

TX-3535W10VRA1-NG4CD-01

PRODUCT SPECIFICATION

Features:

- ◆ Excellent transiting heat from LED chip operating under 3000 mA.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ GaN

Emitting Color:

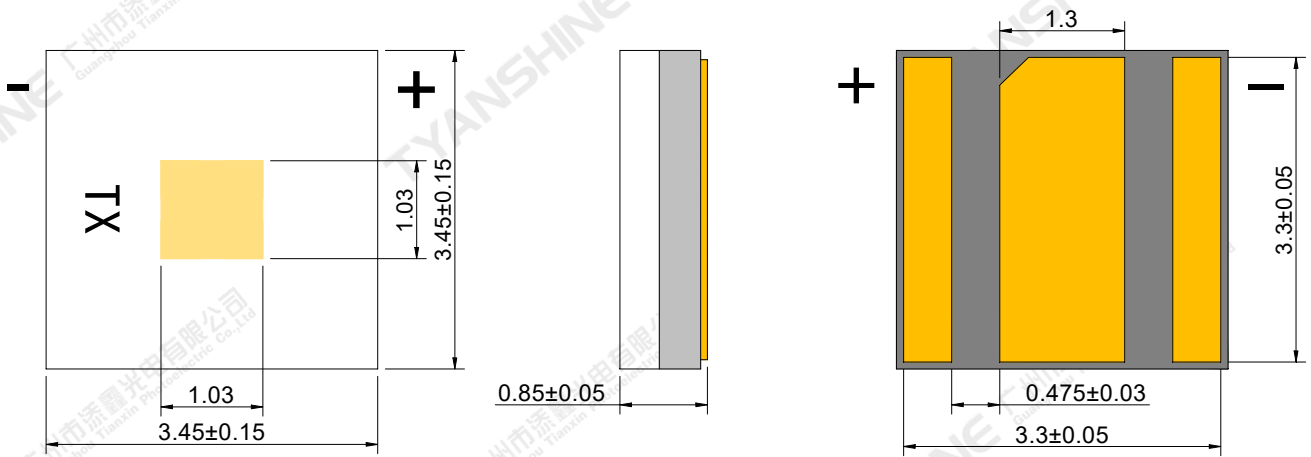
- ◆ white

Applications:

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

Part No.	TX-3535W10VRA1-NG4CD-01	Spec No.	WKF-ED0121	Page	1 of 9
----------	-------------------------	----------	------------	------	--------

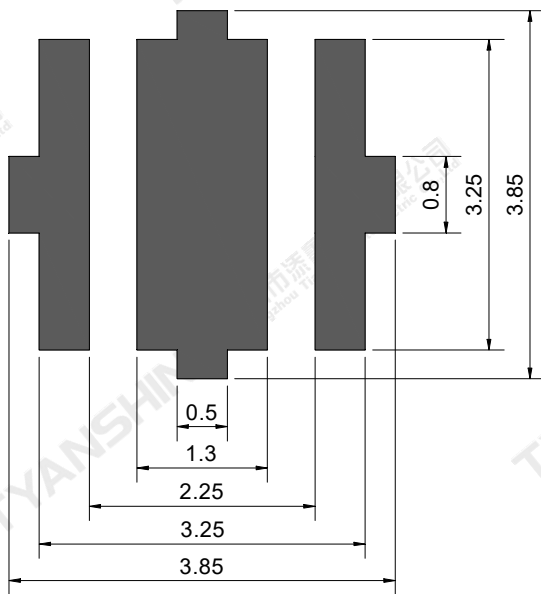
Package Dimensions:



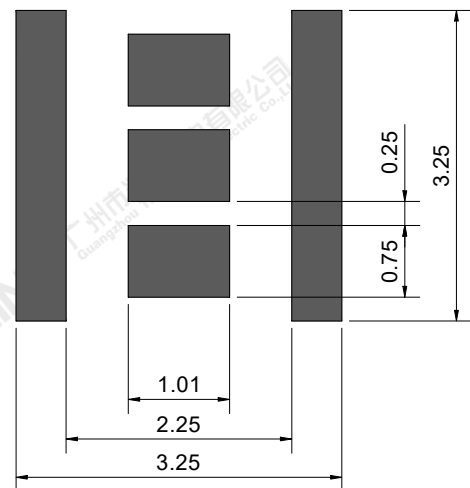
Top view

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 .

