

TX-3535W5FSA1-0G4DB-01H90

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 1500mA.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆GaN

Emitting Color:

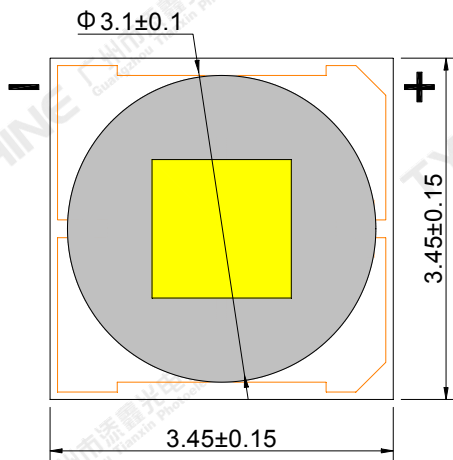
- ◆ white

Applications:

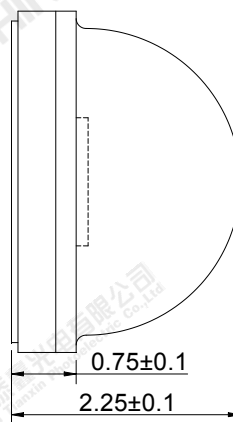
- ◆Auxiliary lighting
- ◆Architectural lighting
- ◆ General Lighting

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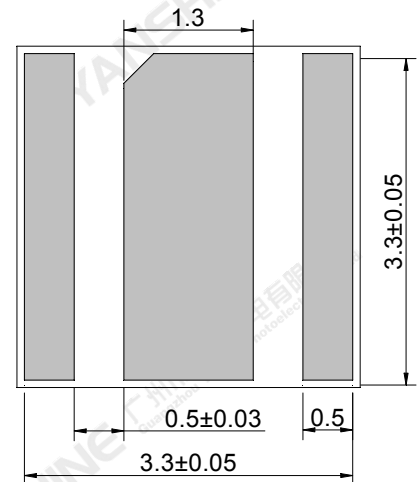
Package Dimensions:



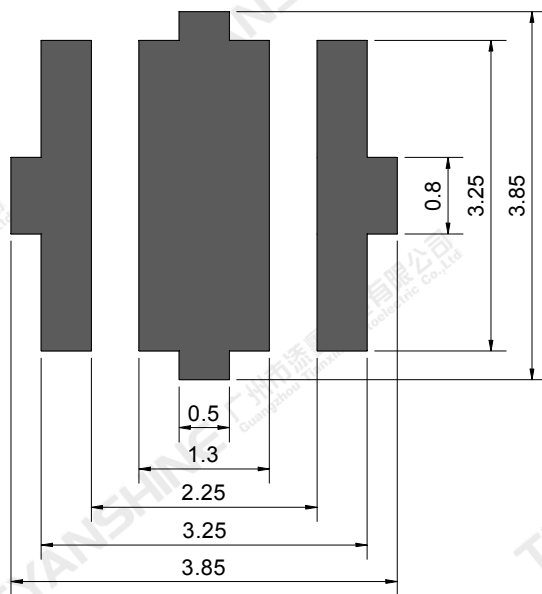
Top view



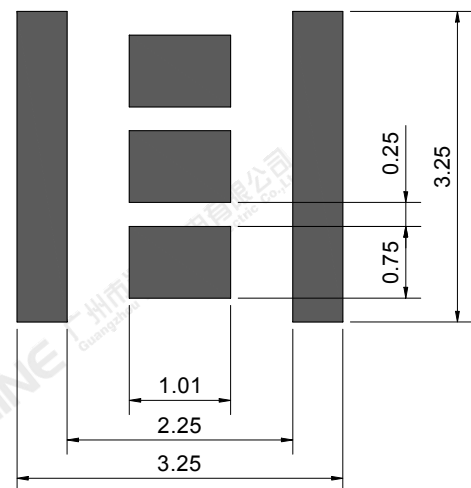
Side view



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	Ratings	Unit
Forward Current	IF	1500	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	5	W
Junction Temperature	Tj	150	℃
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	Tstg	-30~+70	℃
Operation Temperature	Topr	-40~+85	

