

TX-5050W15FC120-NGVEND34-C03H80

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 4.0A.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ThinGaN

Emitting Color:

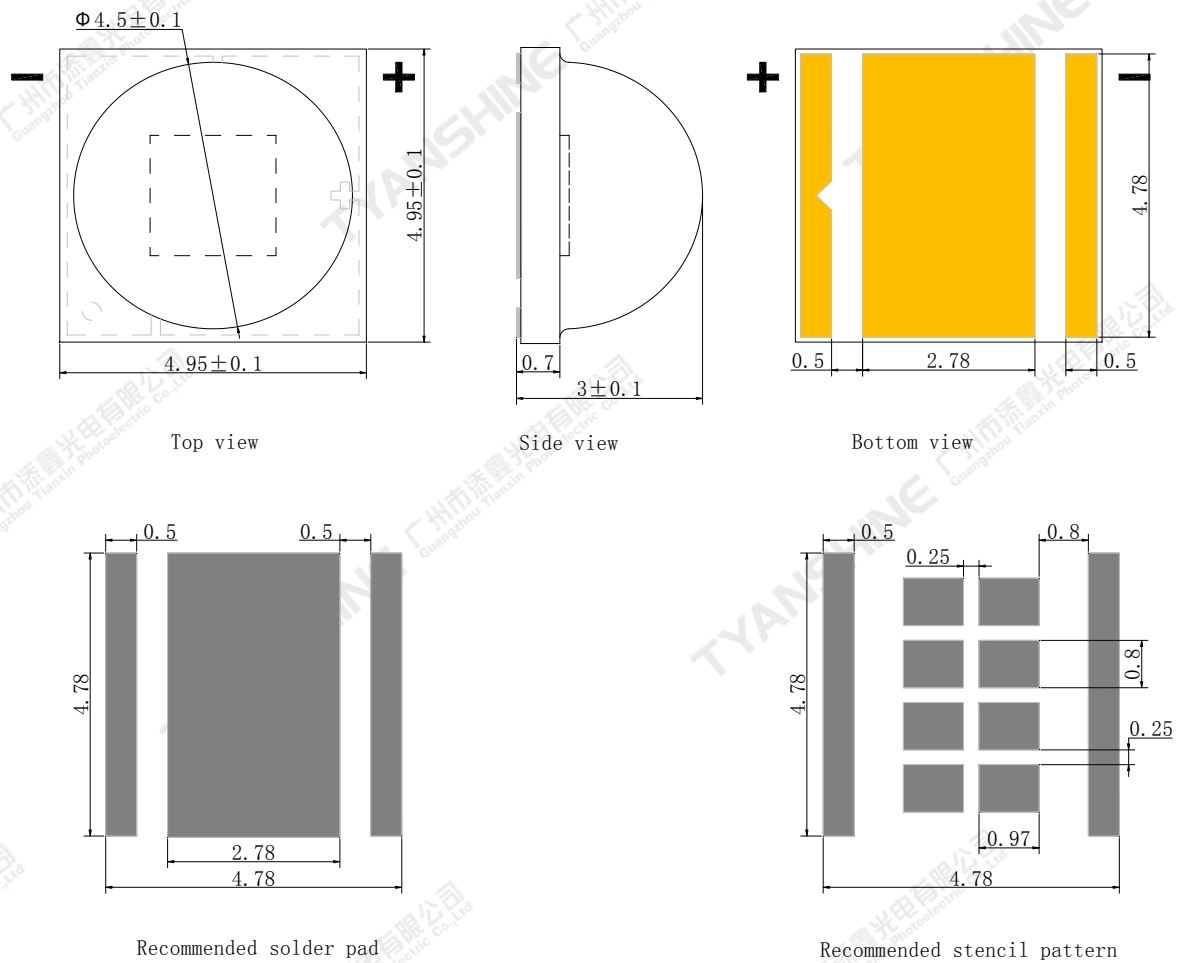
- ◆Warm white(W)

Applications:

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

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Package Dimensions:



Notes:

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

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Ratings	Unit
Forward Current	IF	4.0	A
Reverse Voltage	VR	7	V
Power Dissipation	PD	15.2	W
Junction Temperature	Tj	150	℃
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature	Tstg	-40~+70	℃
Operation Temperature	Topr	-30~+85	