Part No.	TX-3535W10VRA1-NG4CD-01	Spec No.	WKF-ED0121	Page	2 of 9
----------	-------------------------	----------	------------	------	--------

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Ratings	Unit
Forward Current	I _F	3000	mA
Peak Forward Current (Note 1)	I _{FP}	4200	
Reverse Voltage	V _R	Not designed for reverse operation	V
Power Dissipation	P _D	11.4	W
Junction Temperature	T _j	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	T _{stg}	-40~+70	°C
Operation Temperature	T _{opr}	-30~+85	

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

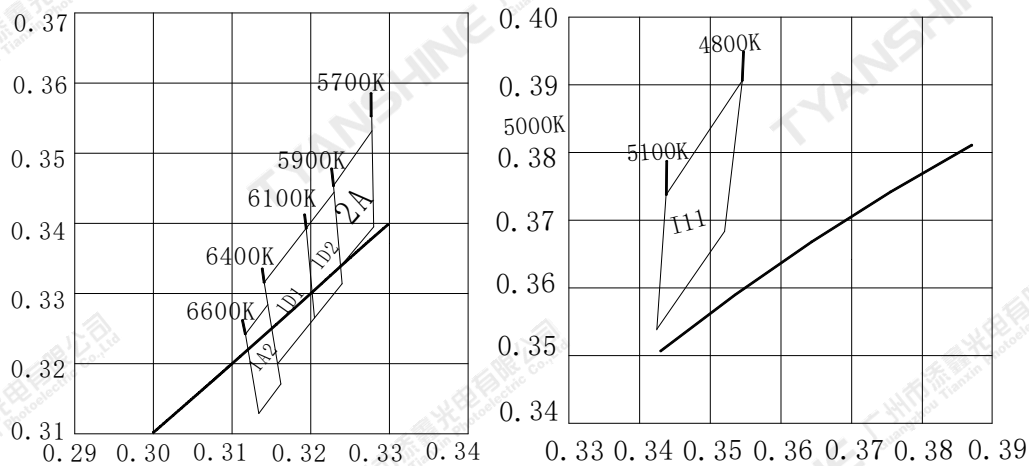
Notes:

- 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.

Electrical Optical Characteristics (Tc=25°C, IF=1.0A)

Parameter	Symbol	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	315	360	—	lm
Forward Voltage	V_f	2.8	3.2	3.5	V
Correlated Colour Temperature	CCT	4800	4950	5100	K
		5700	6000	6600	
Spectral Line Half-Width	$\Delta\lambda$	20	24	28	nm
Viewing Angle at 50% IV	$2\theta_{1/2}$	—	120	—	Deg
Reverse Current	I_R	—	—	2	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	2.7	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$	—	-2.8	—	mV/°C

White light Color coordinate filing (IF=1A)



