

# TX-3535WA4FC120-OGVCND34-03BH80

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 350mA.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ GaN
- ◆ GaN

### Emitting Color:

- ◆ white
- ◆ PC Amber

### Applications:

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



**Absolute Maximum Ratings (Tc=25°C)**

Parameter	Symbol	Ratings	Unit
Forward Current	IF	350	mA
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	W1	1330
		W2	1330
		A1	1330
		A2	1330
Junction Temperature	Tj	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	Tstg	-20~+65	°C
Operation Temperature	Topr	-40~+100	

**Notes:**

- Specifications are subject to change without notice.
- Under the stipulated Characteristics parameters above, the life span of the LED is more than 50,000hours.
- 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)**

Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	$\phi_v$	If=300mA	W1+W2	130	150	170	lm
			A1+A2	70	80	90	
Correlated Colour Temperature	CCT		W	4750	5320	6500	K
			A	1850	1950	2030	
Color Rendering Index	Ra		W	80	82.5	—	—
Peak Emission Wavelength	$\lambda_p$		A	590	593	596	nm
Dominant Wavelength	$\lambda_d$		A	585	588	591	nm
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		
Viewing Angle at 50% IV	$2\theta_{1/2}$	—	—	120	—	Deg	
Reverse Current	$I_R$	—	—	—	—	2.0 $\mu$ A	
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	—	—	5.0	— K/W	
Temperature Coefficient of Voltage	$V\Delta F/T$	If=300mA	—	—	-2	— mV/°C	

**White light Color coordinate filing**

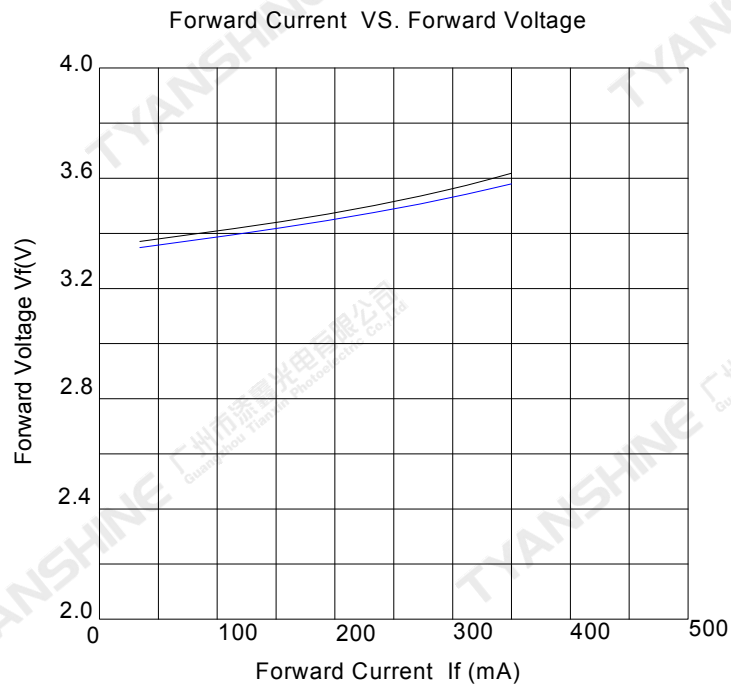
Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
3D	4750	5000	0.3525	0.3562	0.3446	0.3493	0.3458	0.3641	0.3544	0.3716
3C			0.3544	0.3716	0.3458	0.3641	0.3463	0.3711	0.3552	0.3790
3A	5000	5300	0.3445	0.3487	0.3368	0.3420	0.3374	0.3560	0.3457	0.3635
3B			0.3457	0.3635	0.3374	0.3560	0.3376	0.3631	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
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

**Notes:**

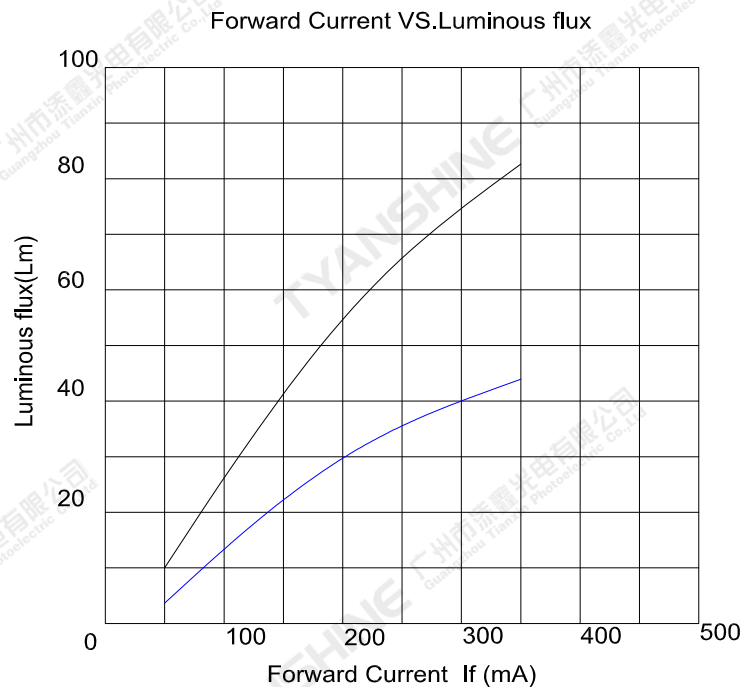
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance:±15%.
- 4.Forward voltage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

