

# TX-3535L10FC120-NGVENA72-03

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 2.5 A.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ GaN

### Emitting Color:

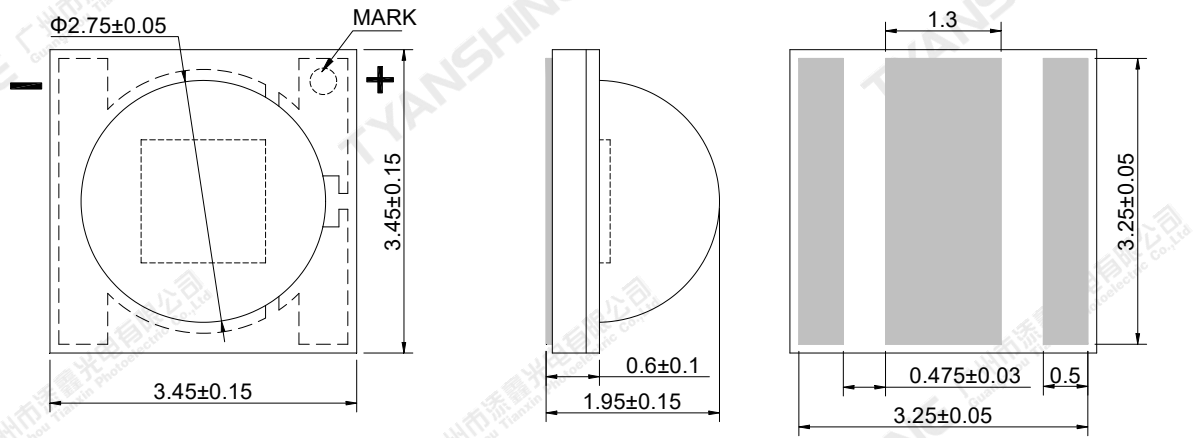
- ◆ Lime

### Applications:

- ◆ Portable Flashlight
- ◆ Garden lighting
- ◆ General Lighting

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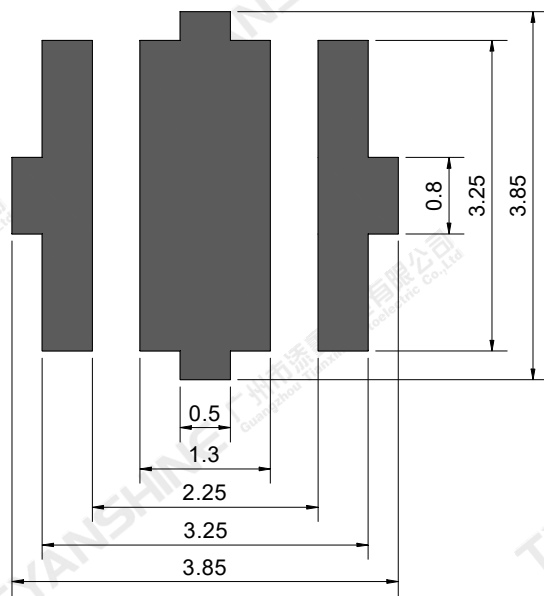
**Package Dimensions:**



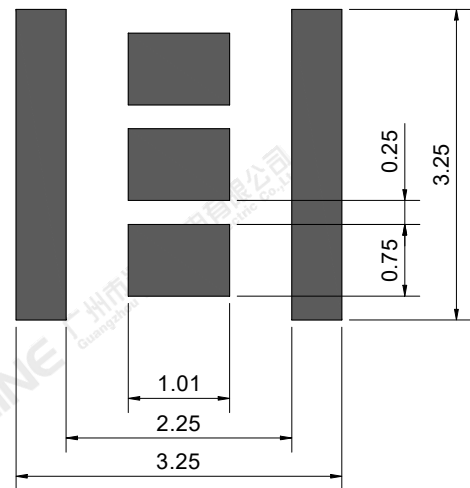
Top view

Side view

Bottom view



Recommended solder pad



Recommended stencil pattern

**Notes:**

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

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

Parameter	Symbol	Ratings	Unit
Forward Current	IF	2.5	A
Reverse Voltage	VR	5	V
Reverse Current	IR	2	μA
Power Dissipation	PD	10	W
Junction Temperature	Tj	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature	Tstg	-40~+70	°C
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**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Luminous Flux	$\phi_v$	If=1000mA	380	420	—	lm
Correlated Colour Temperature	CCT		4030	4150	4280	K
			5400	5650	5900	
Forward Voltage	$V_f$		2.7	3.1	3.5	V
Peak Emission Wavelength	$\lambda_p$		539	544	549	nm
Dominant Wavelength	$\lambda_d$		562	567	572	nm
Spectral Line Half-Width	$\Delta\lambda$		100	110	120	nm
Viewing Angle at 50% IV	$2\theta_{1/2}$	—	120	—	Deg	
Reverse Current	$I_R$	—	—	2	$\mu A$	
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	—	6.0	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$	If=1000mA	—	-1.3	—	mV/°C

