

# TX-3535W5FC120-OGVCND34-C03H90

## PRODUCT SPECIFICATION

### Features:

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

### Chip Material:

- ◆ GaN

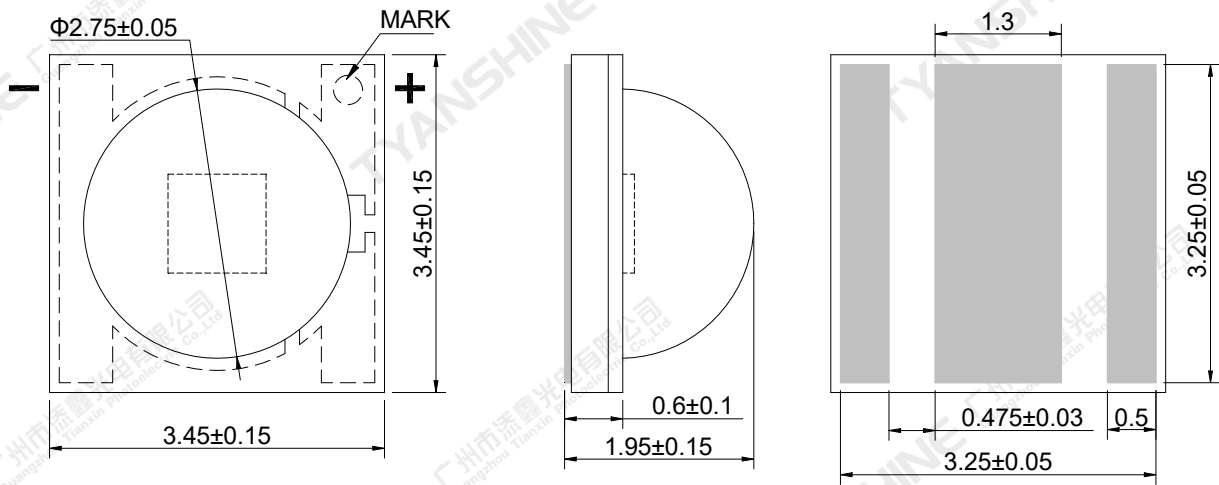
### Emitting Color:

- ◆ white

### Applications:

- ◆ Auxiliary lighting
- ◆ Architectural lighting
- ◆ General Lighting

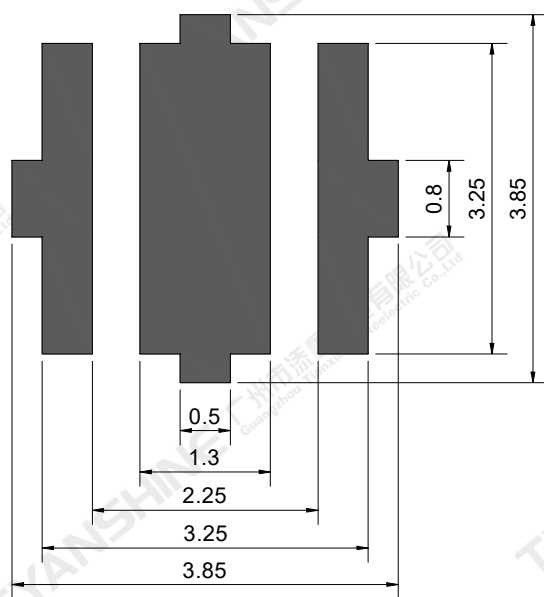
**Package Dimensions:**



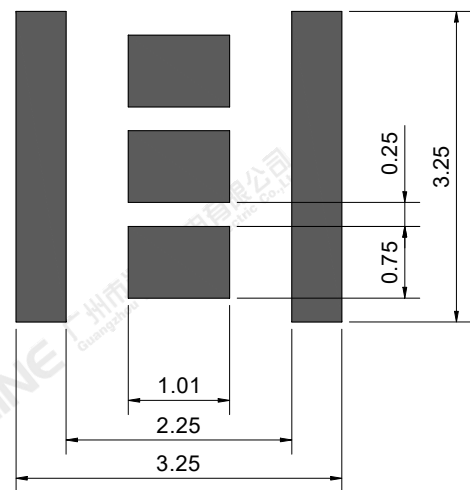
Top view

Side view

Bottom view



Recommended solder pad



Recommended stencil pattern

**Notes:**

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

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

Parameter	Symbol	Ratings	Unit
Forward Current	IF	1200	mA
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	5	W
Junction Temperature	Tj	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	Tstg	-40~+70	°C
Operation Temperature	Topr	-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	Min.	Typ.	Max.	Units
Luminous Flux	$\phi_v$	If=700mA	140	160	—	lm
Correlated Colour Temperature	CCT		2871	3000	3130	K
Spectral Line Half-Width	$\Delta\lambda$		139	144	149	nm
Forward Voltage	$V_f$		2.7	3.0	3.4	V
Viewing Angle at 50% IV	$2\theta_{1/2}$		—	120	—	Deg
Reverse Current	$I_R$	—	—	—	$\mu A$	
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=700mA	—	6.4	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$		—	-2.3	—	mV/°C
Color Rendering Index	Ra		90	92.5	—	—

**White light Color coordinate filing (IF=0.7A)**

Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
7B3	3030K - 3130K	0.4322	0.4096	0.4364	0.4188	0.4430	0.4212	0.4385	0.4119
7B4		0.4281	0.4006	0.4322	0.4096	0.4385	0.4119	0.4342	0.4082
7A3		0.4242	0.3919	0.4281	0.4006	0.4342	0.4028	0.4300	0.3939
7A4		0.4203	0.3833	0.424	0.3919	0.4300	0.3939	0.4259	0.3853
7C2	2950K - 3030K	0.4385	0.4119	0.4430	0.4212	0.4496	0.4236	0.4449	0.4141
7C1		0.4342	0.4028	0.4385	0.4119	0.4449	0.4141	0.4403	0.4049
7D2		0.4300	0.3939	0.4342	0.4028	0.4403	0.4049	0.4359	0.3960
7D1		0.4259	0.3853	0.4300	0.3960	0.4359	0.3960	0.4316	0.3873
7C3	2871K - 2950K	0.4449	0.4141	0.4496	0.4236	0.4562	0.4260	0.4513	0.4164
7C4		0.4403	0.4049	0.4449	0.4141	0.4513	0.4164	0.4465	0.4071
7D3		0.4359	0.3960	0.4403	0.4049	0.4465	0.4071	0.4418	0.3981
7D4		0.4316	0.3873	0.4359	0.3960	0.4418	0.3981	0.4373	0.3893

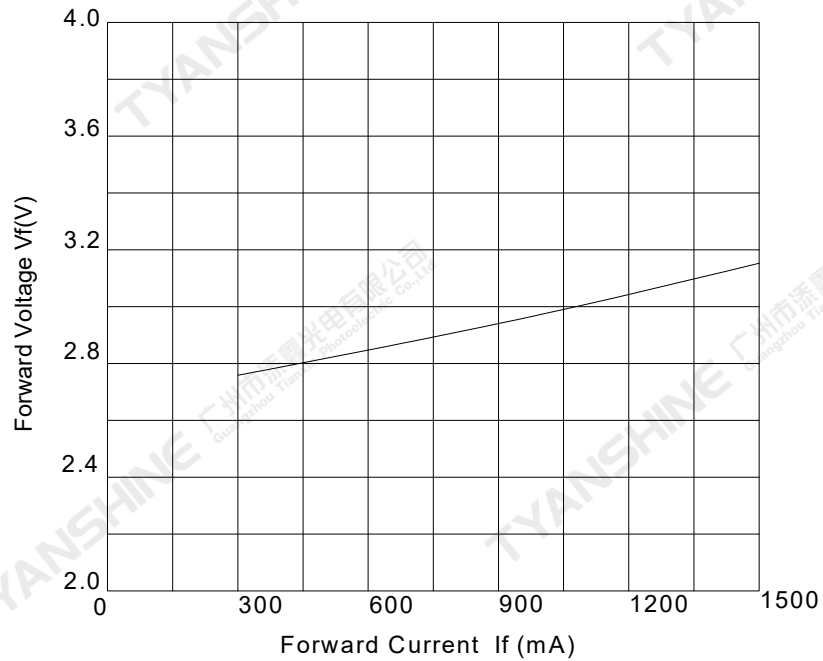
**Notes:**

- 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: $\pm 0.15V$ .