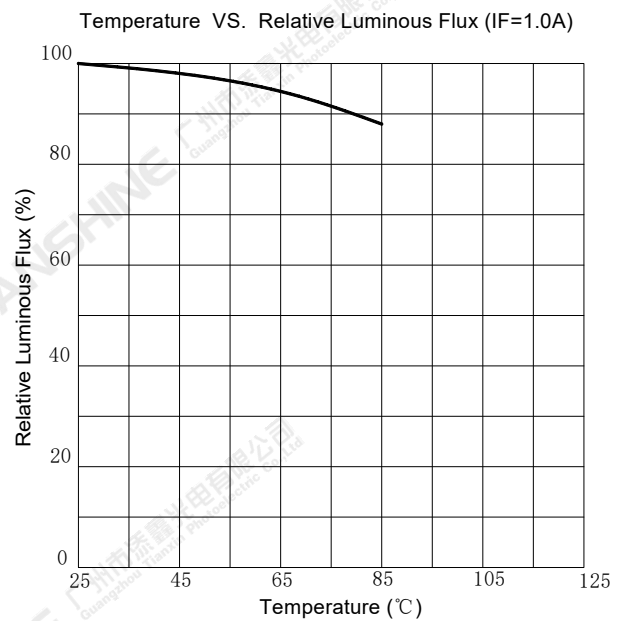
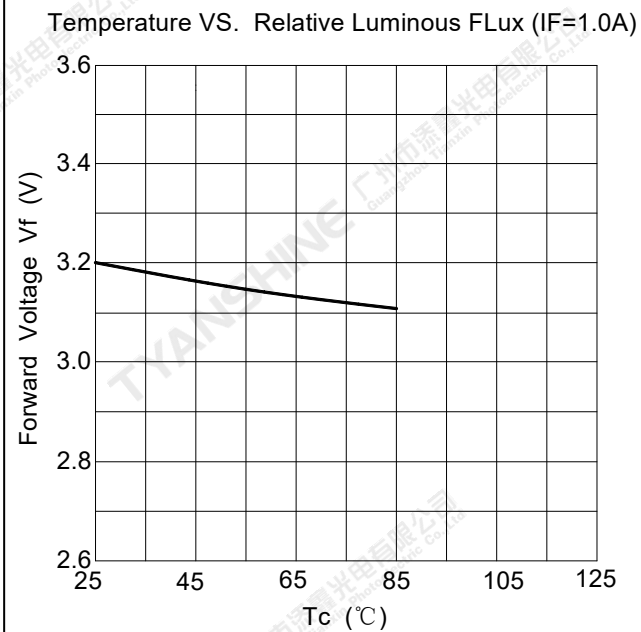
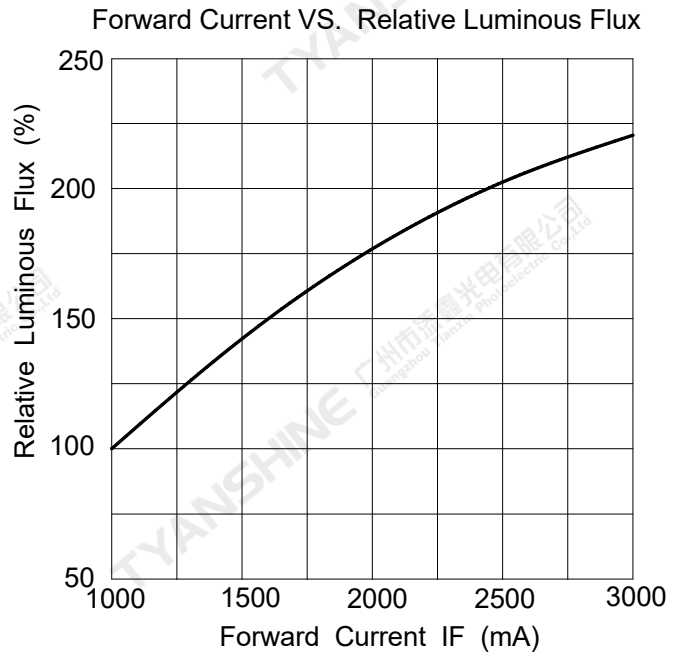
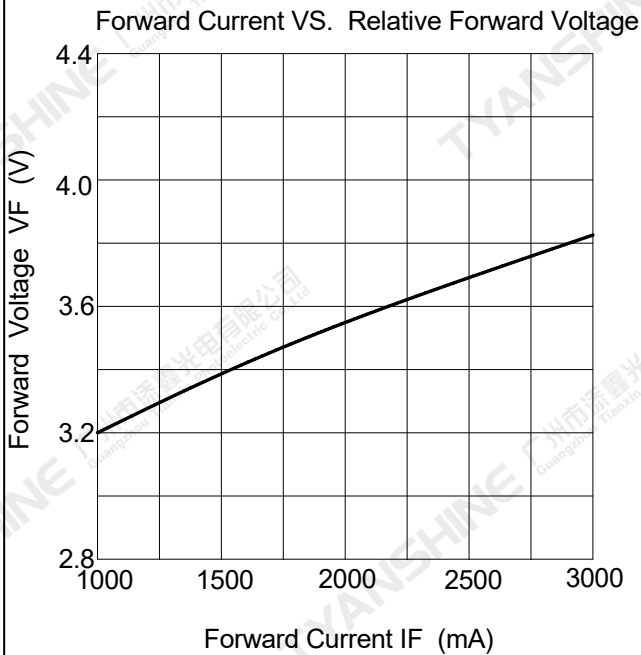
Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
I11	4800K	5100K	0.3520	0.3684	0.3424	0.3539	0.3437	0.3737	0.3545	0.3906
2A	5700K	5900K	0.3280	0.3395	0.3238	0.3339	0.3229	0.3454	0.3278	0.3532
1D2	5900K	6100K	0.3240	0.3314	0.3205	0.3265	0.3194	0.3393	0.3230	0.3444
1D1	6100K	6400K	0.3205	0.3265	0.3158	0.3200	0.3141	0.3316	0.3194	0.3393
1A2	6400K	6600K	0.3162	0.3171	0.3134	0.3129	0.3117	0.3242	0.3145	0.3284