**Lime Color coordinate filing (IF=1000mA )**

Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
J5	4030K	4280K	0.4158	0.5410	0.4008	0.5409	0.4050	0.5500	0.4200	0.5500
J6			0.4092	0.5591	0.4240	0.5590	0.4050	0.5500	0.4200	0.5500
L01	5400K	5900K	0.3312	0.4868	0.3156	0.4868	0.3195	0.4984	0.3351	0.4984
L02			0.3351	0.4984	0.3195	0.4984	0.3227	0.5080	0.3383	0.5080

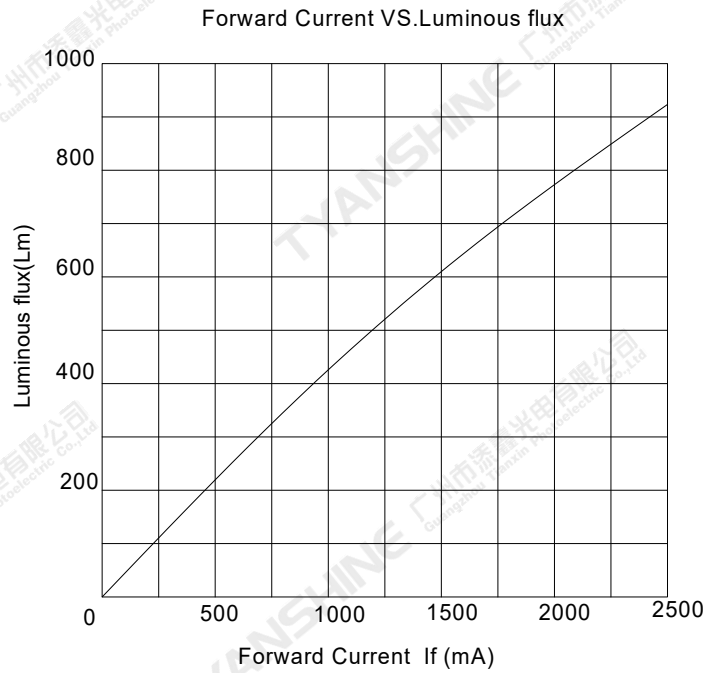
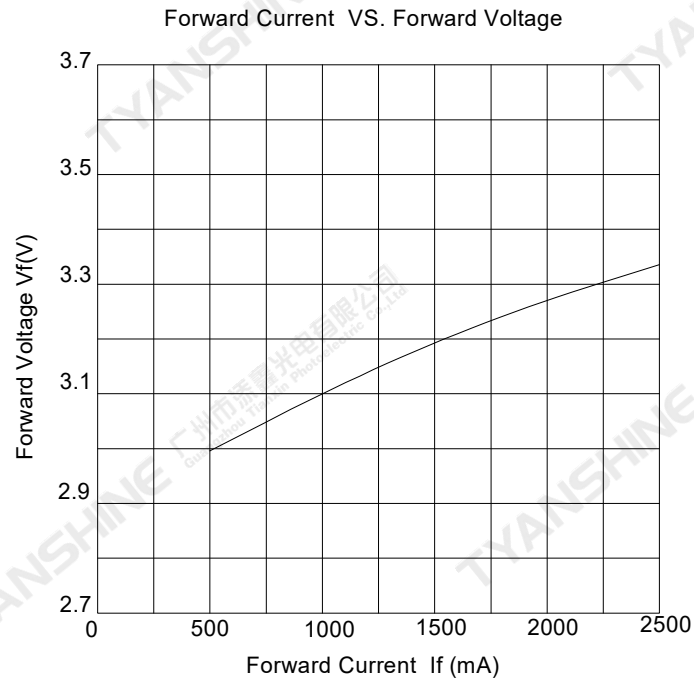
**Notes:**

- 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: $\pm 0.15V$ .