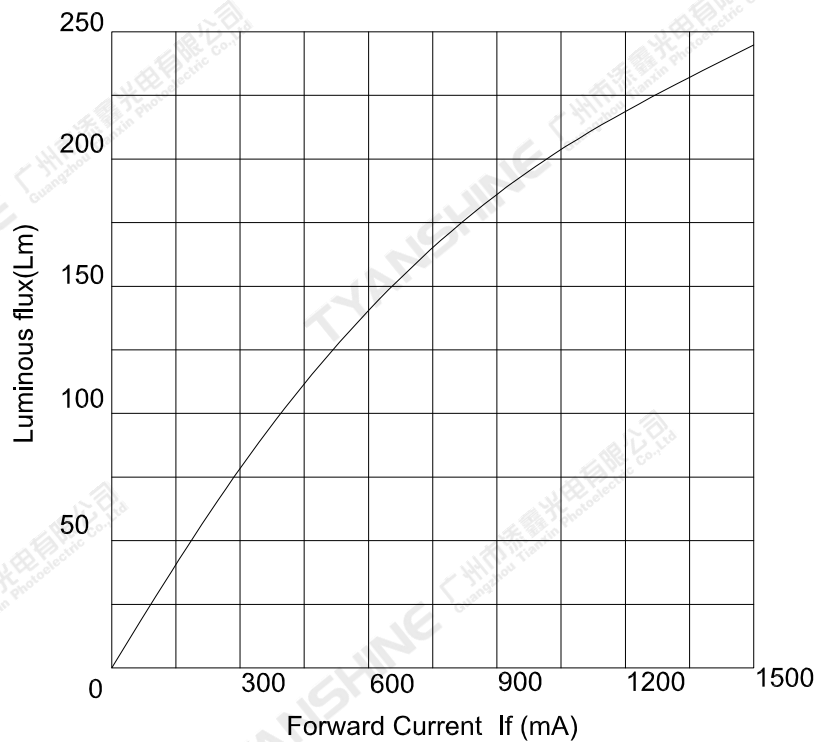
## Typical Electrical/Optical Characteristics Curves