Notes:

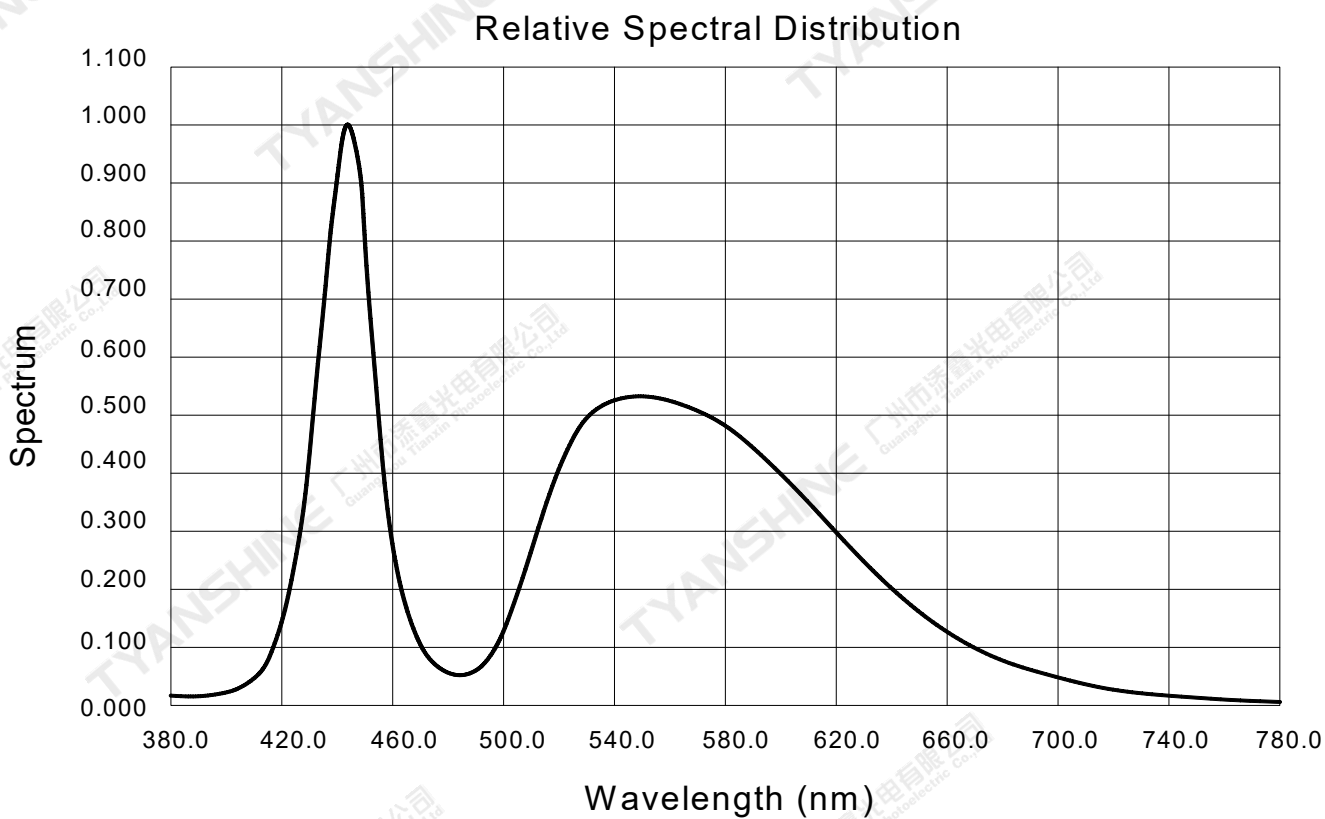
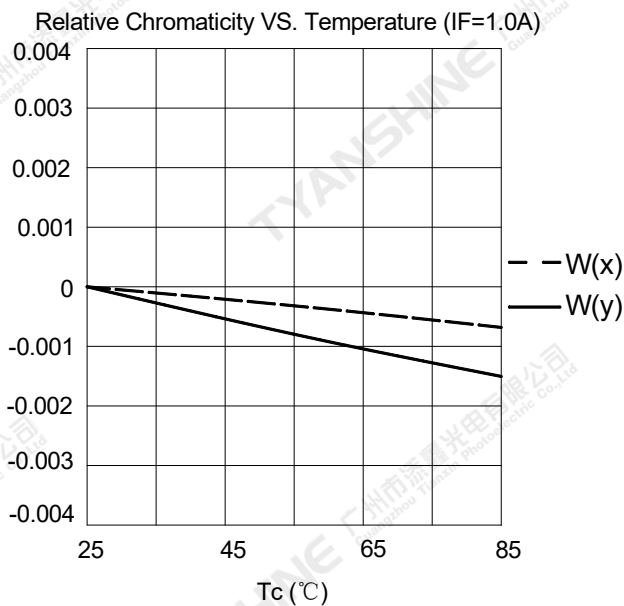
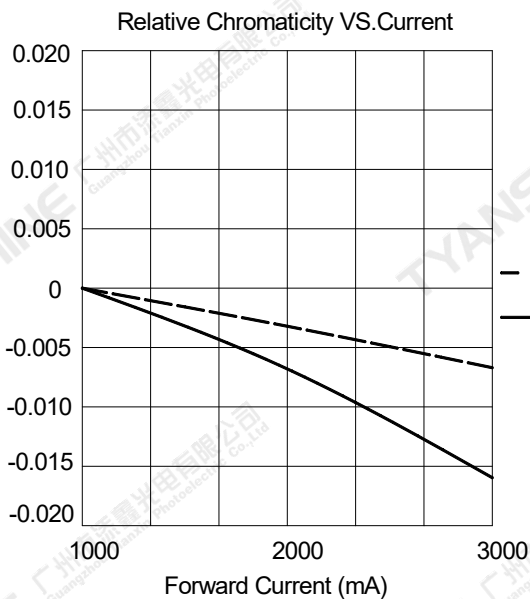
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance: $\pm 10\%$.
- 4.Forward voltage measurement tolerance: $\pm 0.3V$.
- 5.Ra measurement tolerance: ± 2 .