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=0.7A	W	220	250	—	lm
		If=4.0A	W	850	950	—	
Forward Voltage	V_f	If=0.7A	W	2.8	3.1	3.4	V
		If=4.0A	W	3.4	3.7	4.1	
Correlated Colour Temperature	CCT	If=0.7A	W	2600	2700	2800	K
				2900	3030	3130	
		If=4.0A		2620	2750	2870	
				2930	3080	3200	
Color Rendering Index	Ra	If=0.7A	W	80	82.5	—	—
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	W	—	120	—	Deg
Reverse Current	I_R	VR=7V	W	—	—	2	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=0.7A	W	—	3.4	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$		W	—	-2.1	—	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:±10%.
- 4.Forward voltage measurement tolerance:±10%V.
- 5.Ra measurement tolerance:±2.

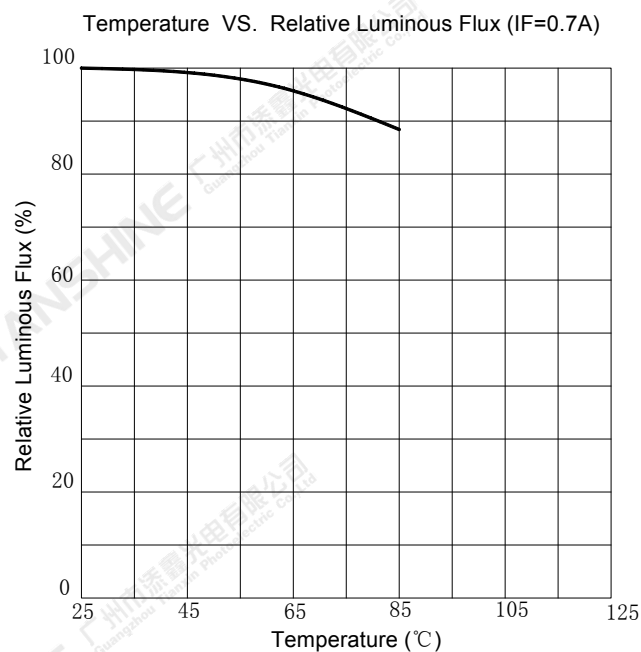
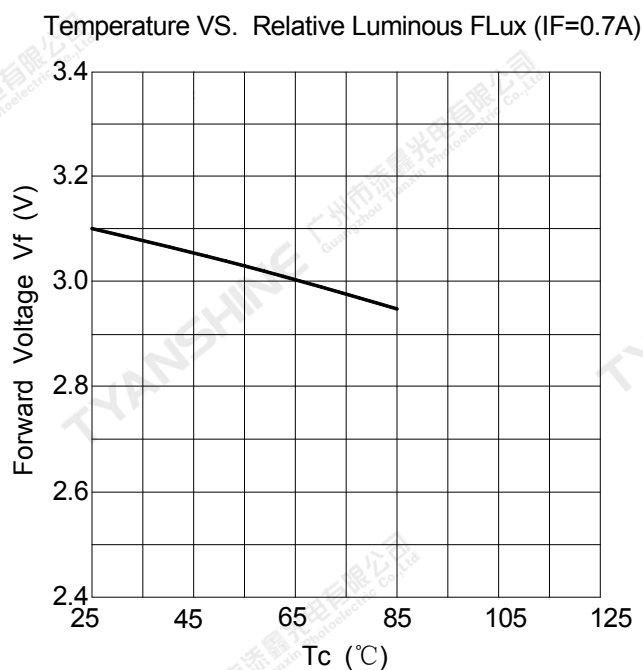
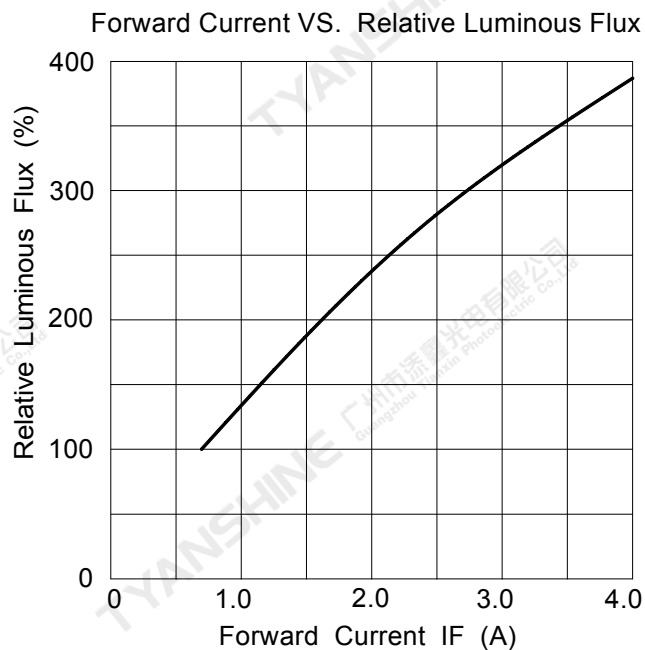
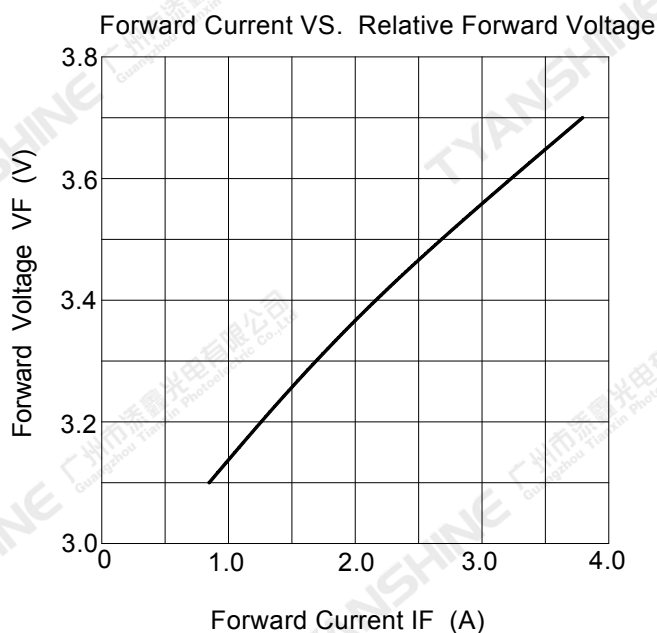
White light Color coordinate filing (IF=0.7A)

Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
7D2	3130K	2960K	0.4237	0.3896	0.4273	0.3995	0.4373	0.4038	0.4337	0.3933
7D3	2960K	2900K	0.4337	0.3933	0.4373	0.4038	0.4417	0.4058	0.4379	0.3947
7C1	3050K	2900K	0.4331	0.4020	0.4355	0.4071	0.4436	0.4111	0.4417	0.4058
8A3	2800K	2700K	0.4564	0.4050	0.4490	0.4032	0.4552	0.4147	0.4630	0.4165
8C1	2700K	2600K	0.4654	0.4071	0.4564	0.4050	0.4630	0.4165	0.4723	0.4187

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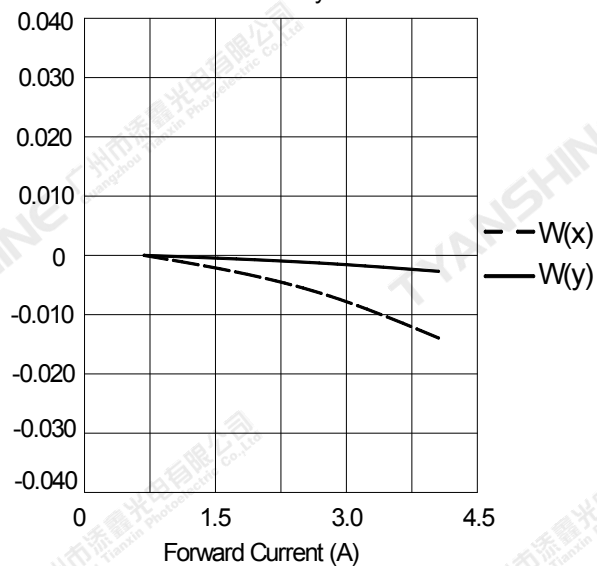
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

