

TX-5050WA10FC120-NGVEND34-03

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 800 mA.
- ◆Provide uniform cross distribution of positive white and warm white dual color scheme, mixed pure.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆GaN

Emitting Color:

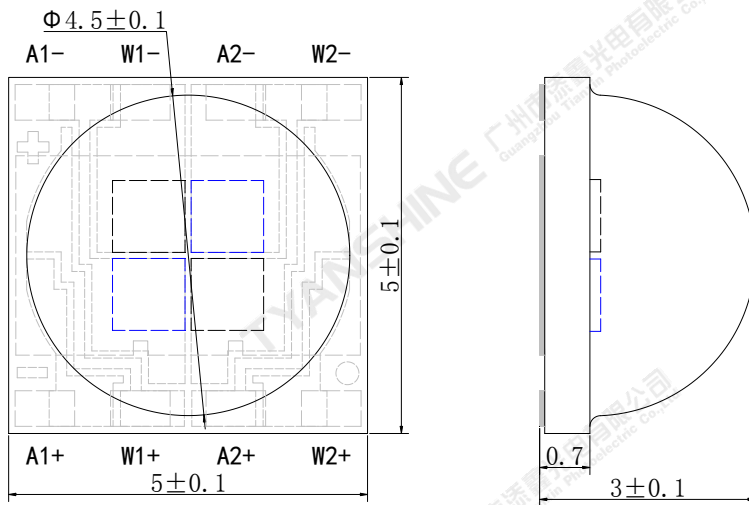
- ◆White
- ◆PC Amber

Applications:

- ◆Auxiliary lighting
- ◆Ambient lighting
- ◆Architectural lighting

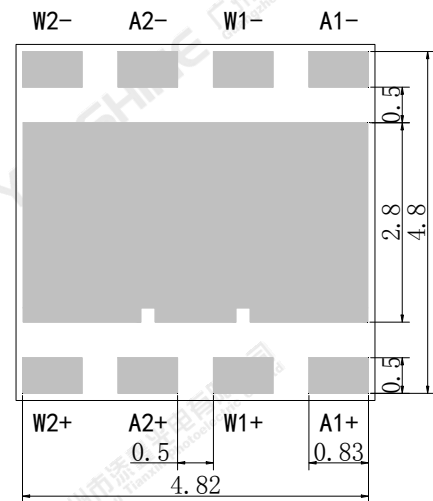
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Package Dimensions:

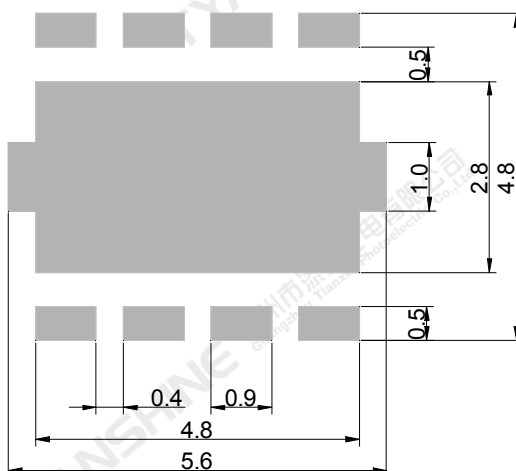


Top view

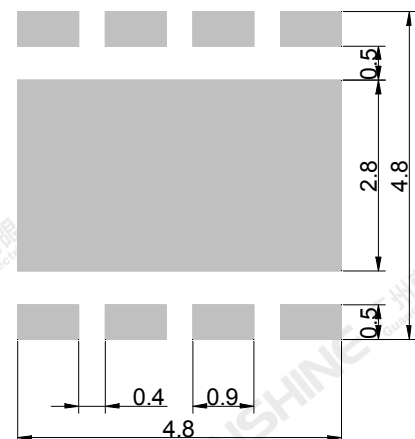
Side view



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	W	800	mA
		A	800	
Reverse Voltage	VR		Not designed for reverse operation	V
Power Dissipation	PD	W	5440	mW
		A	5440	
Junction Temperature	Tj	W	150	℃
		A	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	Tstg		-40~+70	℃
Operation Temperature	Topr		-30~+100	

Notes:

1.Specifications are subject to change without notice.