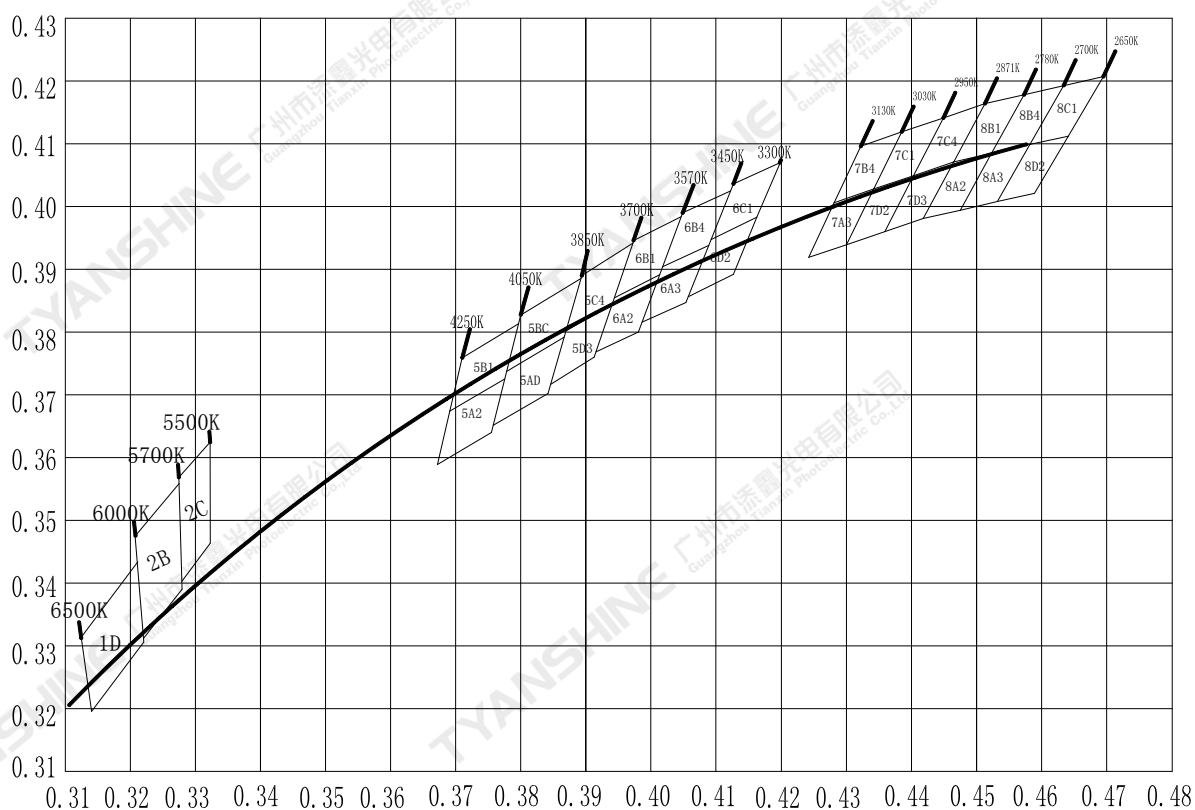
Notes:

- 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, IF=0.7A)

Parameter	Symbol	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	φ_v	W	170	200	—	lm
Forward Voltage	V_f		2.7	3.0	3.3	V
Correlated Colour Temperature	CCT		2650	—	3130	K
			3300	—	4250	
			5500	5800	6500	
Color Rendering Index	Ra		90	92.5	—	—
Spectral Line Half-Width	$\triangle\lambda$		150	170	190	nm
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	—	120	—	Deg
Reverse Current	I_R	$V_R=5V$	—	—	1	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	W	—	6.0	—	K/W
Temperature Coefficient of Voltage	$V\triangle F/T$		—	-2	—	mV/°C

White light Color coordinate filing (IF=0.7A)



Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
8D2	2650K	2700K	0.4590	0.4021	0.4533	0.4008	0.4583	0.4099	0.4642	0.4112
8C1			0.4642	0.4112	0.4583	0.4099	0.4634	0.4192	0.4696	0.4207
8A3	2700K	2780K	0.4533	0.4008	0.4476	0.3994	0.4524	0.4085	0.4583	0.4099
8B4			0.4583	0.4099	0.4524	0.4085	0.4574	0.4178	0.4634	0.4192
8A2	2780K	2871K	0.4476	0.3994	0.4419	0.3981	0.4466	0.4071	0.4524	0.4085
8B1			0.4524	0.4085	0.4466	0.4071	0.4514	0.4164	0.4574	0.4178
7D3	2871K	2950K	0.4419	0.3981	0.4360	0.3960	0.4404	0.4049	0.4466	0.4071
7C4			0.4466	0.4071	0.4404	0.4049	0.4450	0.4141	0.4514	0.4164
7D2	2950K	3030K	0.4360	0.3960	0.4301	0.3939	0.4343	0.4028	0.4404	0.4049
7C1			0.4404	0.4049	0.4343	0.4028	0.4386	0.4119	0.4450	0.4141
7A3	3030K	3130K	0.4301	0.3939	0.4243	0.3919	0.4282	0.4006	0.4343	0.4028
7B4			0.4343	0.4028	0.4282	0.4006	0.4323	0.4096	0.4386	0.4119
6D2	3300K	3450K	0.4127	0.3892	0.4058	0.3859	0.4093	0.3947	0.4163	0.3983
6C1			0.4163	0.3983	0.4093	0.3947	0.4127	0.4036	0.4199	0.4070
6A3	3450K	3570K	0.4054	0.3847	0.3987	0.3816	0.4018	0.3904	0.4089	0.3938
6B4			0.4089	0.3938	0.4018	0.3904	0.4049	0.3990	0.4123	0.4025
6A2	3570K	3700K	0.3981	0.3800	0.3916	0.3768	0.3944	0.3855	0.4014	0.3891
6B1			0.4014	0.3891	0.3944	0.3855	0.3974	0.3946	0.4047	0.3984
5D3	3700K	3850K	0.3913	0.3760	0.3846	0.3717	0.3870	0.3802	0.3941	0.3846
5C4			0.3941	0.3846	0.3870	0.3802	0.3894	0.3890	0.3973	0.3942
5AD	3850K	4050K	0.3842	0.3702	0.3758	0.3651	0.3778	0.3737	0.3867	0.3792
5BC			0.3867	0.3792	0.3778	0.3737	0.3800	0.3827	0.3893	0.3885
5A2	4050K	4250K	0.3755	0.3640	0.3672	0.3589	0.3691	0.3674	0.3776	0.3725
5B1			0.3776	0.3725	0.3691	0.3674	0.3710	0.3759	0.3797	0.3813
2C	5500K	5700K	0.3323	0.3464	0.3279	0.3403	0.3275	0.3568	0.3323	0.3625
2B	5700K	6000K	0.3279	0.3390	0.3220	0.3312	0.3207	0.3475	0.3275	0.3558
1D	6000K	6500K	0.3221	0.3306	0.3140	0.3196	0.3124	0.3314	0.3211	0.3433

Notes:

1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

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

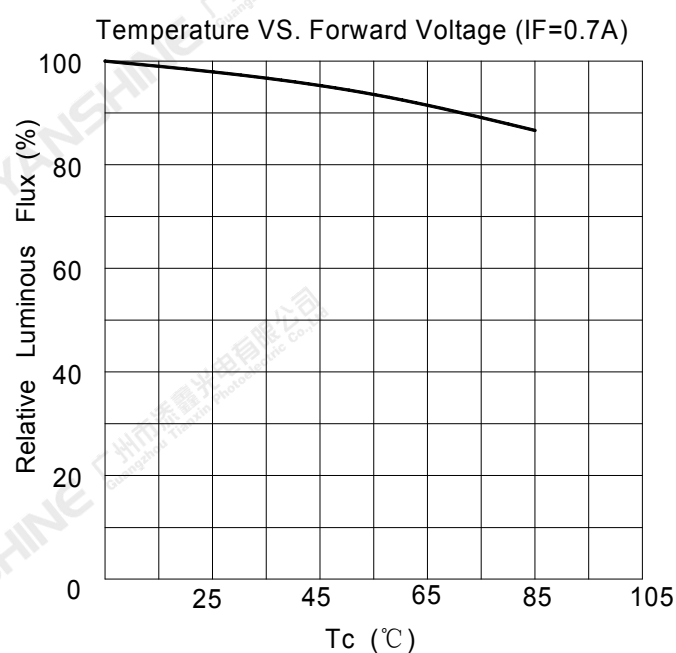
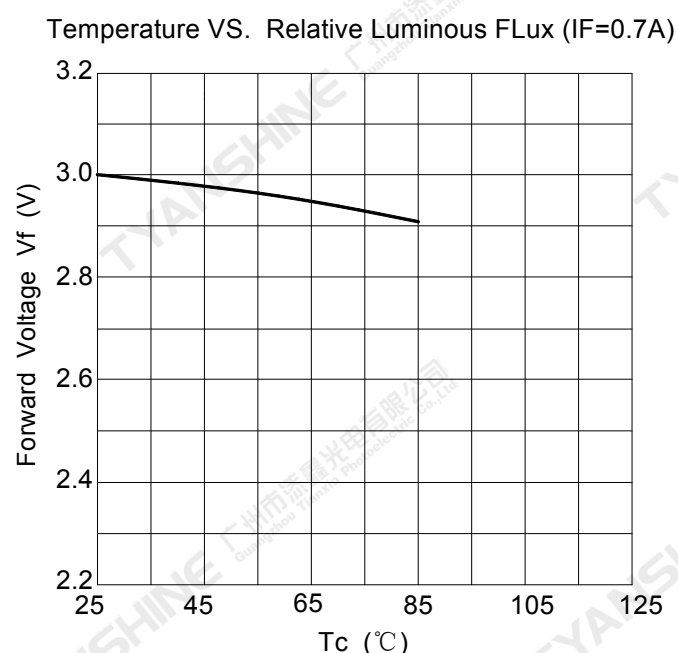
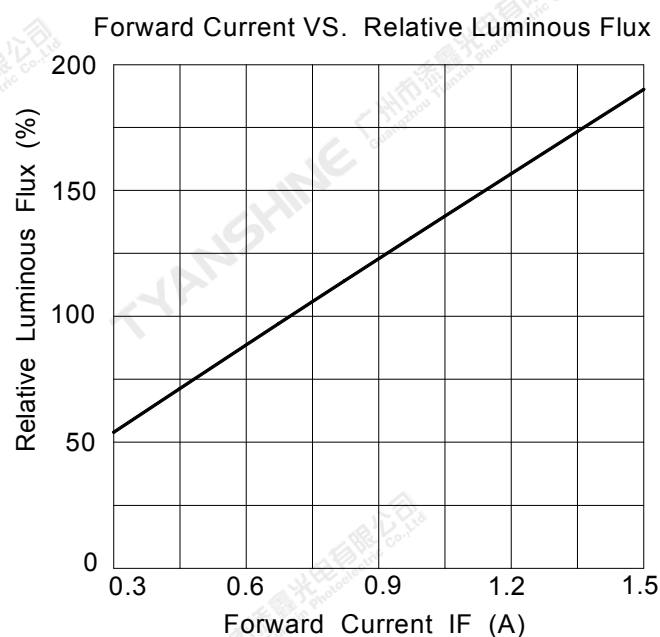
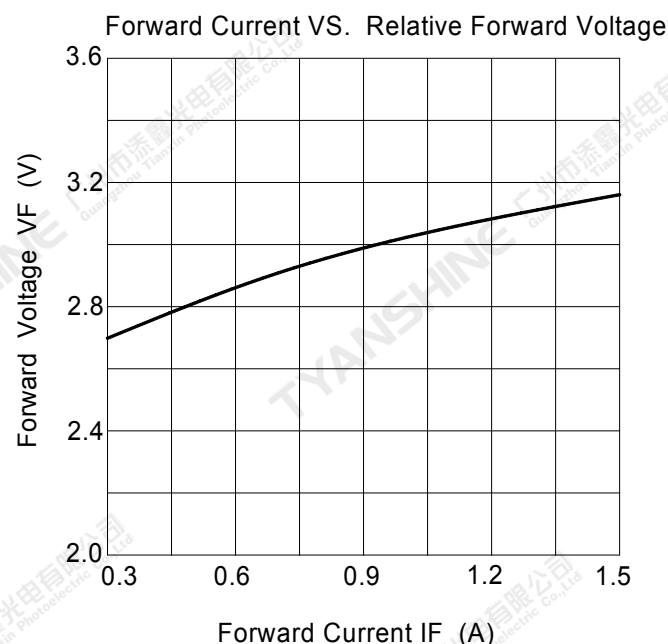
3. Luminous flux measurement tolerance: $\pm 10\%$.

