

TX-3535RGB8VSD1-NG4DC-01H80**PRODUCT SPECIFICATION****Features:**

- ◆Excellent transiting heat from LED chip operating under 600mA
- ◆High luminous output
- ◆No UV

Chip Material:

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

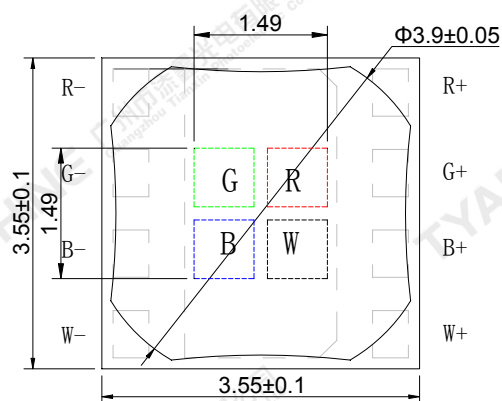
Emitting Color:

- ◆Red (R)
- ◆Green (G)
- ◆Blue (B)
- ◆White (W)

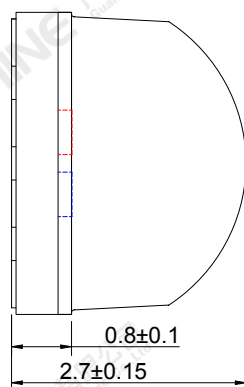
Applications:

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

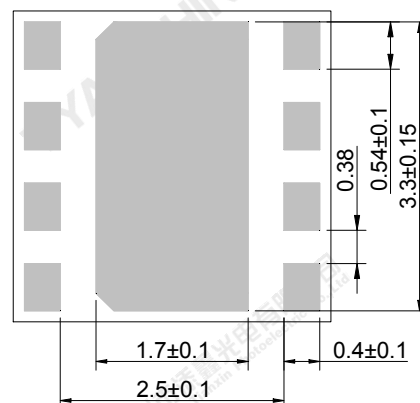
Package Dimensions:



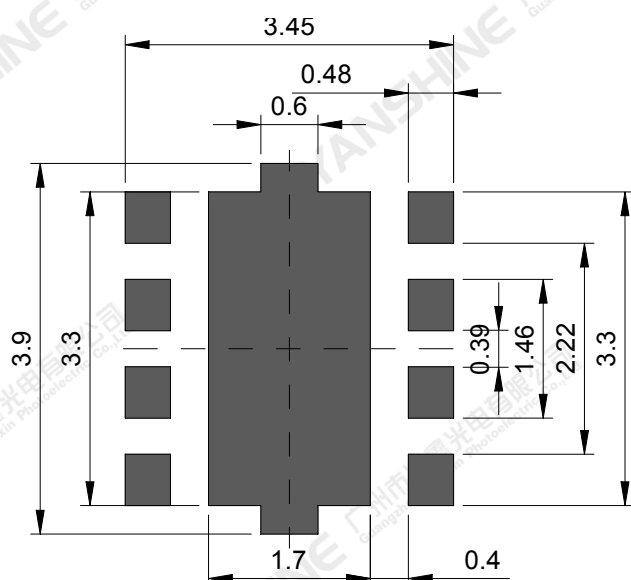
Top view



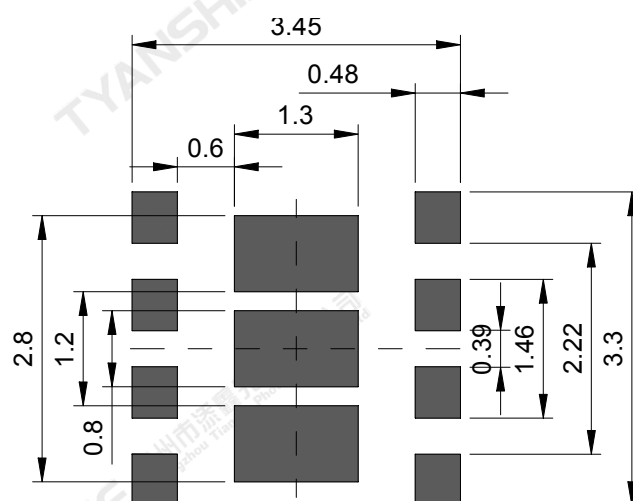
Side view



Bottom view



Recommended solder pad



Recommended stencil pattern

Notes:

