

TX-3535W5VSA1-0G3DA-01H90

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 1.5A.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆GaN

Emitting Color:

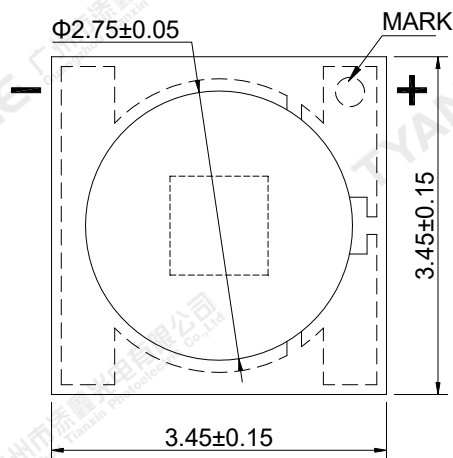
- ◆White(W)

Applications:

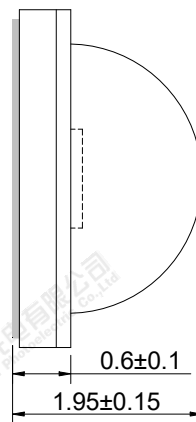
- ◆Auxiliary lighting
- ◆Architectural lighting
- ◆General Lighting

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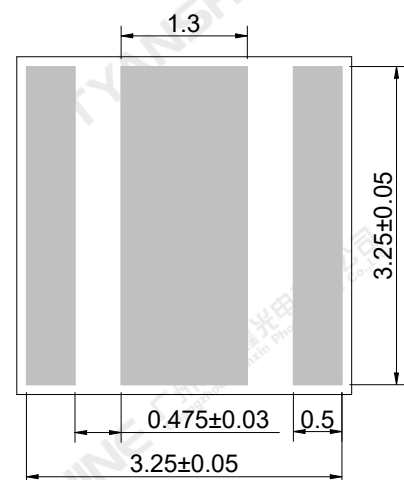
Package Dimensions:



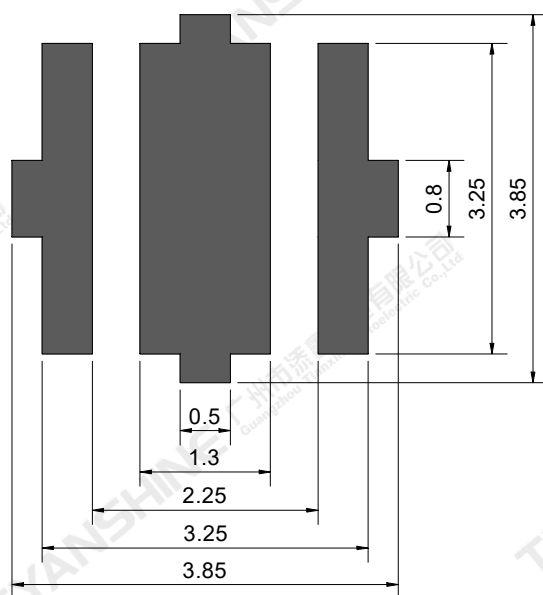
Top view



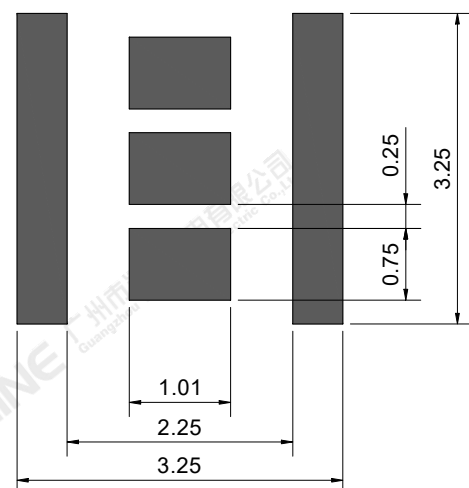
Side view



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	I _F	1.5	A
Peak Forward Current (Note 1)	I _{FP}	1.8	
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	5	W
Junction Temperature	T _j	150	℃
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	T _{stg}	-40~+70	℃
Operation Temperature	T _{opr}	-30~+85	