2.The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.

3.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)

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	If=700mA	W1	200	275	350	lm
			W2	110	125	140	
			A1	200	275	350	
			A2	110	125	140	
Forward Voltage	V_f		W1	3.2	3.5	3.8	V
			W2	3.2	3.5	3.8	
			A1	3.2	3.5	3.8	
			A2	3.2	3.5	3.8	
Correlated Colour Temperature	CCT		W	5000	5500	6500	K
			A	1780	1900	2030	
Viewing Angle at 50 % IV	$2\theta_{1/2}$		W	—	120	—	Deg
			A	—	120	—	
Reverse Current	I_R	—	W	—	—	μA	
		A	—	—	—		
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=700mA	—	—	2.6	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$		W	—	-2	—	mV/°C
			A	—	-2	—	

White light Color coordinate filing (IF=700mA)

Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
W1	1950	2030	0.5464	0.4257	0.5377	0.4315	0.5460	0.4386	0.5529	0.4317
W4	1850	1950	0.5570	0.4186	0.5464	0.4257	0.5529	0.4317	0.5615	0.4231
3A	5000	5300	0.3445	0.3487	0.3368	0.3420	0.3374	0.3560	0.3457	0.3635
3B			0.3457	0.3635	0.3374	0.3560	0.3376	0.3631	0.3463	0.3705
2D	5300	5700	0.3368	0.3415	0.3290	0.3347	0.3290	0.3480	0.3373	0.3555
2C			0.3373	0.3555	0.3290	0.3480	0.3289	0.3548	0.3376	0.3626
2A	5700	6000	0.3290	0.3373	0.3220	0.3276	0.3211	0.3400	0.3290	0.3471
2B			0.3290	0.3471	0.3211	0.3400	0.3206	0.3462	0.3289	0.3537
1D	6000	6500	0.3222	0.3234	0.3147	0.3161	0.3130	0.3290	0.3213	0.3373

Notes:

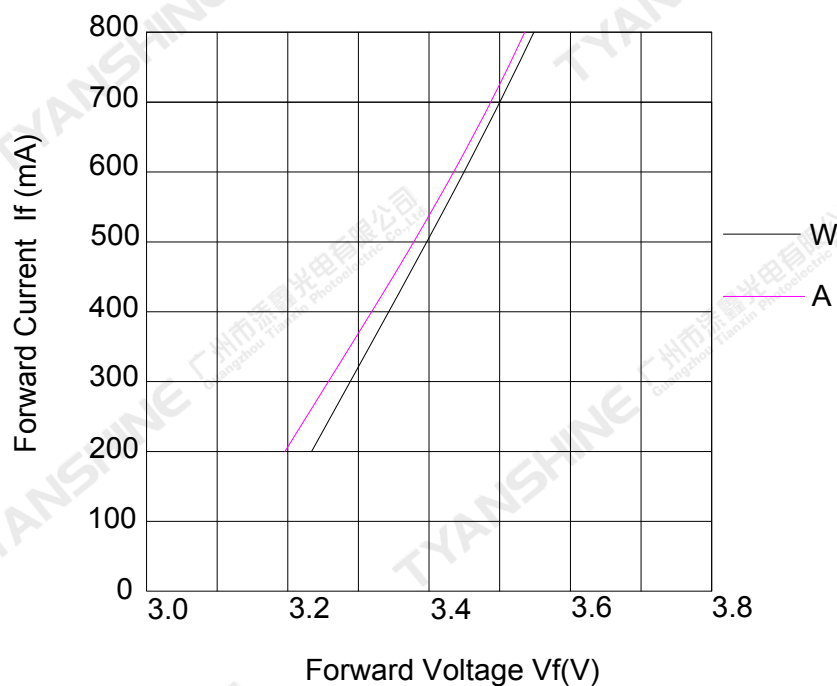
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance: $\pm 15\%$.
- 4.Forward voltage measurement tolerance: $\pm 0.15V$.