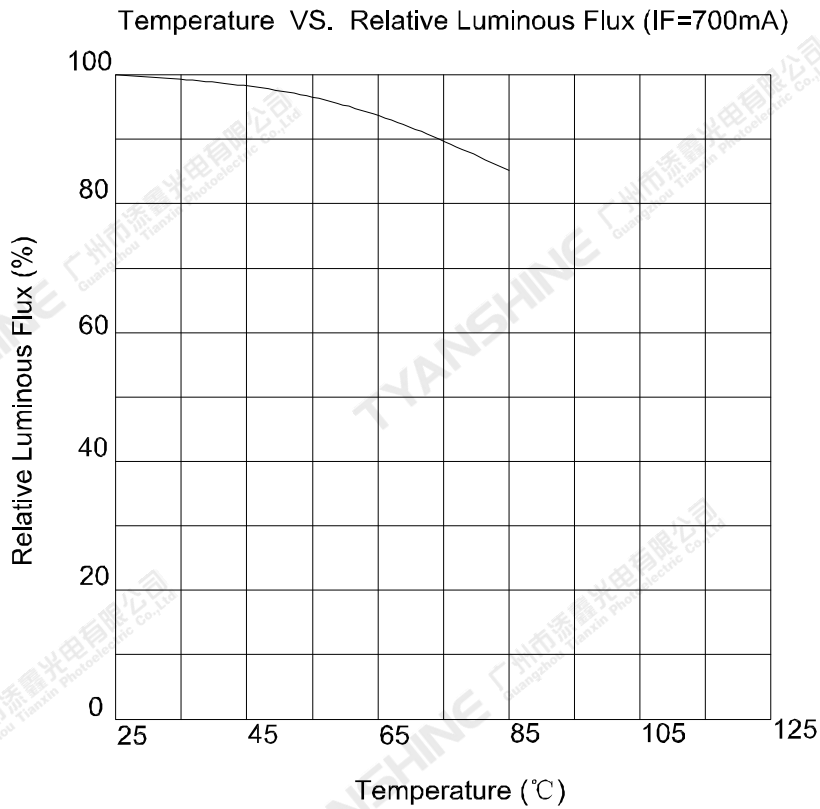
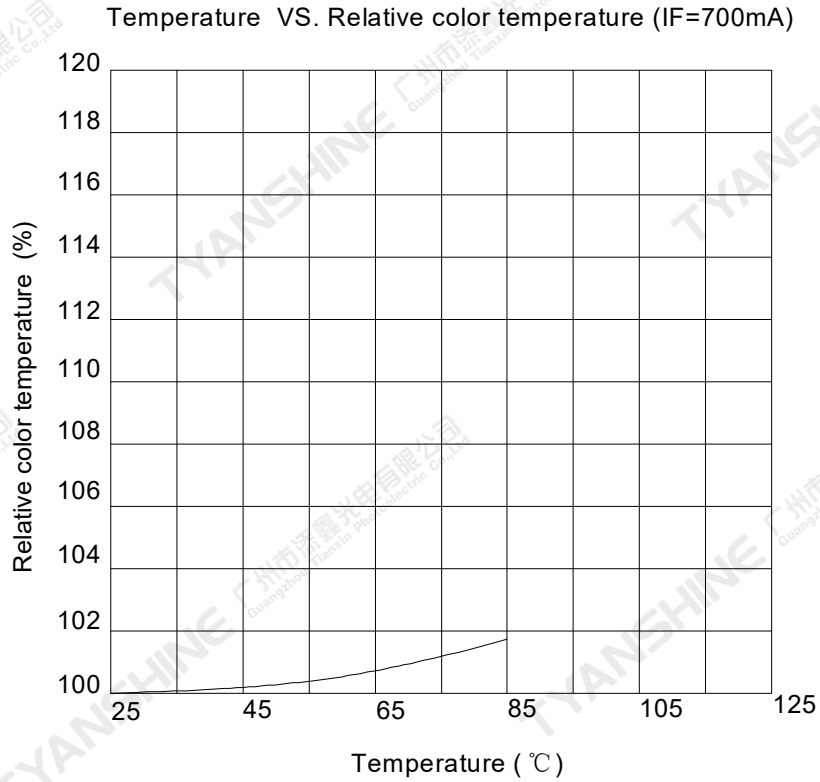
(25°C Ambient Temperature Unless Otherwise Noted)