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

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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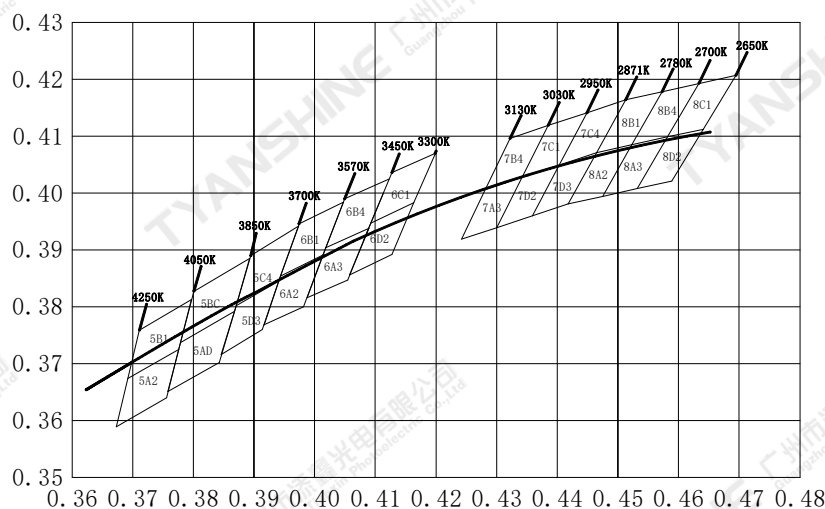
Electrical Optical Characteristics (Tc=25°C, IF=0.7A)

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	W	145	180	—	lm
Correlated Colour Temperature	CCT	W	2650	2700	2871	K
			2780	3000	3130	
			3300	3500	3700	
			3700	4000	4250	
Color Rendering Index	Ra	W	90	92	—	—
Spectral Line Half-Width	$\Delta\lambda$	W	130	150	170	nm
Forward Voltage	V_f	W	2.7	3.1	3.5	V
Viewing Angle at 50 % IV	$2\theta_{1/2}$	W	—	120	—	Deg
Reverse Current	I_R	$V_R=5V$	—	—	2	μA
Thermal Resistance Junction to Case	$R_{\theta J-C}$	—	—	6.4	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$	W	—	-2.3	—	mV/°C

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: $\pm 15\%V$.
5. Ra measurement tolerance: ± 2 .