4. Forward voltage measurement tolerance: $\pm 10\%V$.

5. Ra measurement tolerance: ± 2 .

Typical Electrical/Optical Characteristics Curves

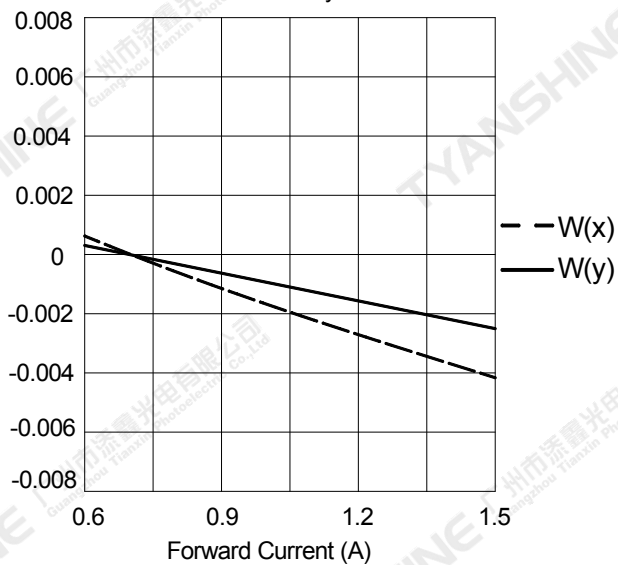
(25°C Ambient Temperature Unless Otherwise Noted)



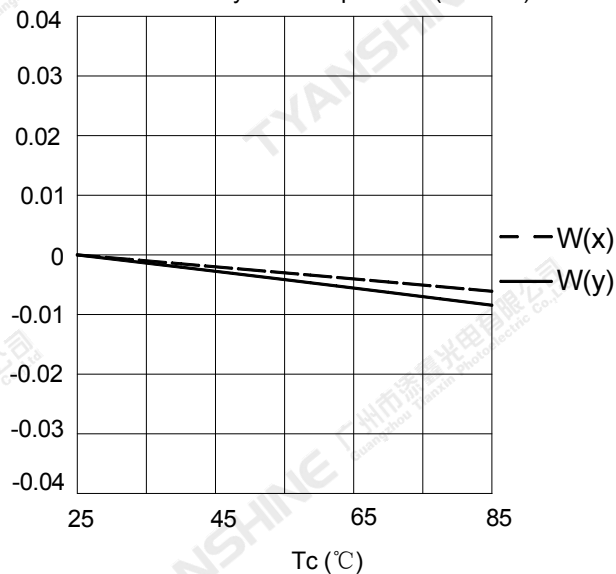
Notes: — White (W) ;