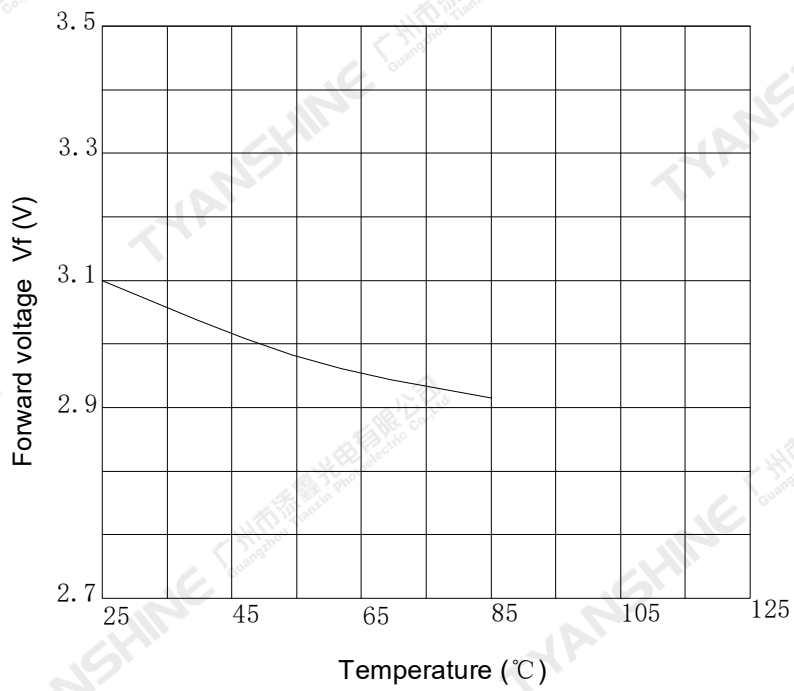
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## Typical Electrical/Optical Characteristics Curves

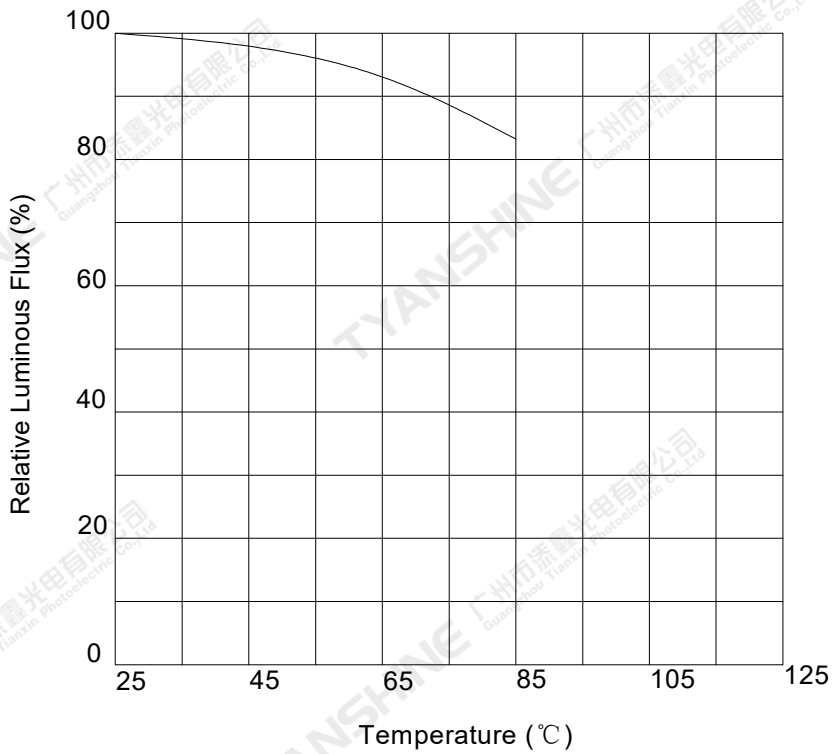
(25°C Ambient Temperature Unless Otherwise Noted)