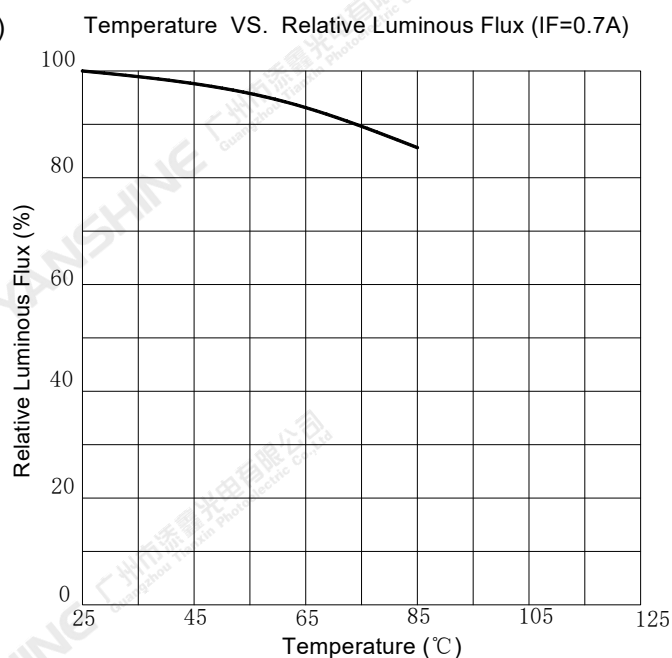
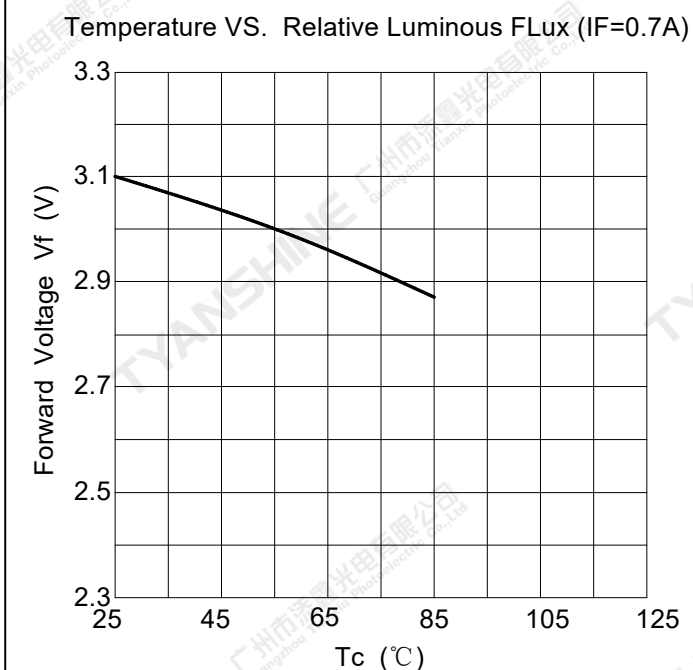
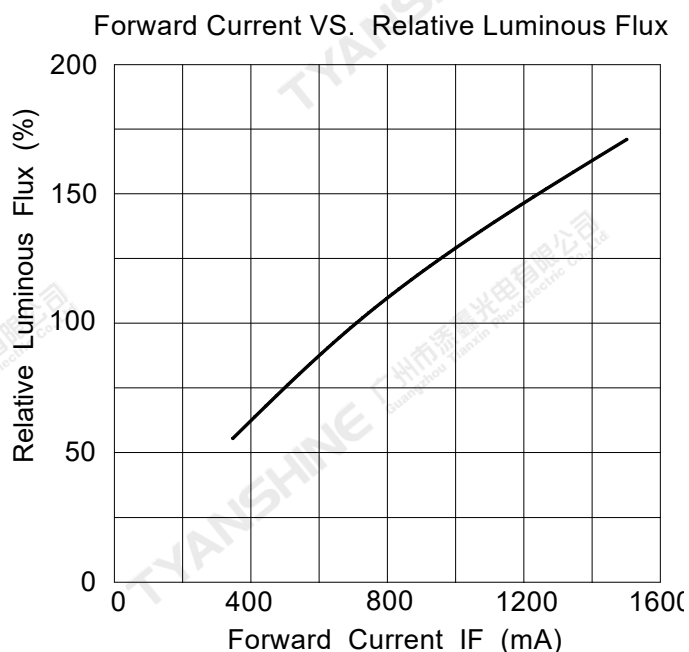
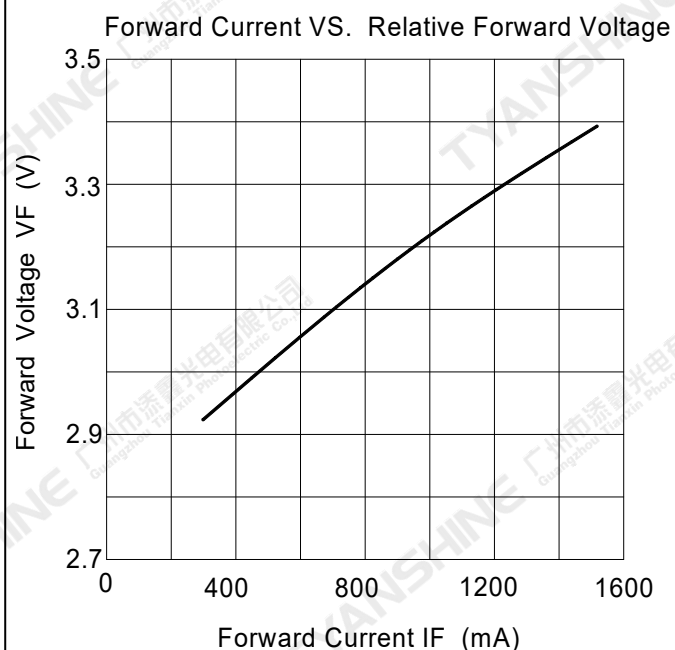
White light Color coordinate filing (IF=0.7A,Tc=25℃)