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

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol		Max Ratings	Unit
Forward Current	I _F		600	mA
Peak Forward Current (Note 1)	I _{FP}		800	
Reverse Voltage	V _R		5	V
Power Dissipation	P _D	R	1620	mW
		G	2160	
		B	2100	
		W	2160	
Junction Temperature	T _j	R	125	℃
		G	150	
		B	150	
		W	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	T _{stg}		-40~70	℃
Operation Temperature	T _{opr}		-30~85	

Note: 1. Pulse width ≤0.1 msec, duty ≤1/10.

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.

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Electrical Optical Characteristics (Tc=25°C , IF=500mA)

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	R	70	75	80	lm
		G	110	125	140	
		B	35	40	45	
		W	95	110	125	
Correlated Colour Temperature	CCT	W	2871	3000	3130	K
Color Rendering Index	Ra	W	80	82	—	—
Dominant Wavelength	λ_d	R	618	623	628	nm
		G	523	528	533	
		B	462	467	472	
Peak-emission Wavelength	λ_p	R	625	630	635	nm
		G	518	523	528	
		B	458	463	468	
Spectral Line Half-Width	$\Delta\lambda$	R	14	16	18	nm
		G	30	35	40	
		B	18	21	24	
		W	115	130	145	
Forward Voltage	V_f	R	2.0	2.4	2.7	V
		G	2.9	3.2	3.6	
		B	2.8	3.1	3.5	
		W	2.9	3.2	3.6	
Reverse Current	I_R	$V_R=5V$	—	—	2	μA
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	—	14	—	
		B	—	14	—	
		W	—	14	—	
Temperature Coefficient of Voltage	$V \Delta F/T$	R	—	-2.0	—	mV/°C
		G	—	-5.8	—	
		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.

