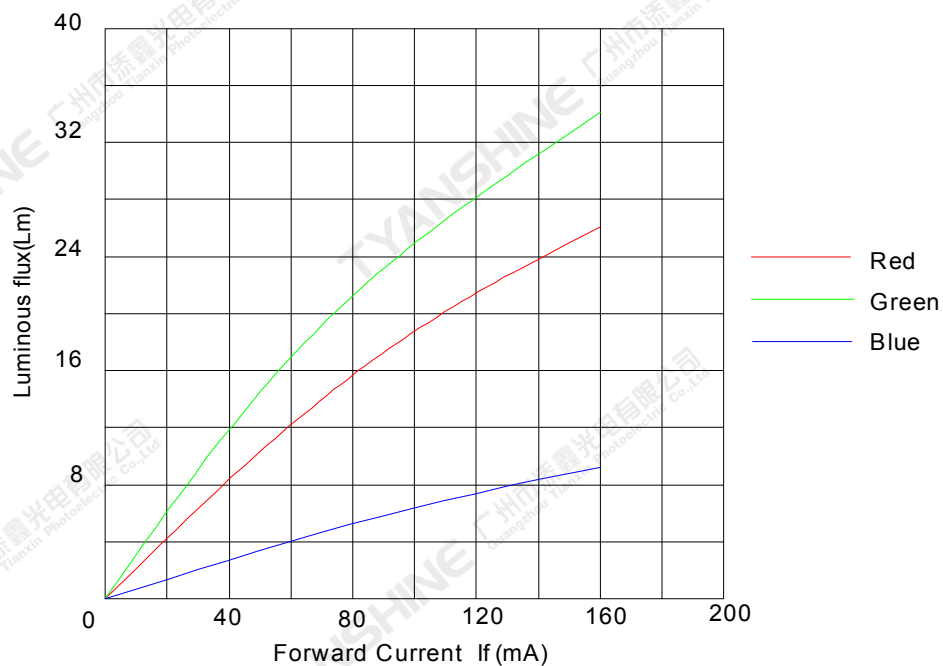
Typical Electrical/Optical Characteristics Curves