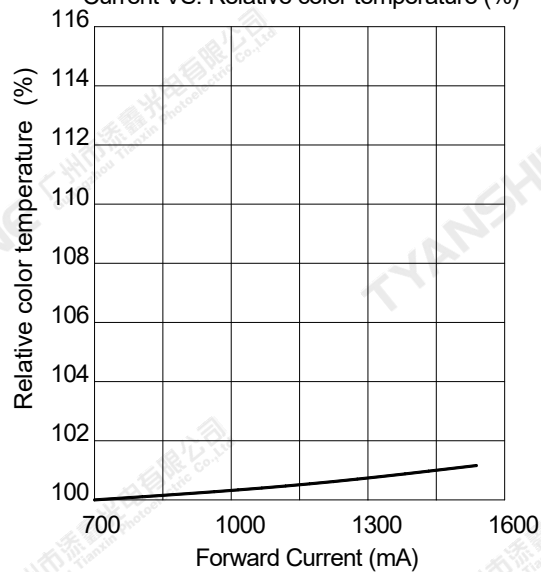
Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
8D2	2650-2700K	0.459	0.4021	0.4533	0.4008	0.4583	0.4099	0.4642	0.4112
8C1		0.4642	0.4112	0.4583	0.4099	0.4634	0.4192	0.4696	0.4207
8A3	2700-2780K	0.4533	0.4008	0.4476	0.3994	0.4524	0.4085	0.4583	0.4099
8B4		0.4583	0.4099	0.4524	0.4085	0.4574	0.4178	0.4634	0.4192
8A2	2780-871K	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	2871-2950K	0.4419	0.3981	0.4360	0.3960	0.4404	0.4049	0.4466	0.4071
7C4		0.4360	0.3960	0.4404	0.4049	0.4450	0.4141	0.4514	0.4164
7D2	2950-3030K	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	3030-3130K	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	3300-3450K	0.4128	0.3892	0.4058	0.3856	0.4093	0.3947	0.4164	0.3983
6C1		0.4164	0.3983	0.4093	0.3947	0.4128	0.4036	0.4200	0.4070
6A3	3450-3570K	0.4055	0.3847	0.3988	0.3816	0.4019	0.3904	0.4090	0.3938
6B4		0.4090	0.3938	0.4019	0.3904	0.4050	0.3990	0.4123	0.4025
6A2	3570-3700K	0.3982	0.3800	0.3917	0.3769	0.3944	0.3854	0.4014	0.3891
6B1		0.4014	0.3891	0.3944	0.3854	0.3975	0.3946	0.4048	0.3984
5D3	3700-3850K	0.3914	0.3760	0.3847	0.3717	0.3871	0.3802	0.3941	0.3845
5C4		0.3941	0.3845	0.3871	0.3802	0.3895	0.3890	0.3974	0.3942
5AD	3850-4050K	0.3843	0.3702	0.3759	0.3651	0.3779	0.3737	0.3868	0.3792
5BC		0.3868	0.3792	0.3779	0.3737	0.3801	0.3827	0.3893	0.3885
5A2	4050-4250K	0.3756	0.3640	0.3673	0.3589	0.3692	0.3674	0.3776	0.3725
5B1		0.3776	0.3725	0.3692	0.3674	0.3711	0.3759	0.3797	0.3813

Typical Electrical/Optical Characteristics Curves

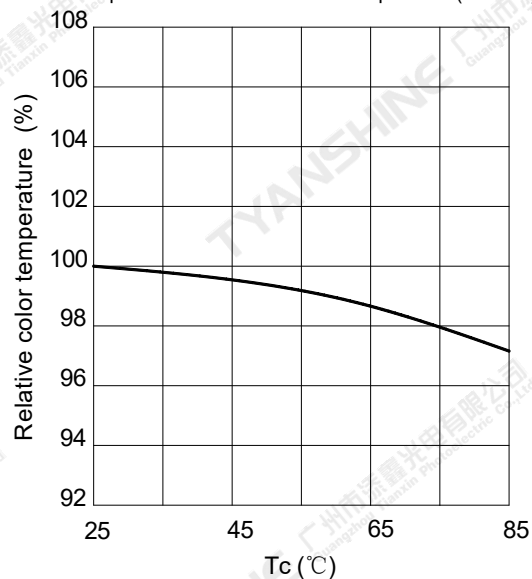
(25°C Ambient Temperature Unless Otherwise Noted)