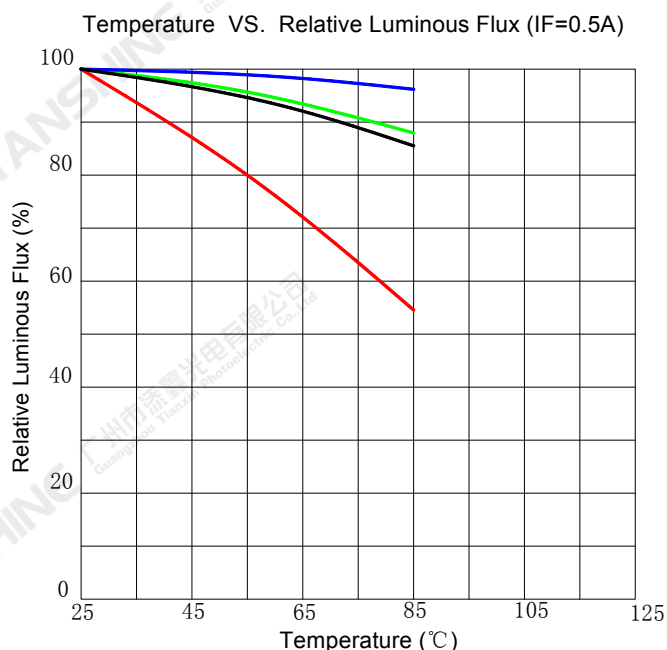
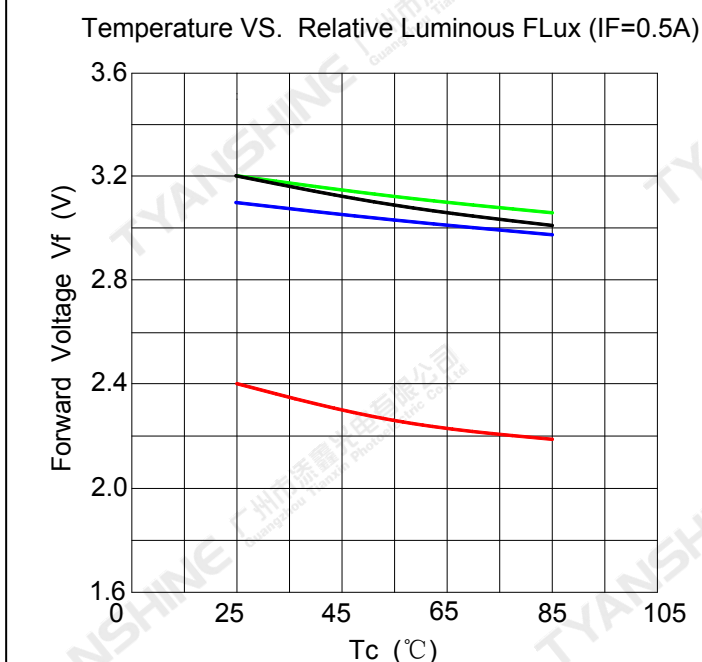
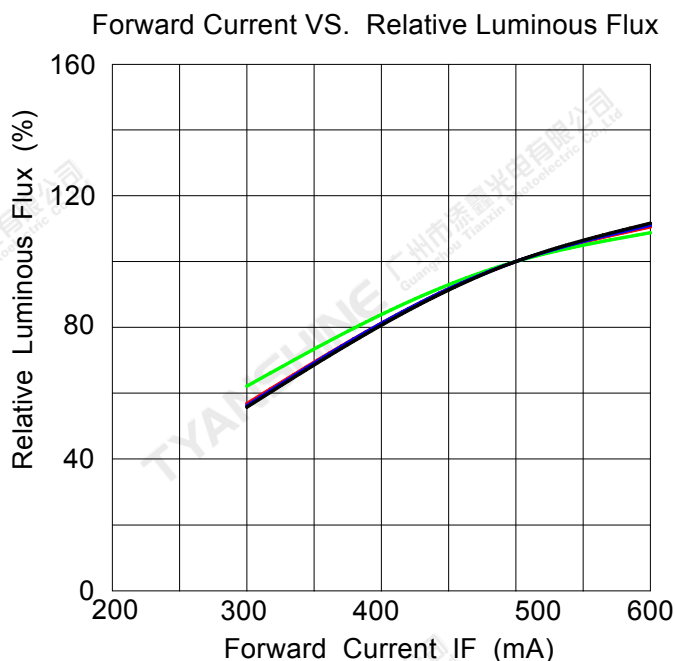
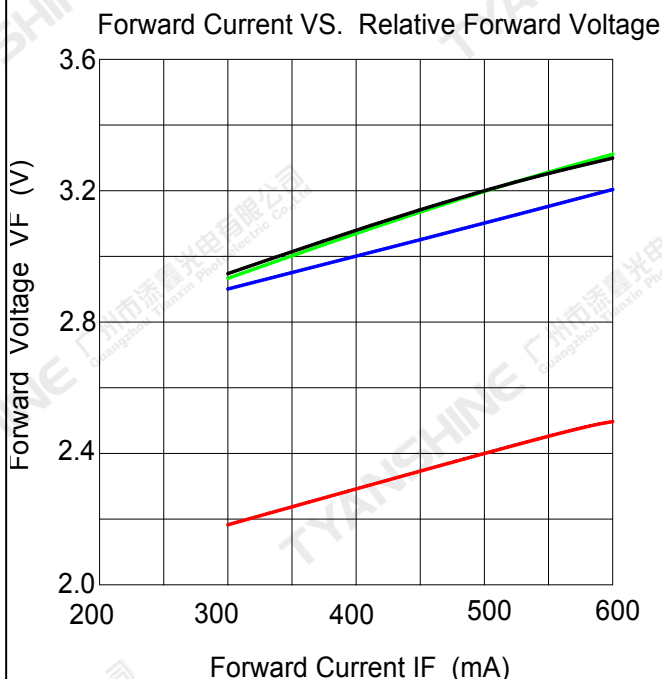
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

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3. Luminous flux measurement tolerance: $\pm 10\%$.
4. Forward voltage measurement tolerance: $\pm 10\%V$.
5. Ra measurement tolerance: ± 2 .