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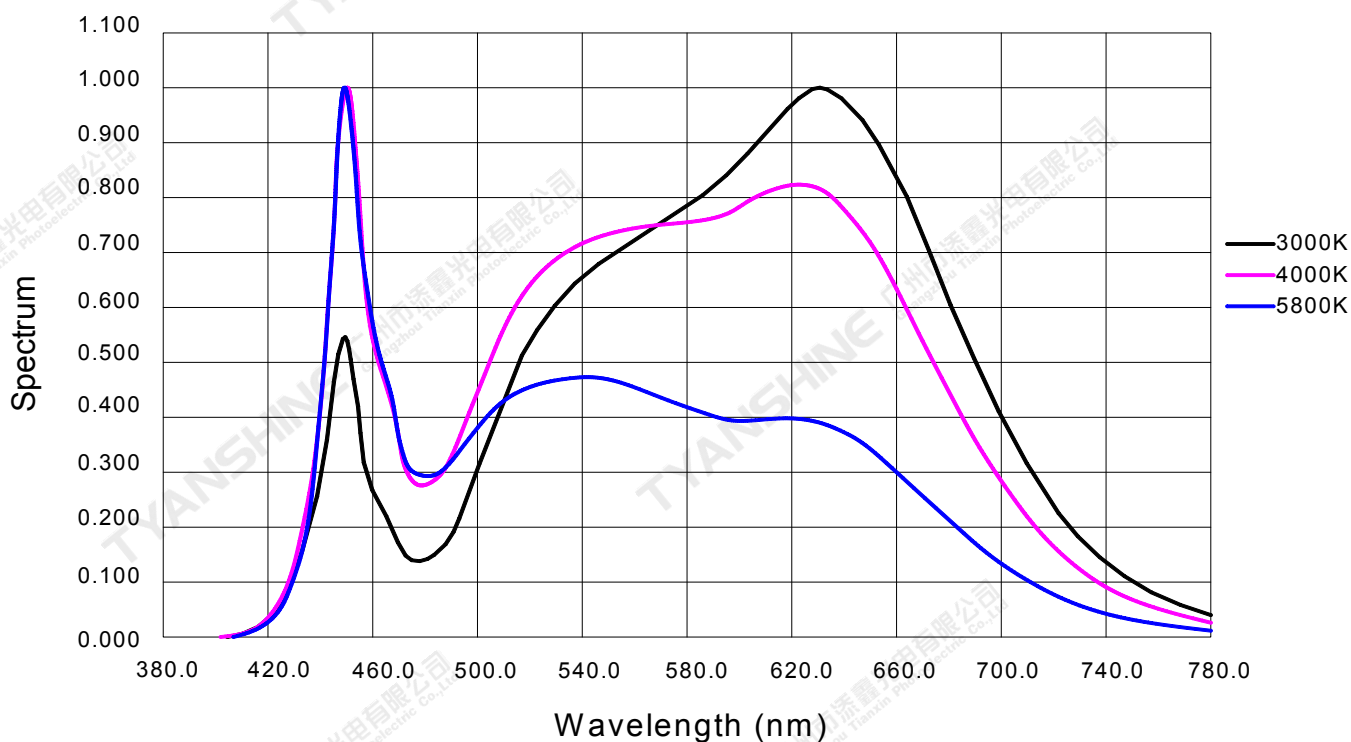
Relative Chromaticity VS. Current



Relative Chromaticity VS. Temperature (IF=0.7A)



Relative Spectral Distribution



Notes: — 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

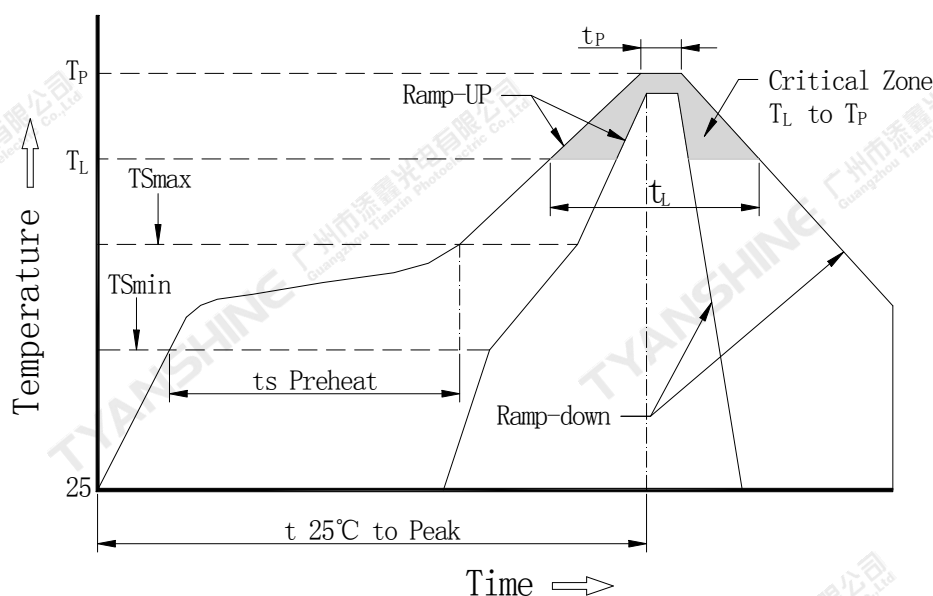
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