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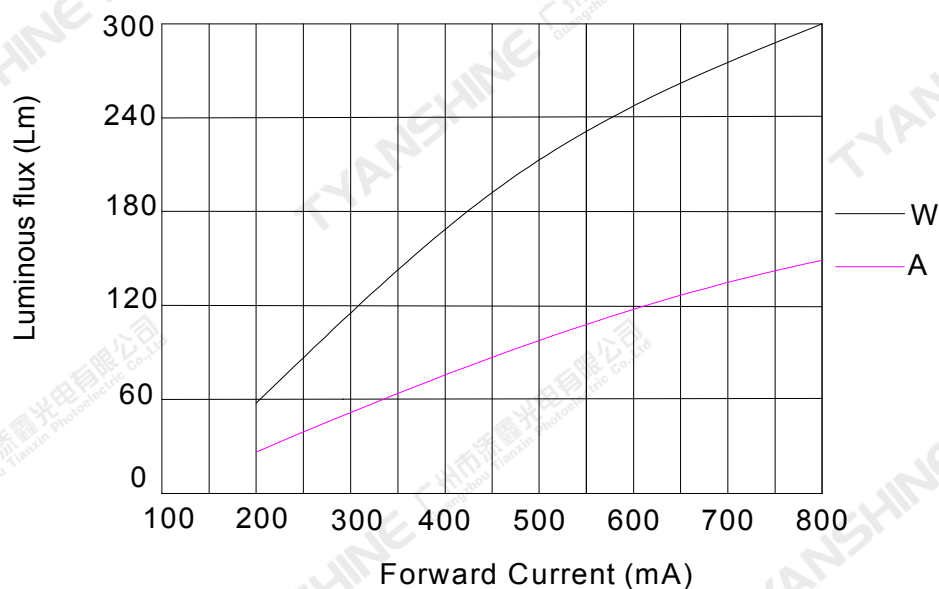
Typical Electrical/Optical Characteristics Curves