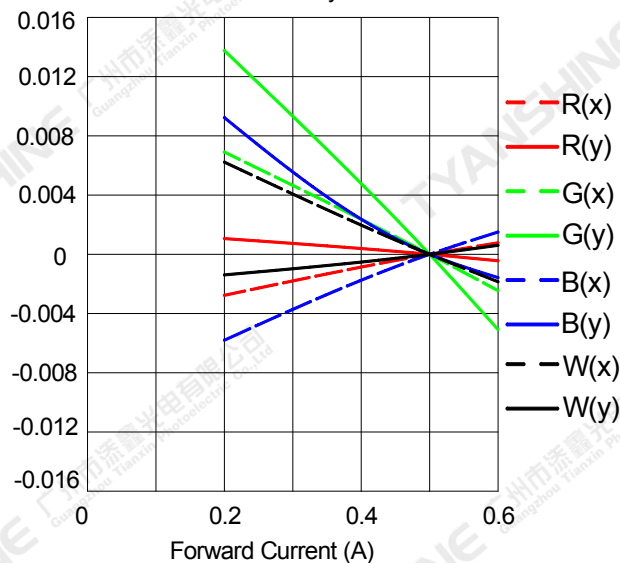
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

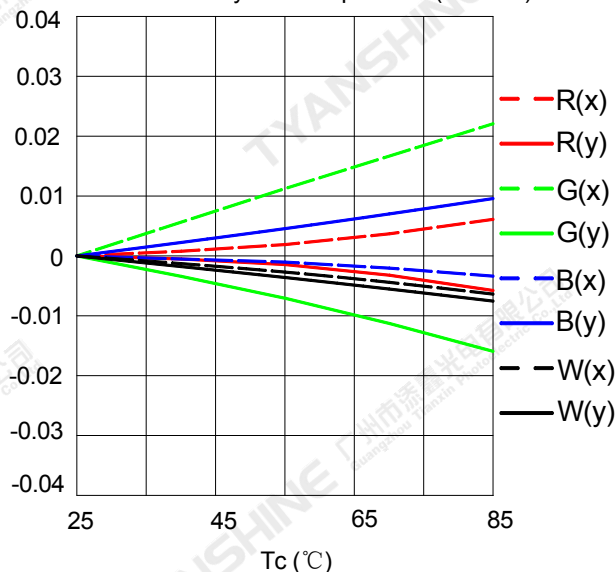


Notes: — Red (R) ; — Green (G) ; — Blue (B) ; — White (W) ;