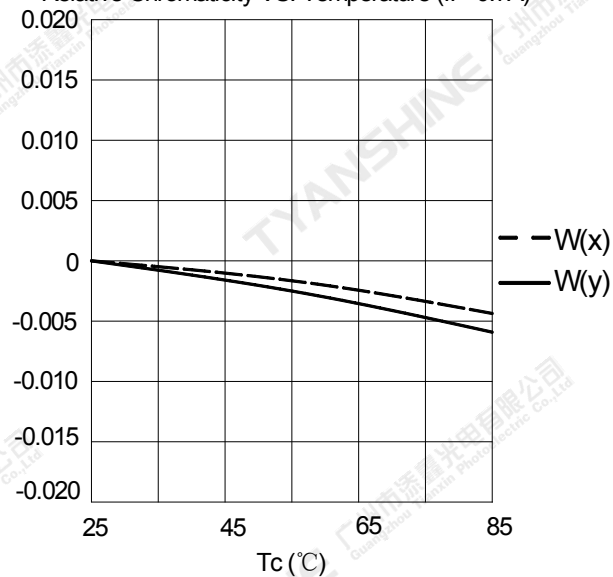


Notes: — White (W) ;

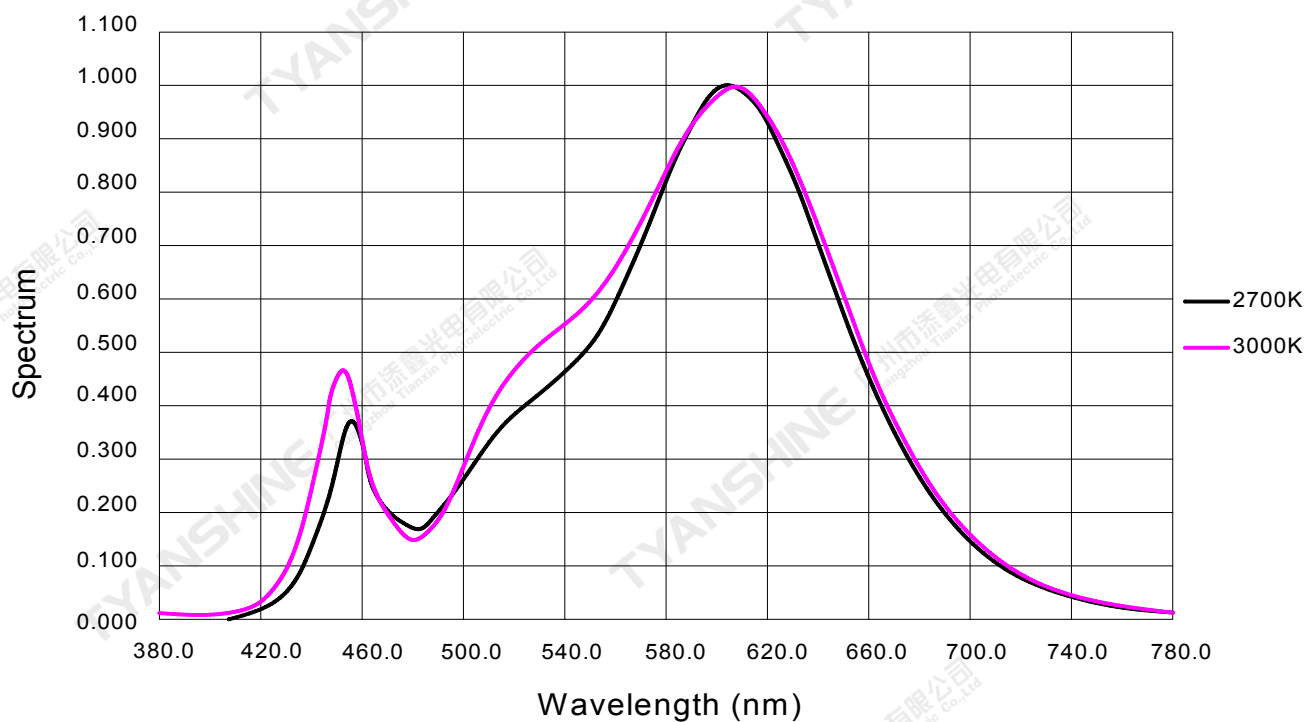
Relative Chromaticity VS. Current



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

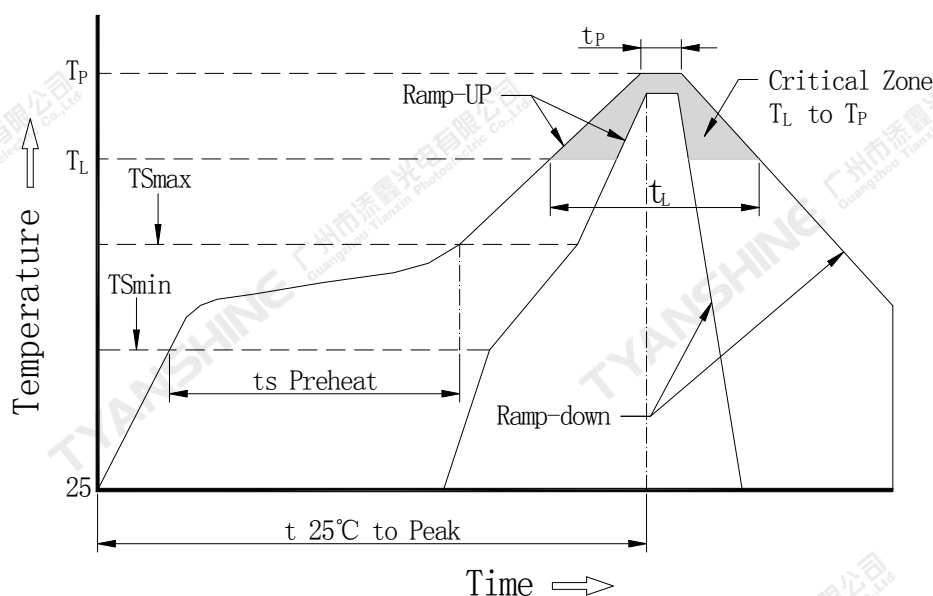
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



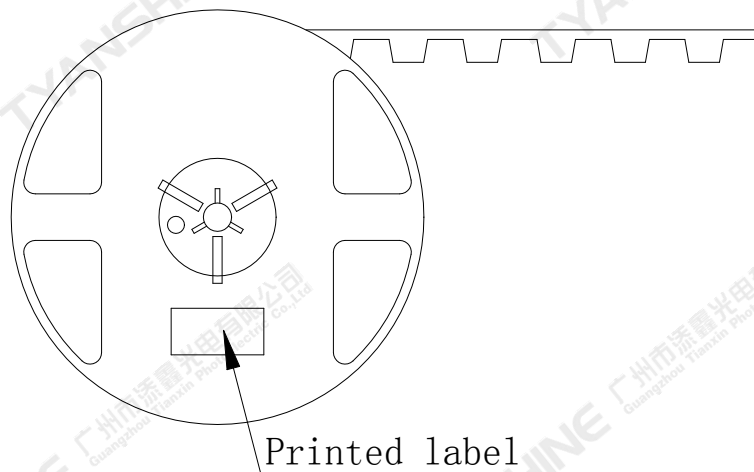
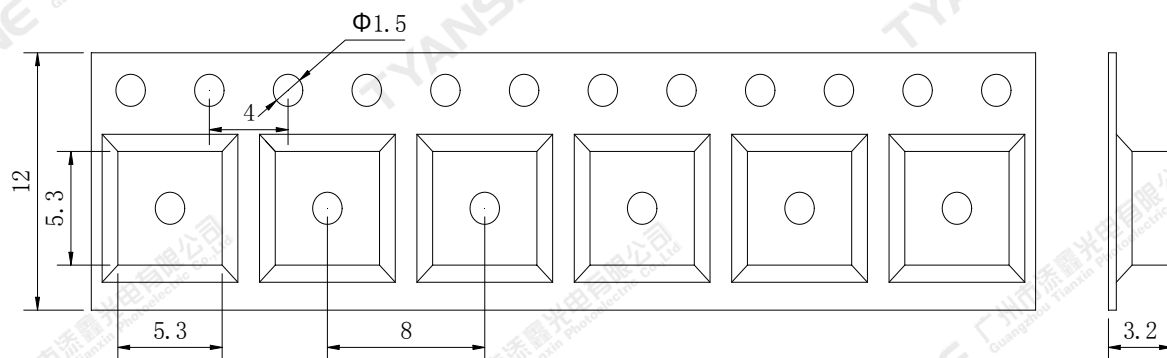
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (Tsmax to TP)	3°C/second max.
Preheat: Temperature Min (Tsmin)	100°C
Preheat: Temperature Max (Tsmax)	150°C
Preheat: Time (Tsmin to Tsmax)	60-120 seconds
Time Maintained Above: Temperature (TL)	183°C
Time Maintained Above: Time (TL)	60-150 seconds
Peak/Classification Temperature (TP)	225°C
Time Within 5°C of Actual Peak Temperature (TP)	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.

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