Forward Current VS. Forward Voltage

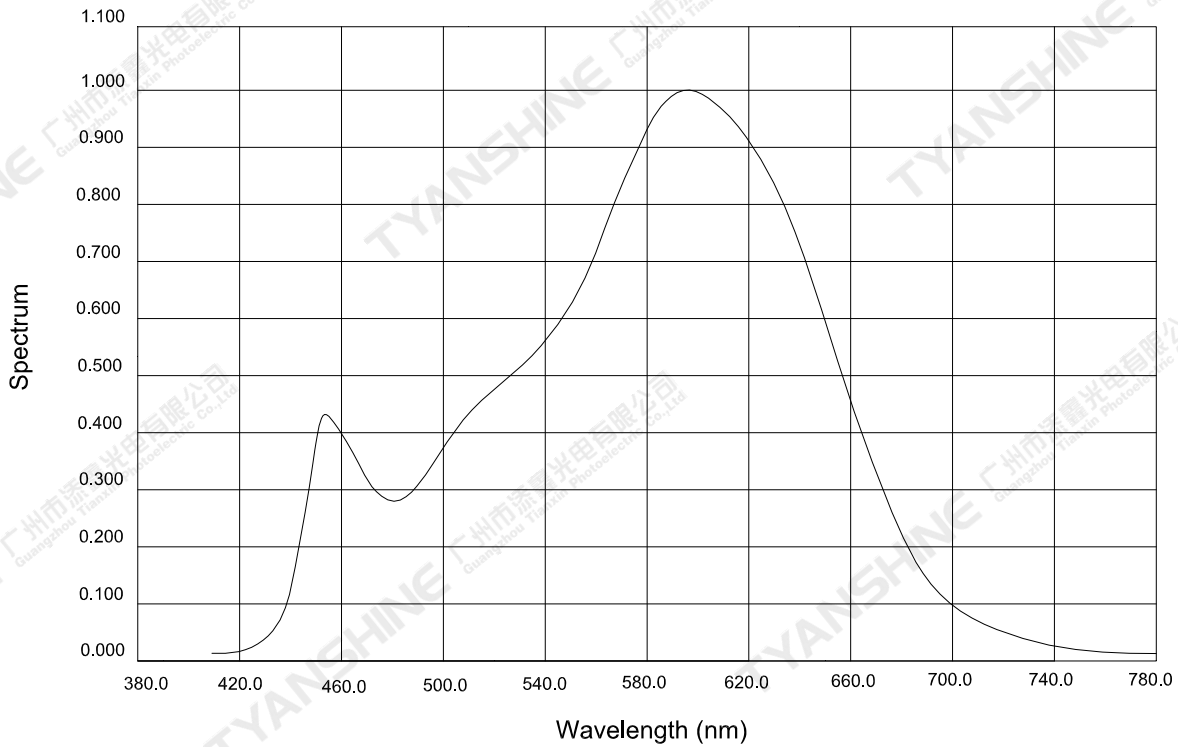


Forward Current VS. Luminous flux

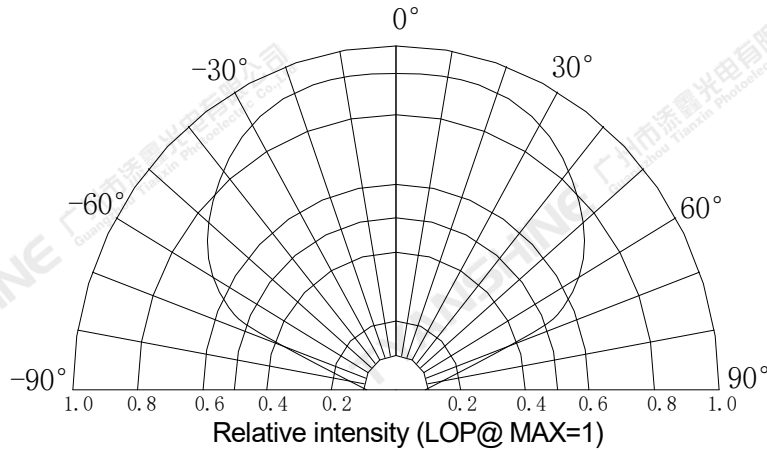




Relative Spectral Distribution



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  $\pm 5^\circ$ .

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## Usage Precautions

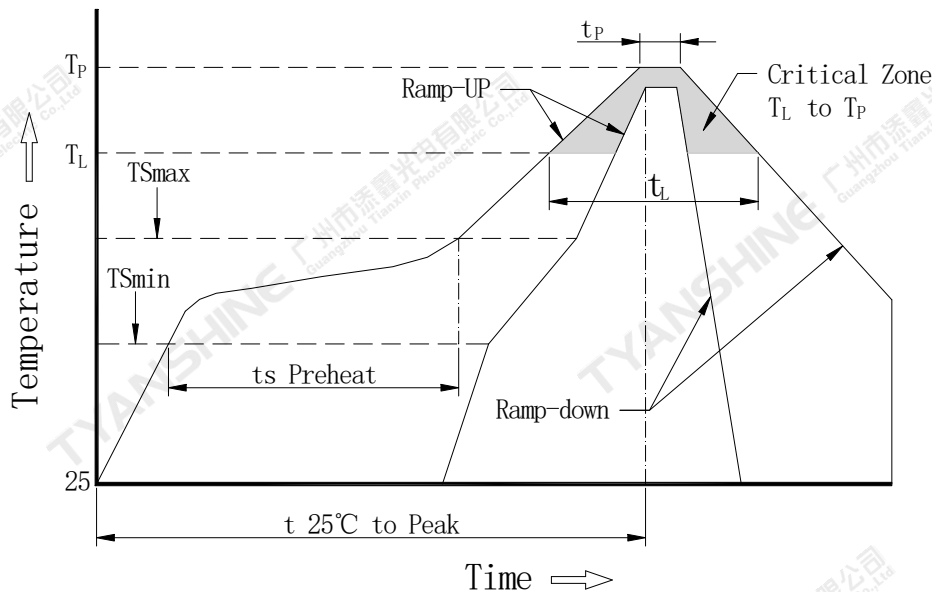
### Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

### Soldering Condition

Use the conditions shown to the under figure.