**Notes:** — White (W) ;

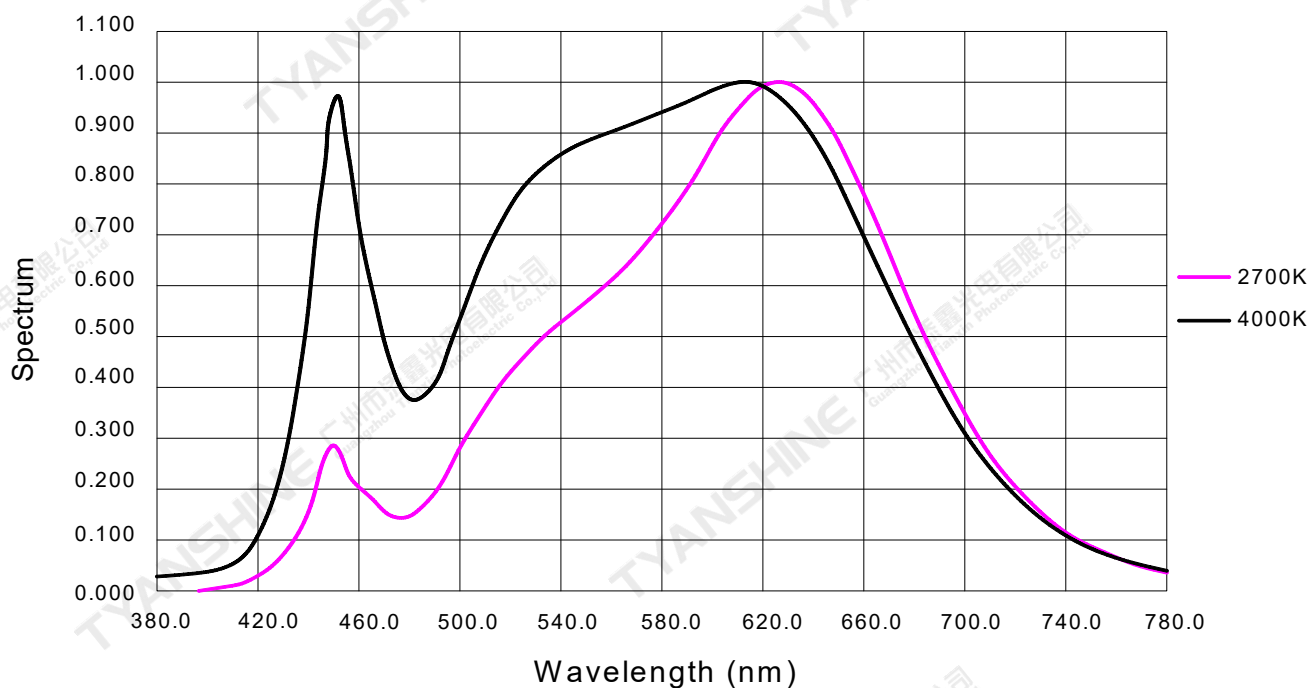
Current VS. Relative color temperature (%)



Temperature VS. Relative color 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 $\pm 5^\circ$.

Forward Current VS. Relative color temperature (%)

Usage Precautions

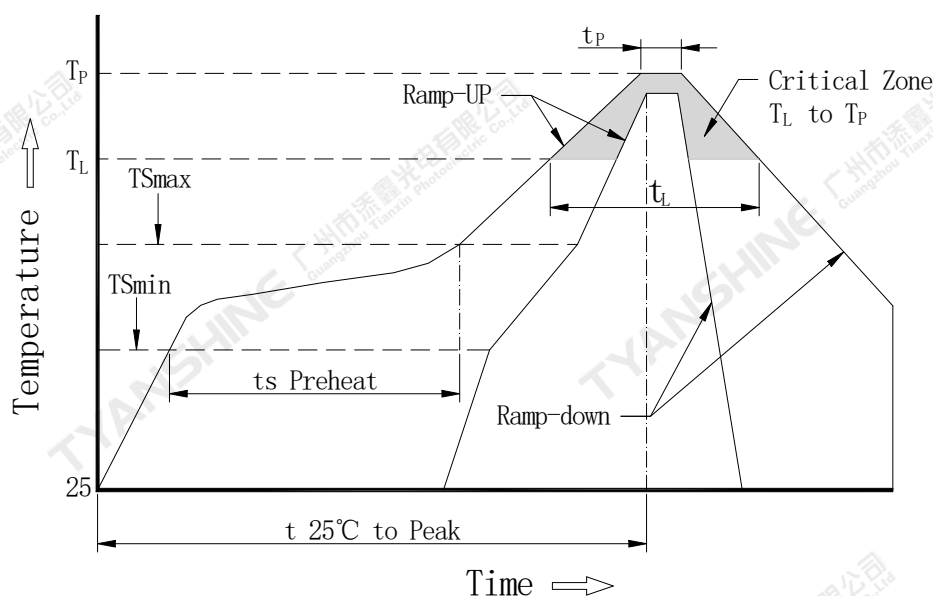
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