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Notes: — White (W) ;



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

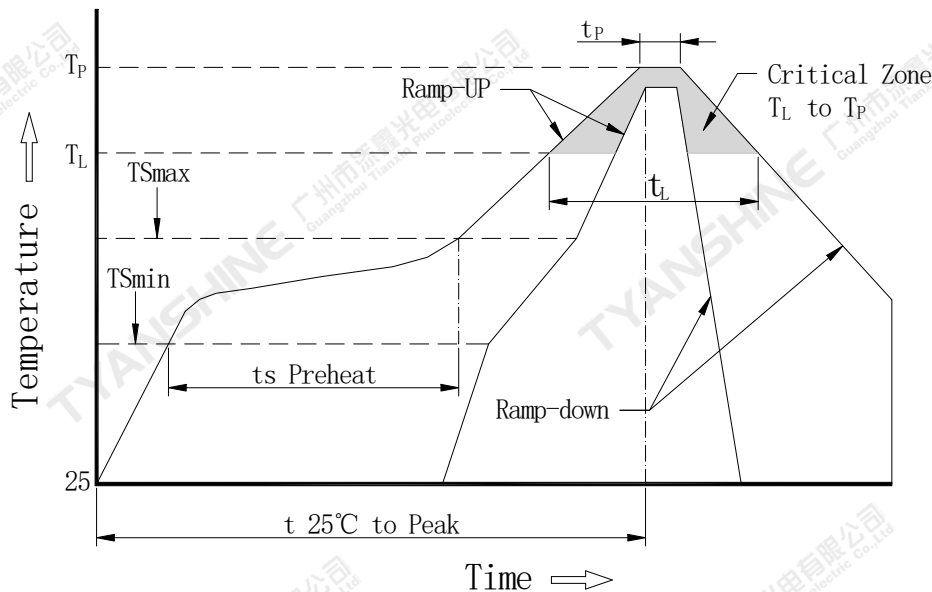
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