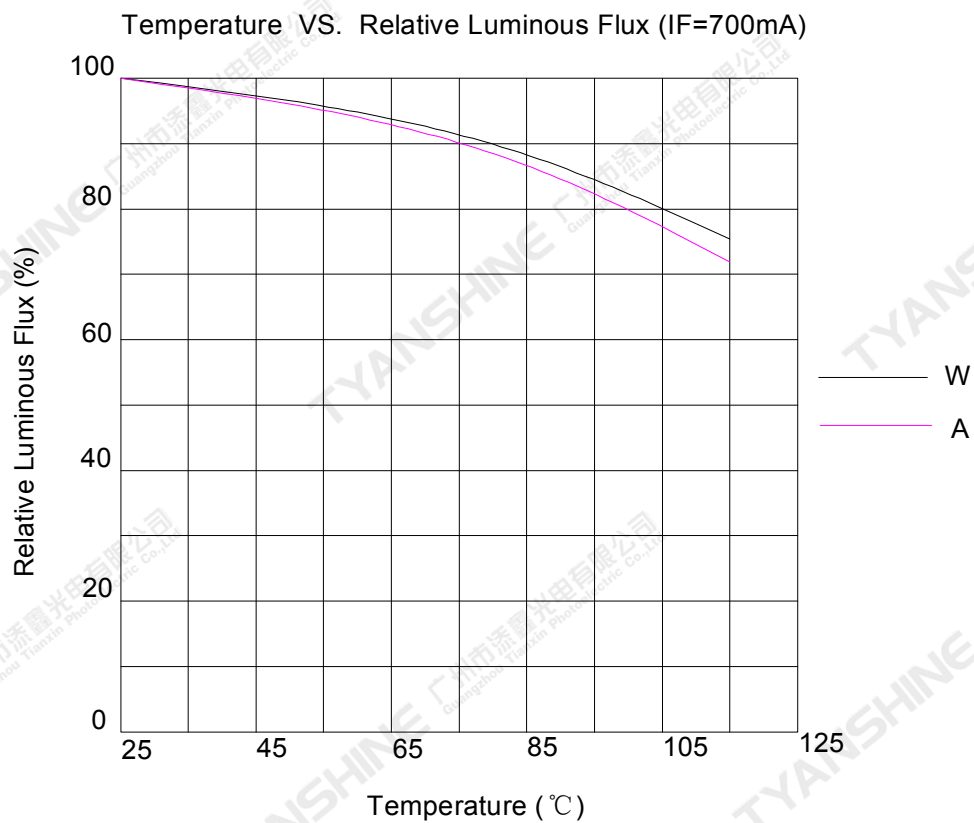
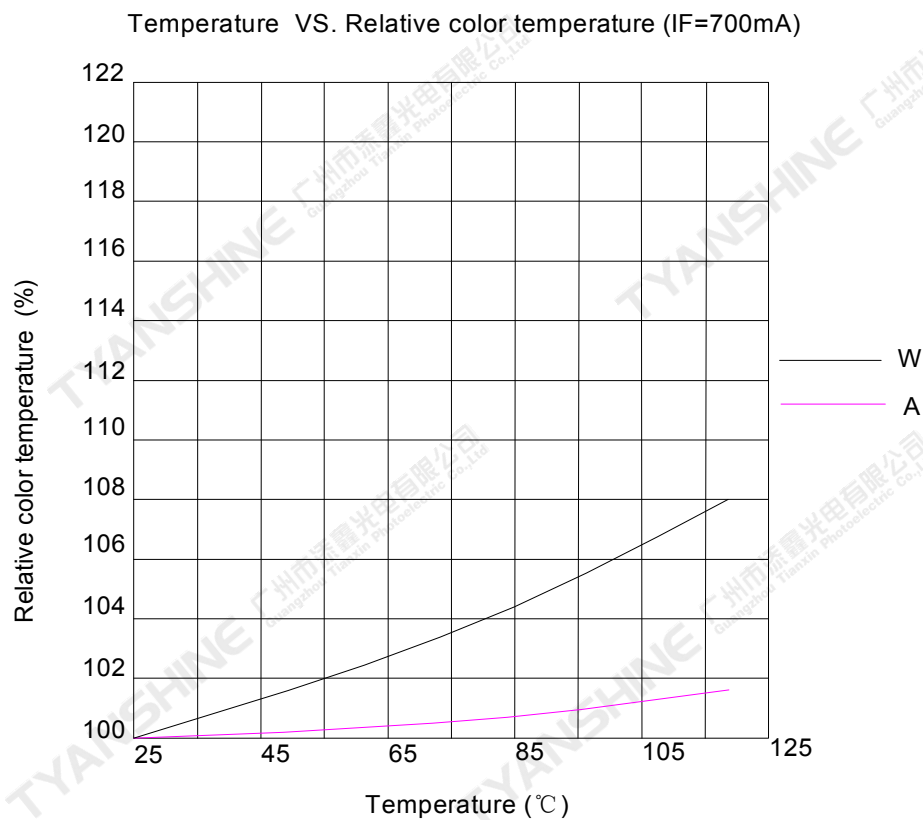
(25°C Ambient Temperature Unless Otherwise Noted)