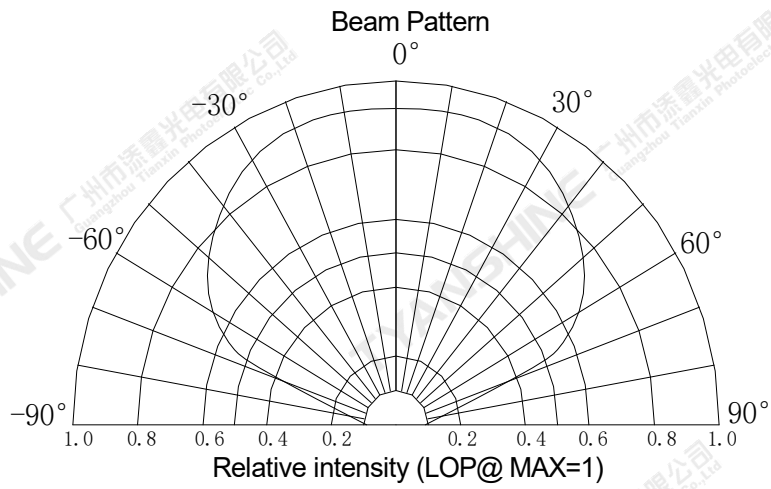
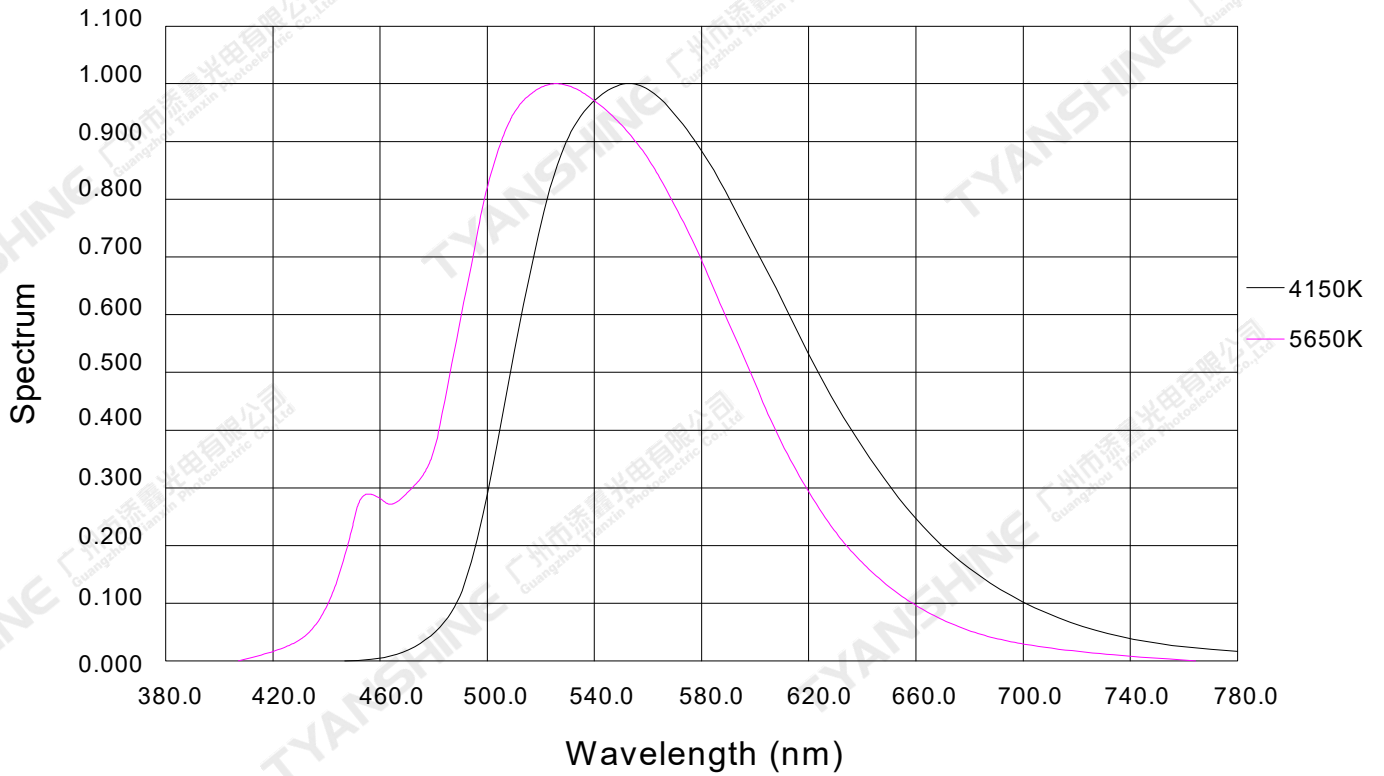
Temperature VS. Forward Voltage (IF=1000mA)



Temperature VS. Relative Luminous Flux (IF=1000mA)