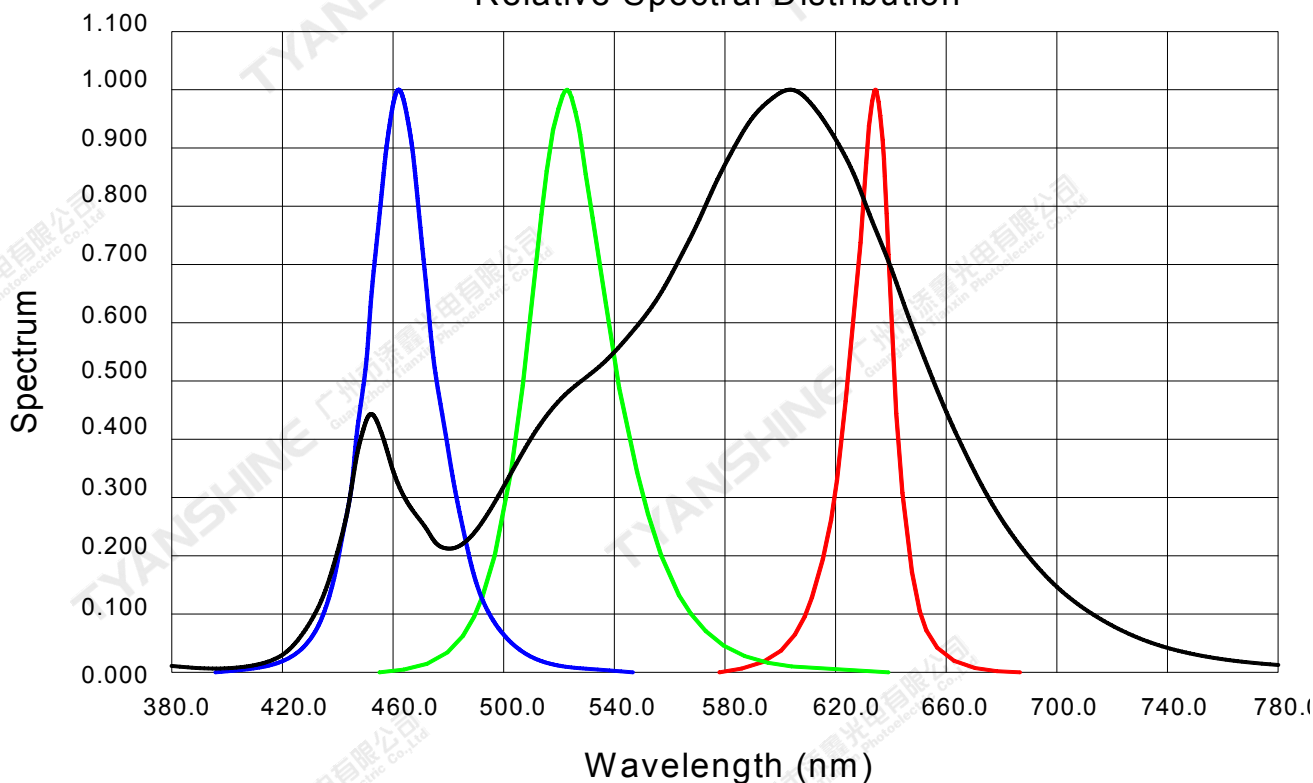
Relative Chromaticity VS. Current



Relative Chromaticity VS. Temperature (IF=0.5A)



Relative Spectral Distribution



Notes: — Red (R) ; — Green (G) ; — Blue (B) ; — White (W) ;