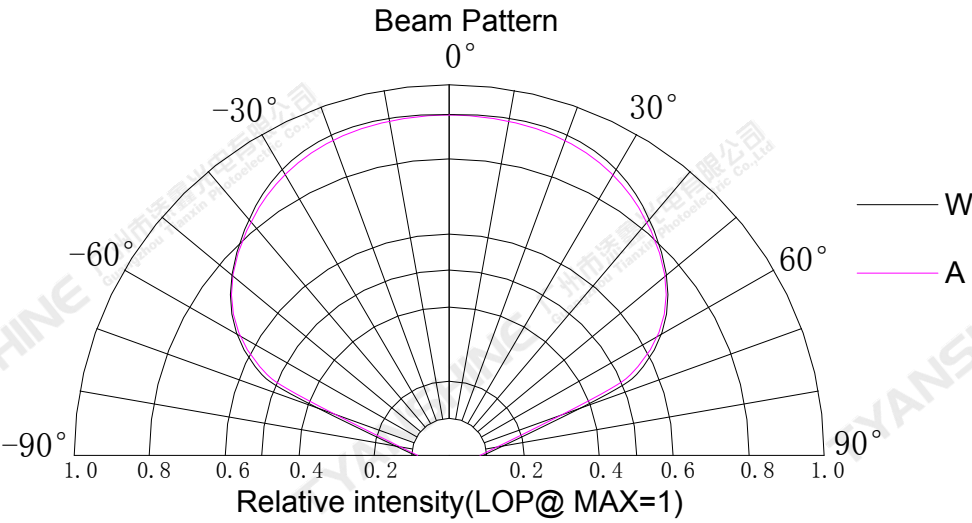
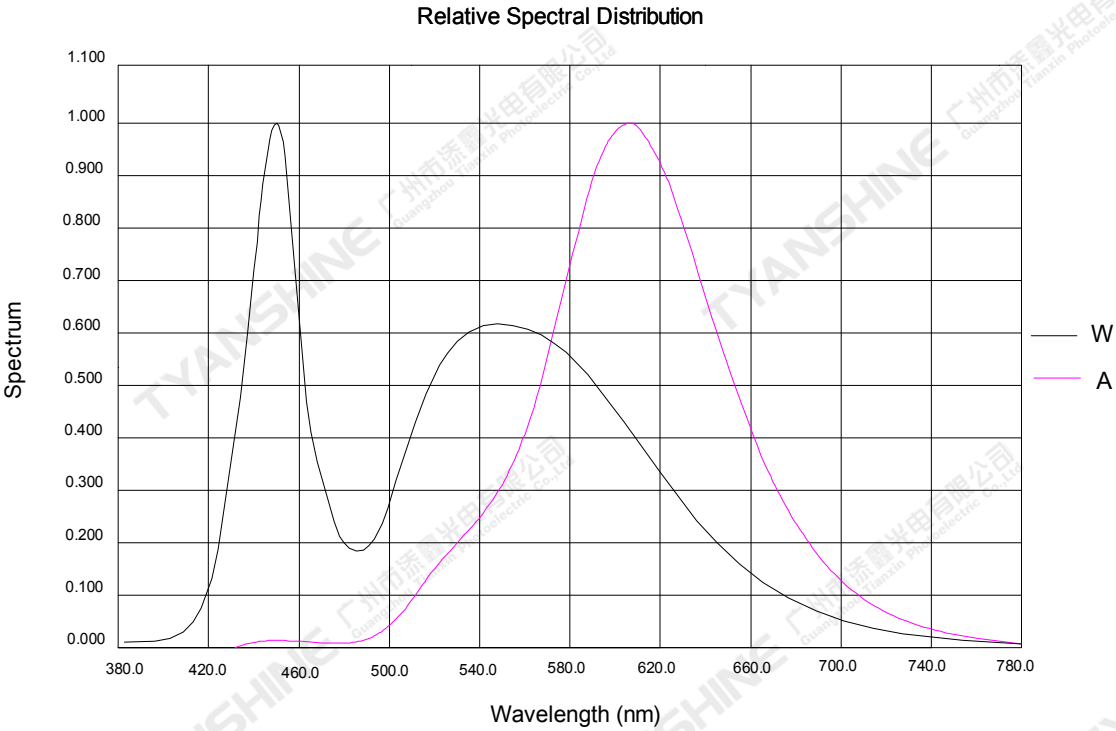
Forward Current VS. Forward Voltage



Forward Current VS. Luminous flux







Notes:

1. 2θ 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 ± 5°.