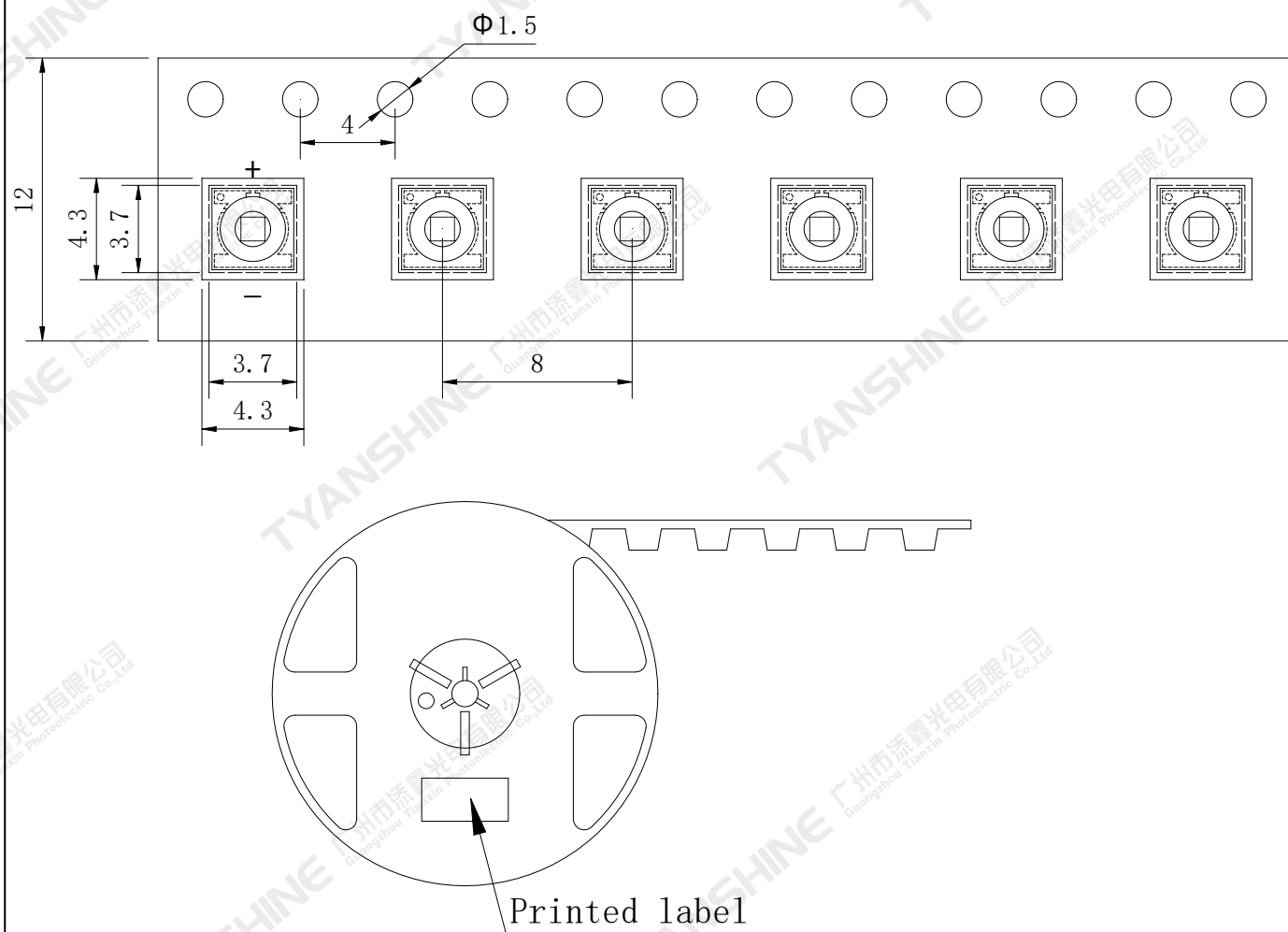
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (T_{Smax} to T_P)	3°C/second max.
Preheat: Temperature Min (T_{Smin})	130°C
Preheat: Temperature Max (T_{Smax})	190°C
Preheat: Time (T_{Smin} to T_{Smax})	120-180 seconds
Time Maintained Above: Temperature (T_L)	230°C
Time Maintained Above: Time (T_L)	60-150 seconds
Peak/Classification Temperature (T_P)	255°C
Time Within 5°C of Actual Peak Temperature (T_P)	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 ± 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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