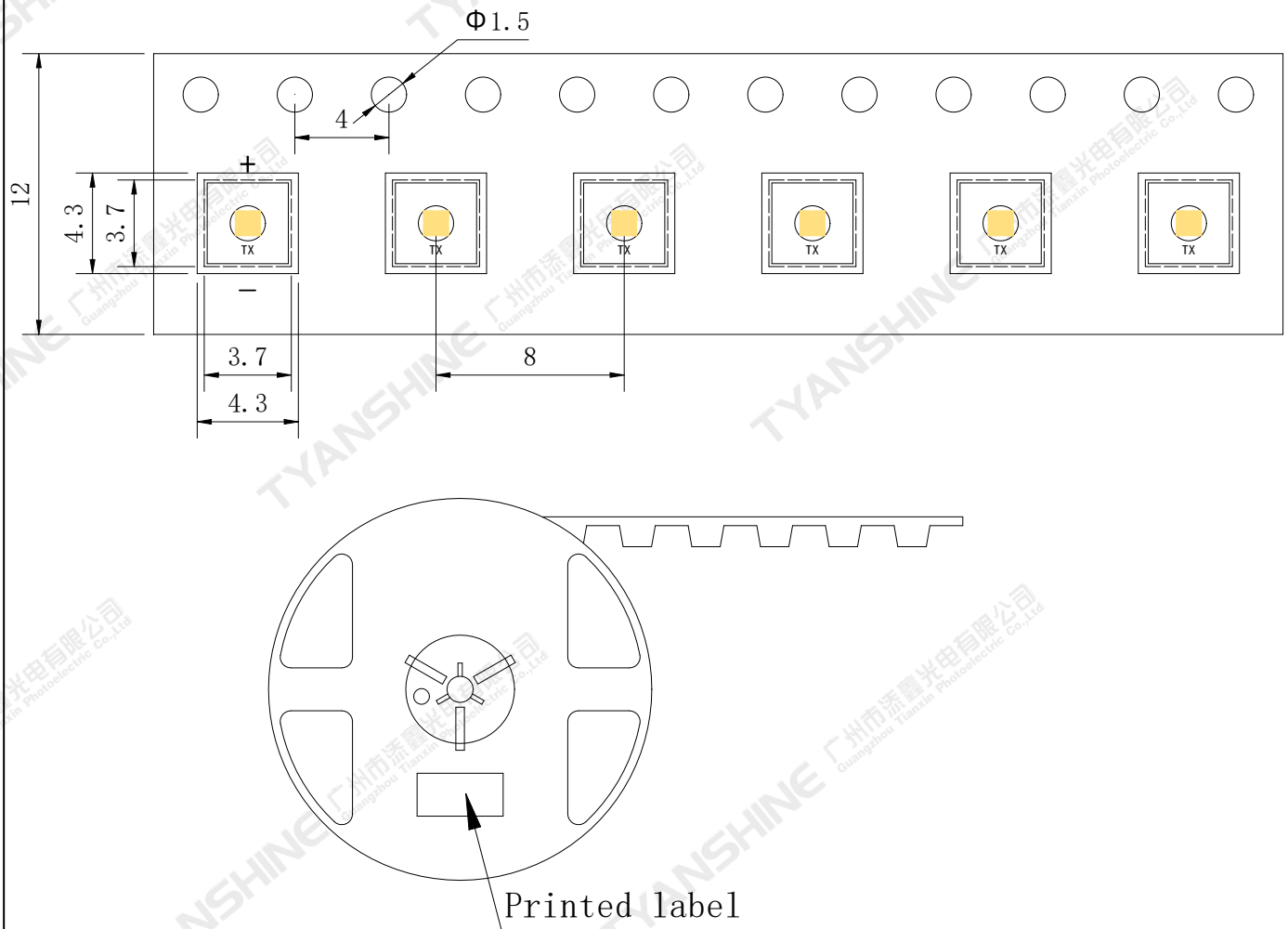
Profile Feature	Pb-Free Solder(SnBi35Ag0.3)
Average Ramp-Up Rate (Tsmax to Tp)	3°C/second max.
Preheat: Temperature Min (Tsmin)	130°C
Preheat: Temperature Max (Tsmax)	190°C
Preheat: Time (Tsmin to Tsmax)	120-180 seconds
Time Maintained Above: Temperature (Tl)	230°C
Time Maintained Above: Time (tL)	60-150 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 ± 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.

Part No.	TX-3535W10VRA1-NG4CD-01	Spec No.	WKF-ED0121	Page	9 of 9
----------	-------------------------	----------	------------	------	--------