## Typical Electrical/Optical Characteristics Curves

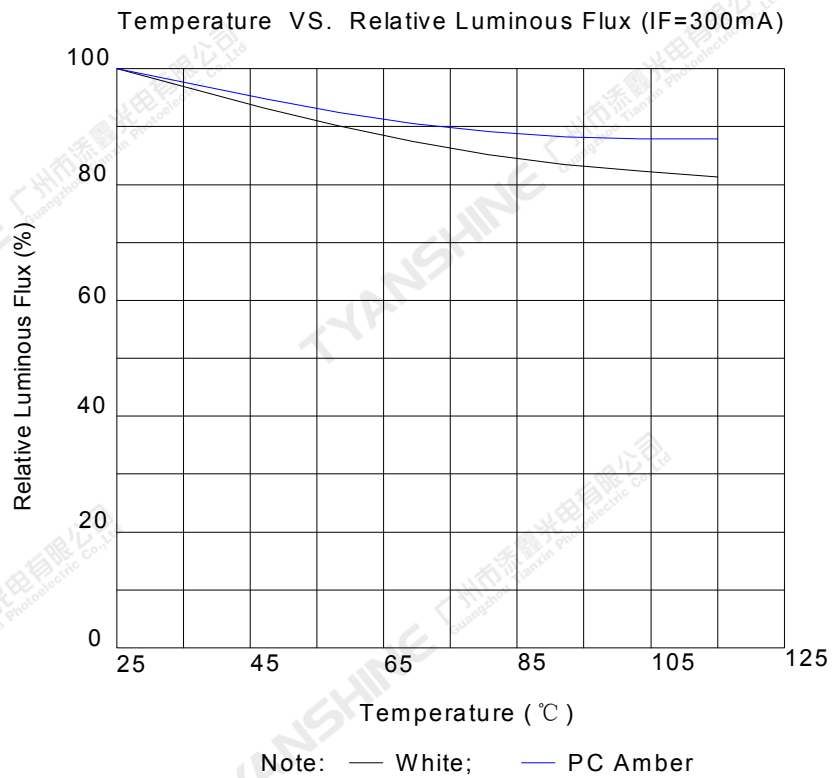
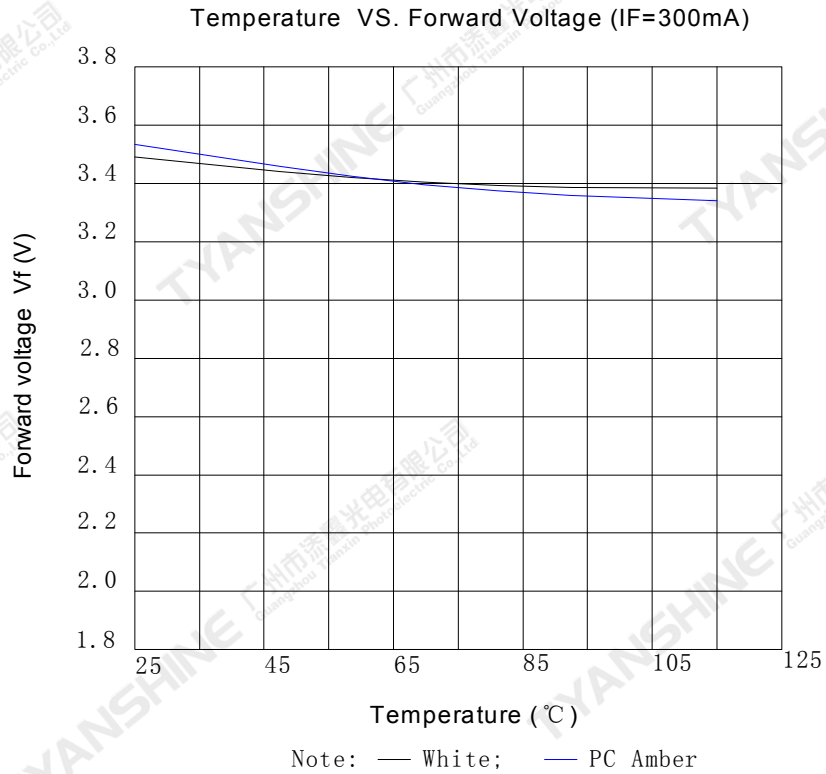
(25°C Ambient Temperature Unless Otherwise Noted)