Usage Precautions

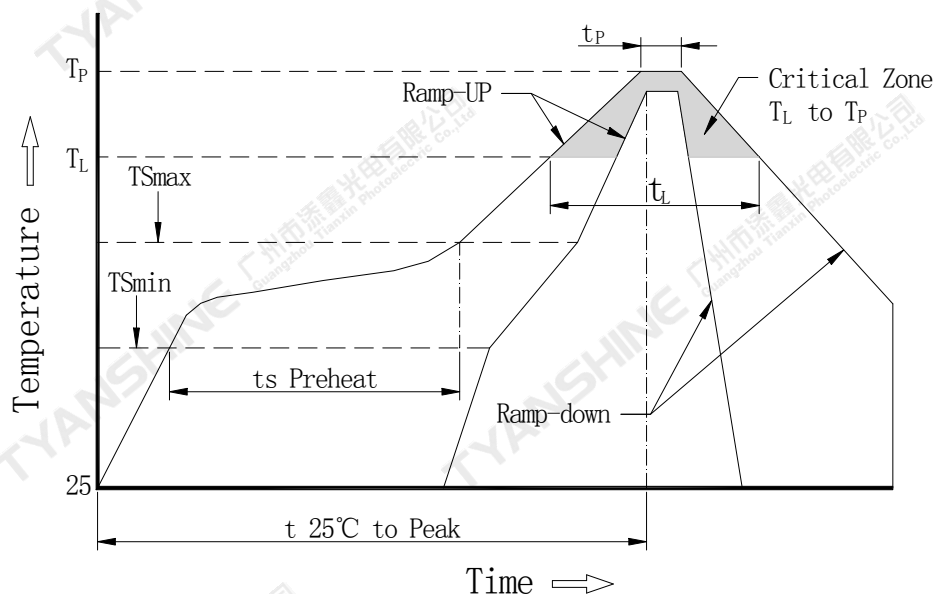
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



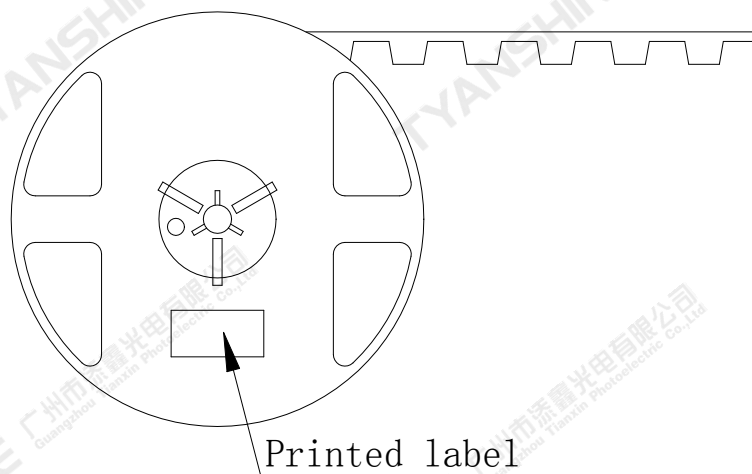
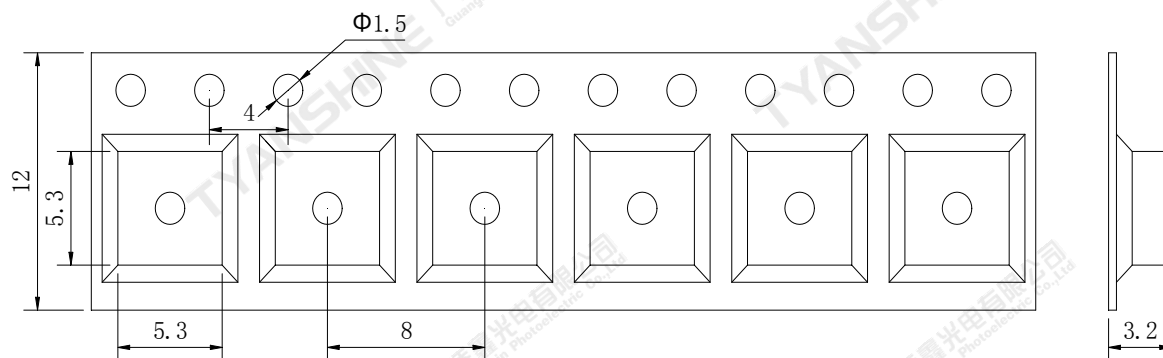
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (T_{Smax} to T_P)	3°C/second max.
Preheat: Temperature Min (T_{Smin})	100°C
Preheat: Temperature Max (T_{Smax})	150°C
Preheat: Time (T_{Smin} to T_{Smax})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183°C
Time Maintained Above: Time (T_L)	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:500PCS

**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.