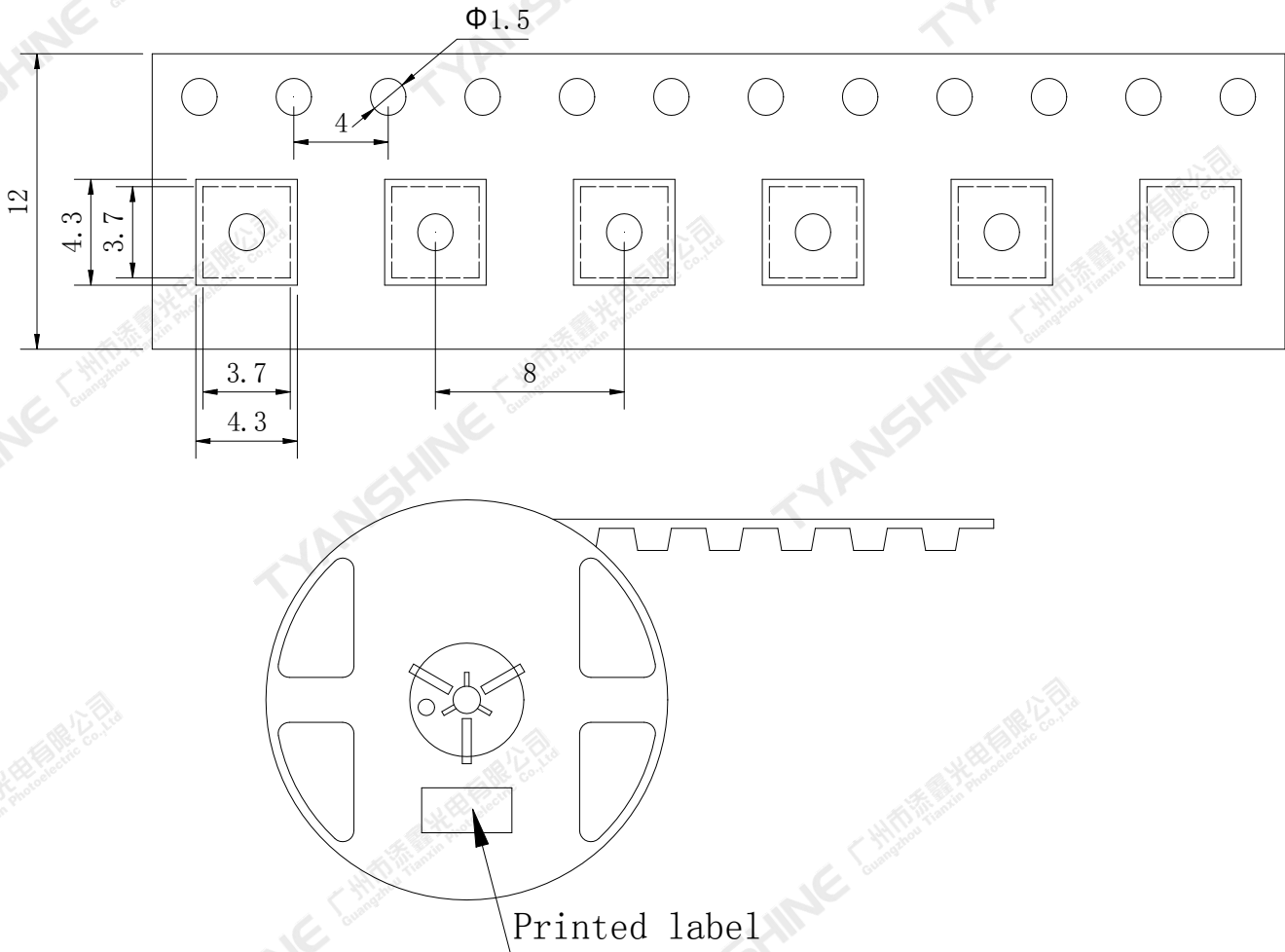
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (T_{Smax} to T_P)	3°C/second max.
Preheat: Temperature Min (T_{Smin})	100°C
Preheat: Temperature Max (T_{Smax})	150°C
Preheat: Time (T_{Smin} to T_{Smax})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183°C
Time Maintained Above: 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:1000 PCS



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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