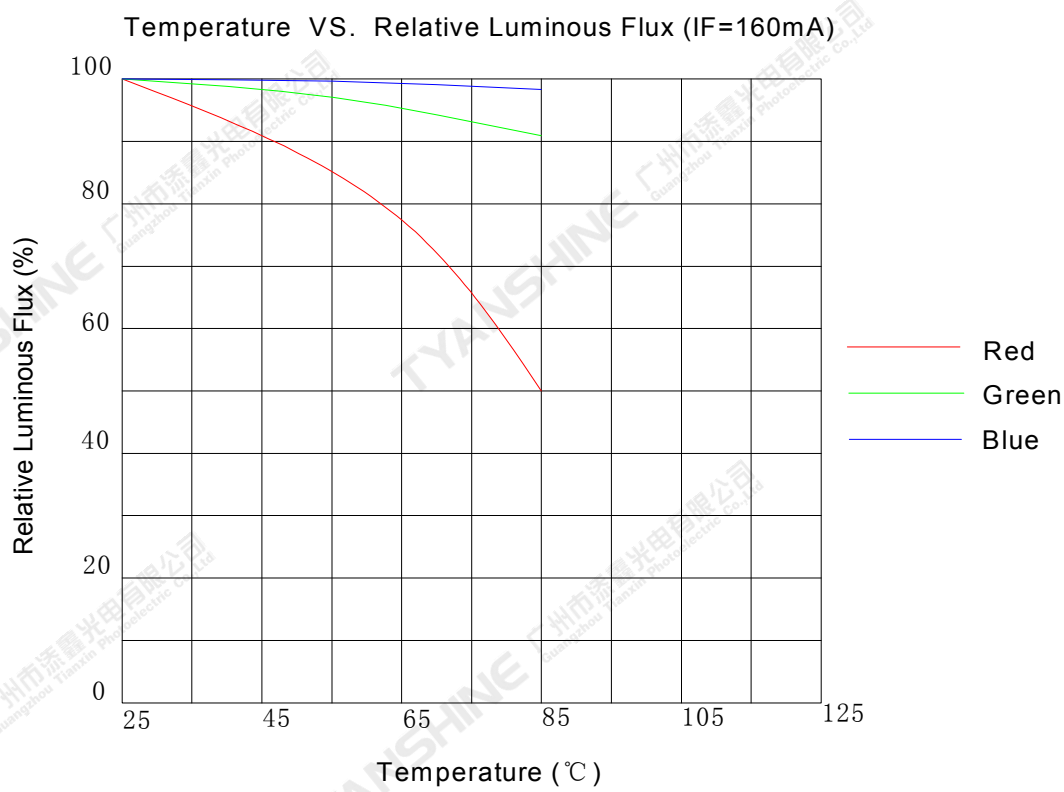
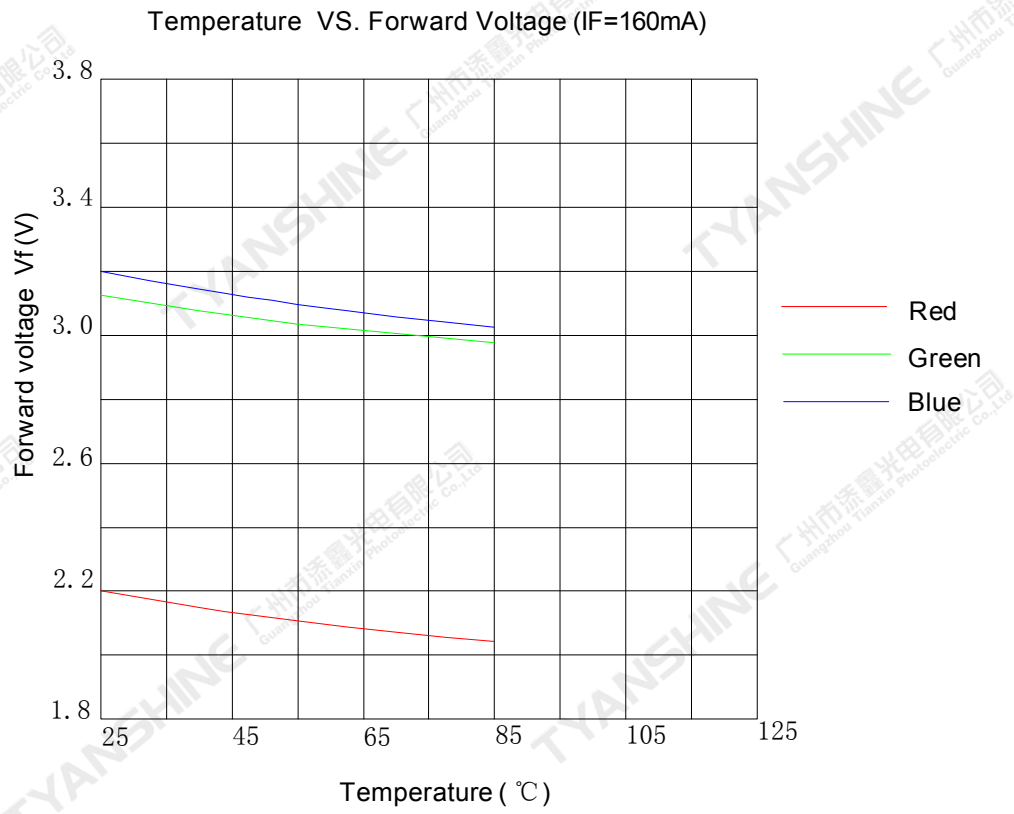
(25°C Ambient Temperature Unless Otherwise Noted)