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

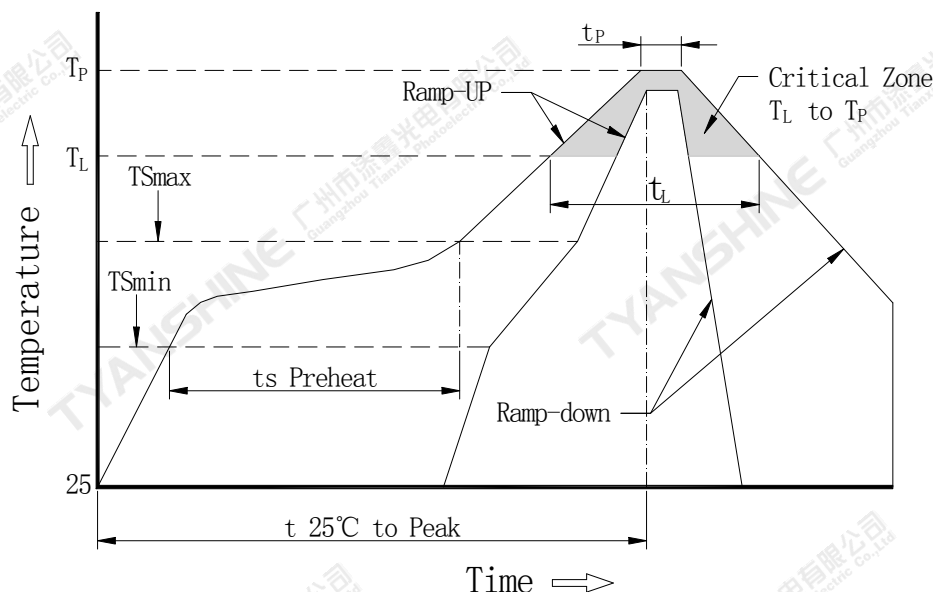
Storage Environment Condition

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	Pb-Free Solder(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.

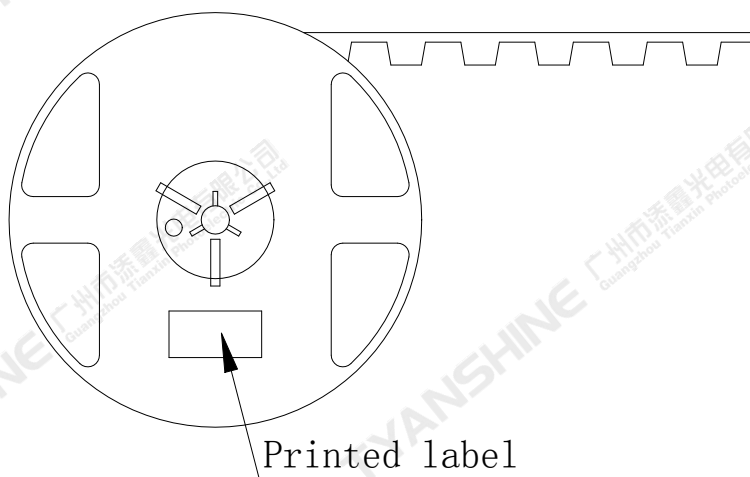
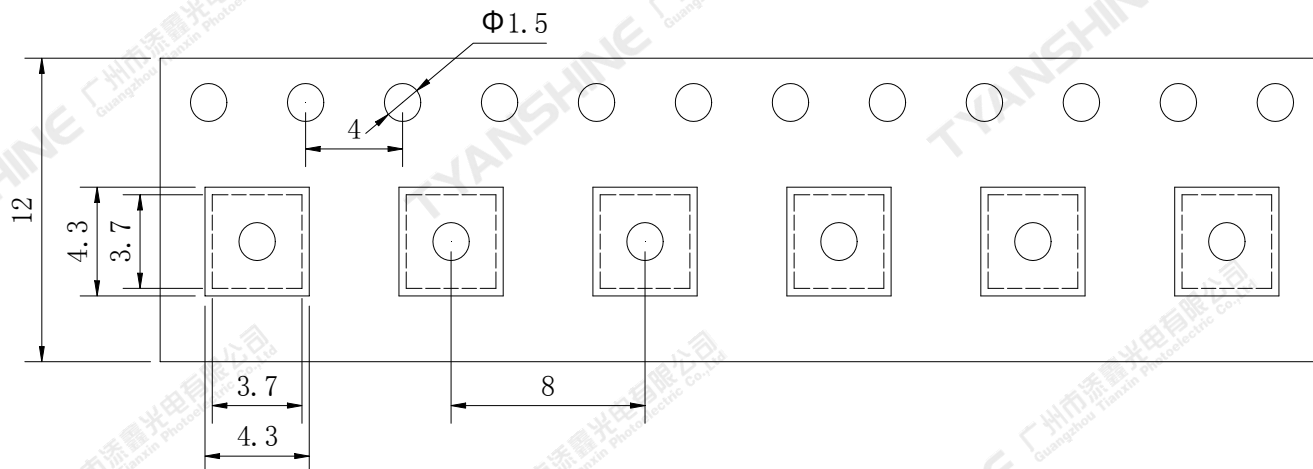
Note:

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

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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.