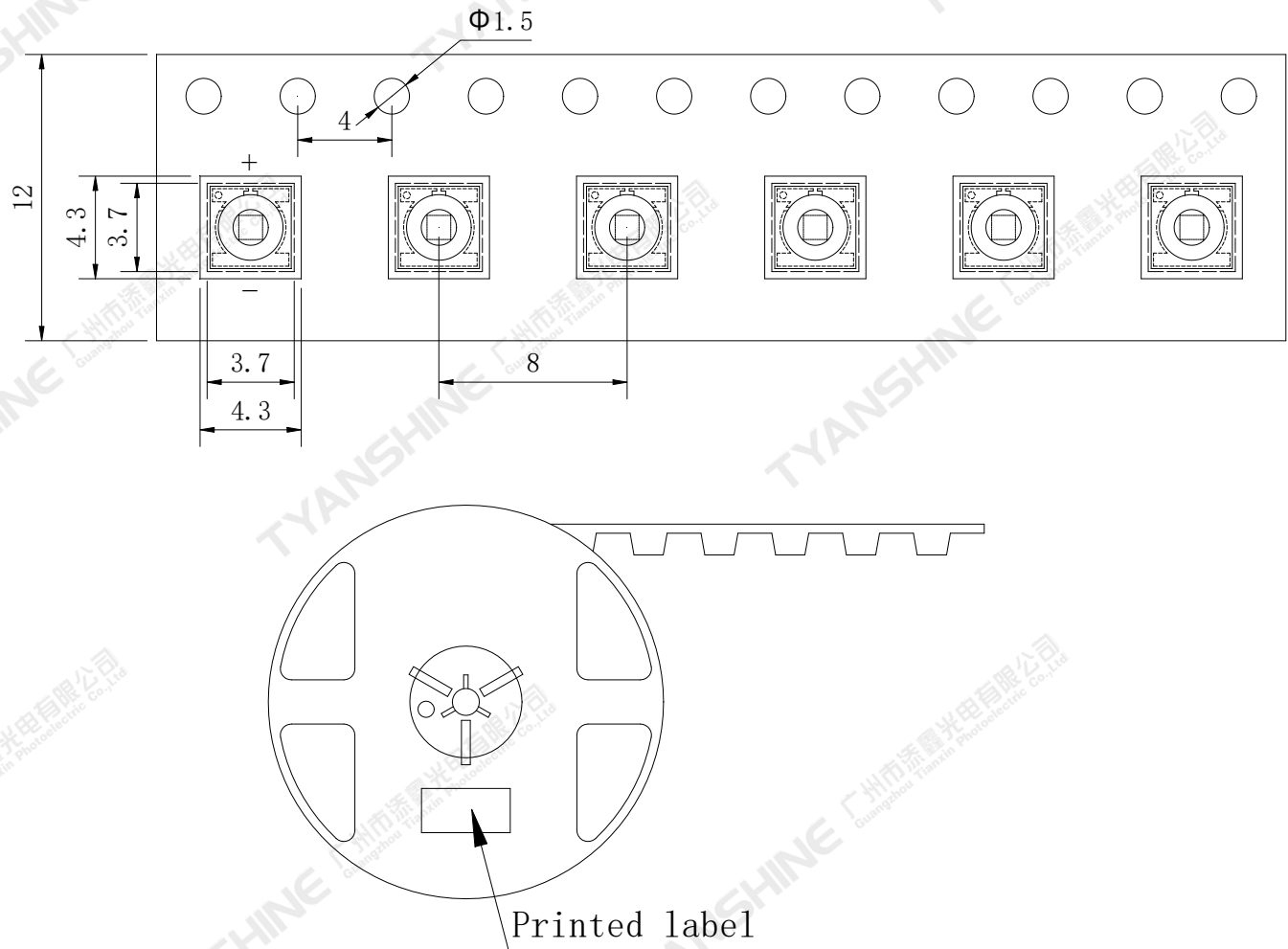
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (TSmax to TP)	3°C/second max.
Preheat: Temperature Min (TSmin)	130°C
Preheat: Temperature Max (TSmax)	190°C
Preheat: Time (TSmin to TSmax)	120-180 seconds
Time Maintained Above: Temperature (TL)	230°C
Time Maintained Above: Time (TL)	60-150 seconds
Peak/Classification Temperature (TP)	255°C
Time Within 5°C of Actual Peak Temperature (TP)	10-35seconds
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:1000 PCS**



**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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