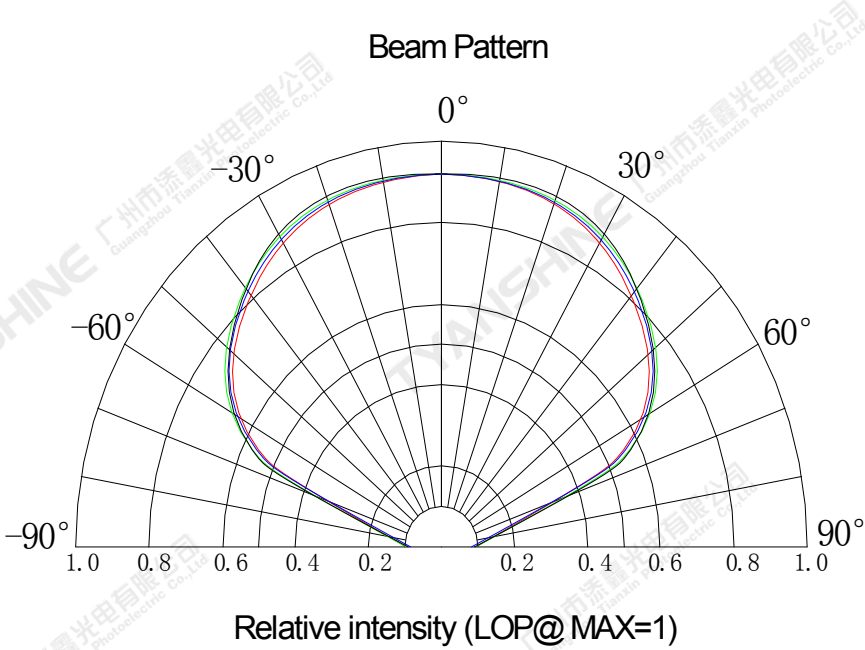
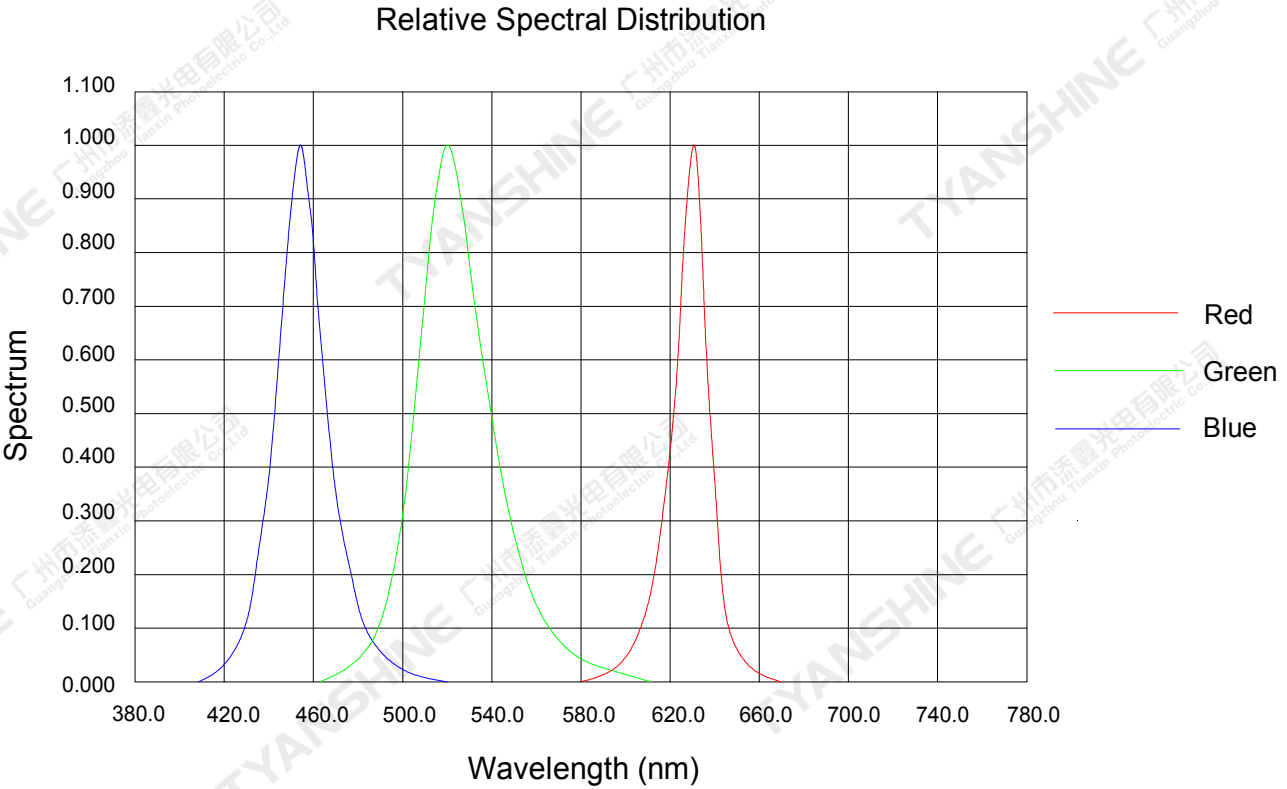
Forward Current VS. Forward Voltage



Forward Current VS. Luminous flux







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 $\pm 5^\circ$.