Relative Spectral Distribution



**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

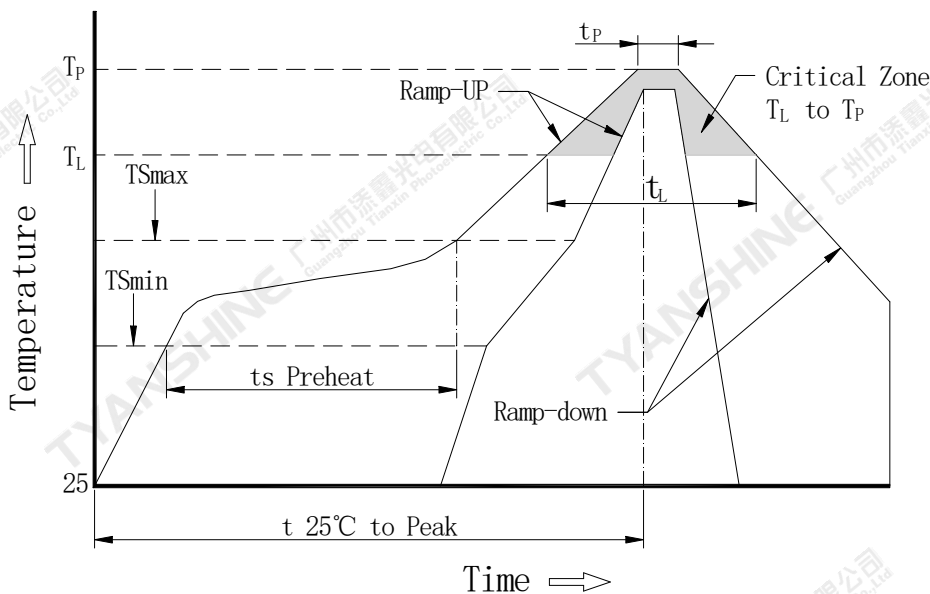
### Storage Environment Condition

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)	10-35 seconds
Ramp-Down Rate	5°C/second max.
Time 25°C to Peak Temperature	7 minutes max.

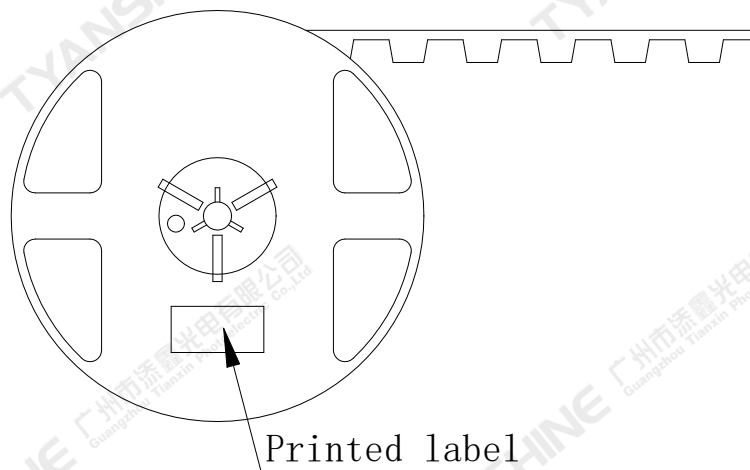
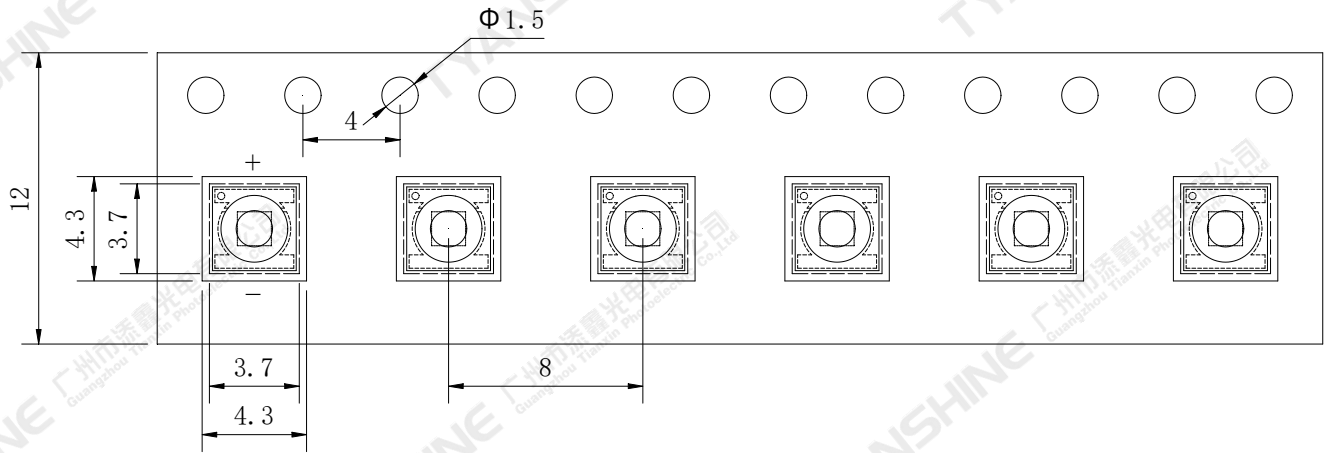
**Note:**

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



**Dimensions For Cannulation And Packaging**

**Quantity: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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