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Usage Precautions

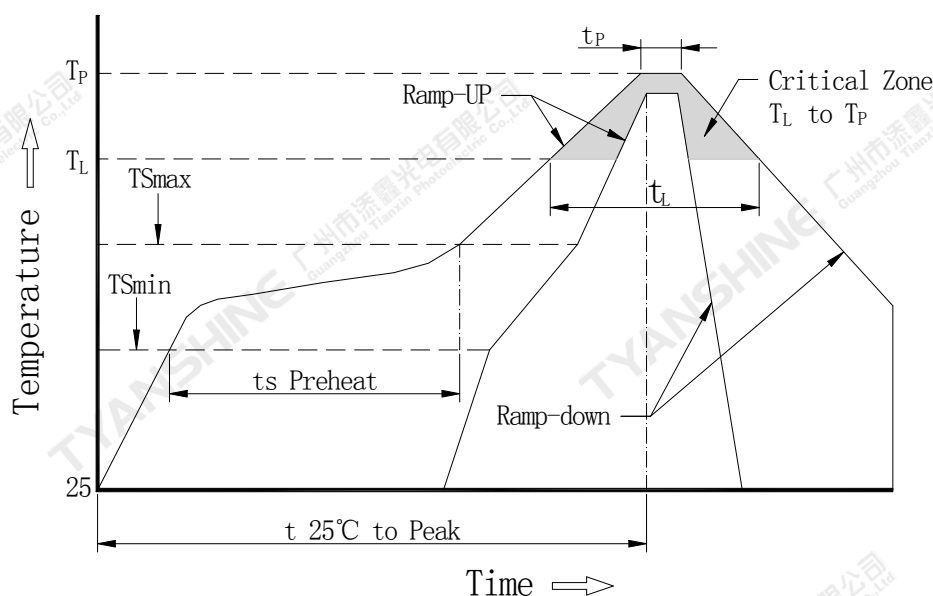
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



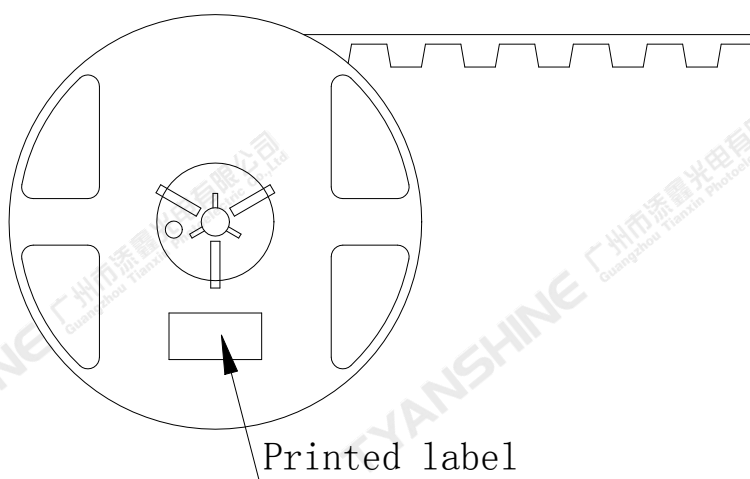
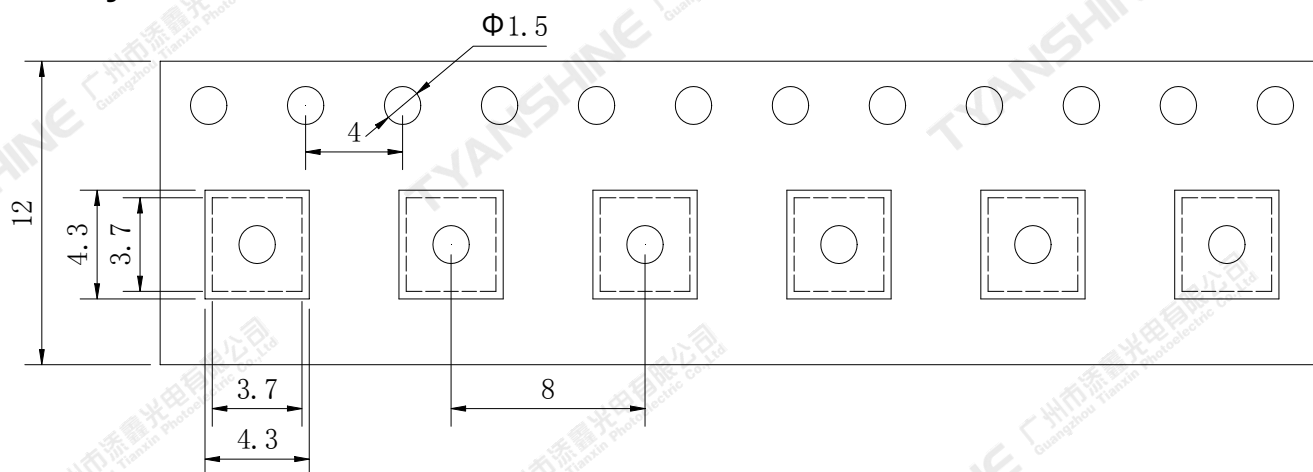
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (T_{Smax} to T_P)	3°C/second max.
Preheat: Temperature Min (T_{Smin})	100°C
Preheat: Temperature Max (T_{Smax})	150°C
Preheat: Time (T_{Smin} to T_{Smax})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183°C
Time Maintained Above: Time (T_L)	60-150 seconds
Peak/Classification Temperature (T_P)	225°C
Time Within 5°C of Actual Peak Temperature (T_P)	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 ± 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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