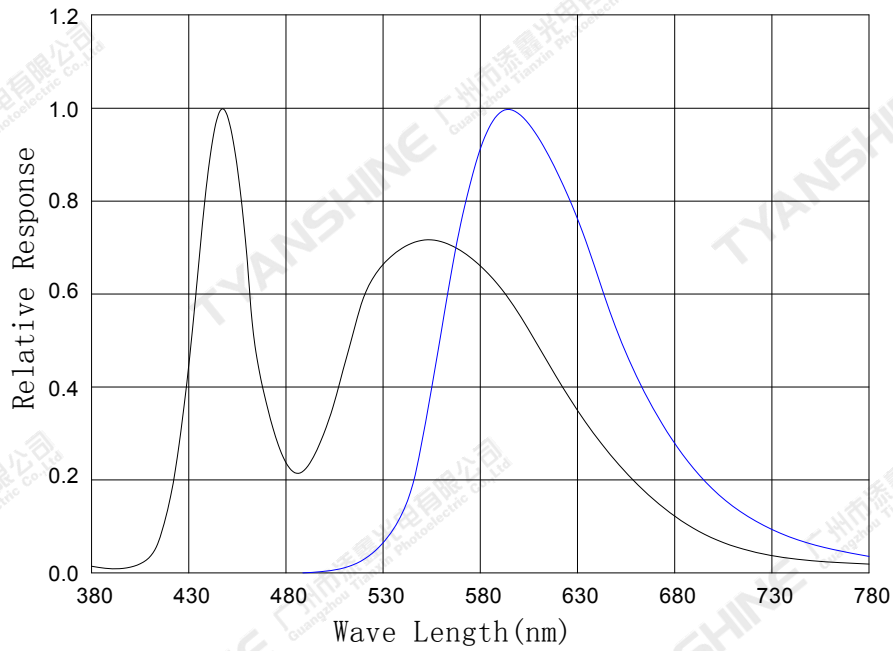


Note: — White; — PC Amber

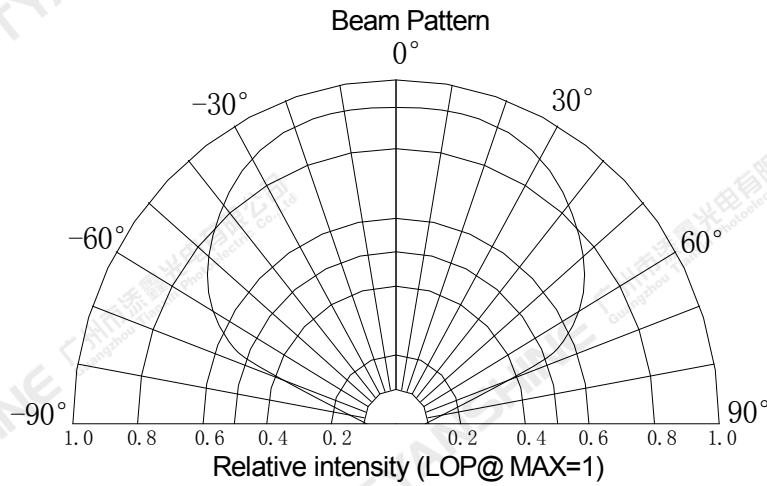


Note: — White; — PC Amber





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**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

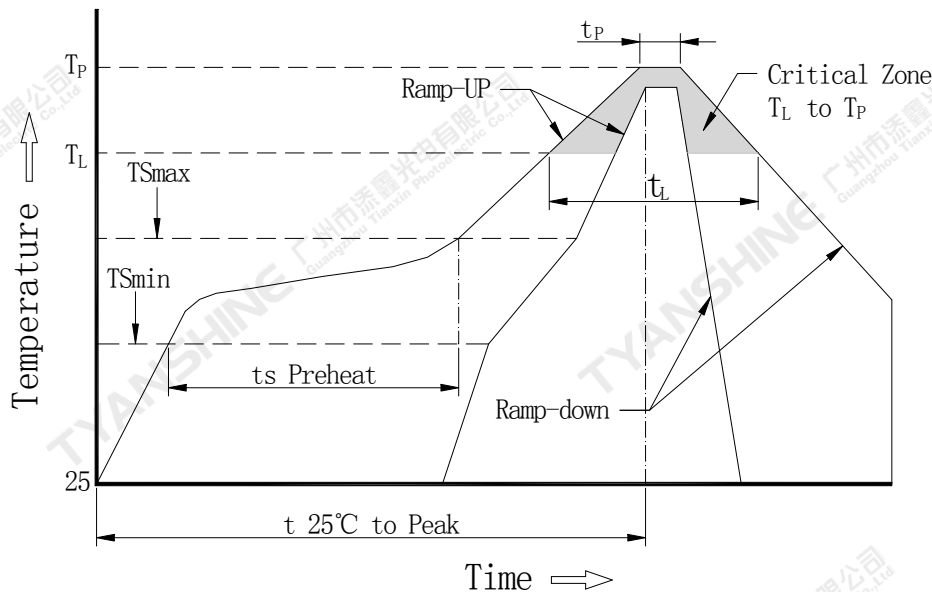
### Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

### Soldering Condition

Use the conditions shown to the under figure.



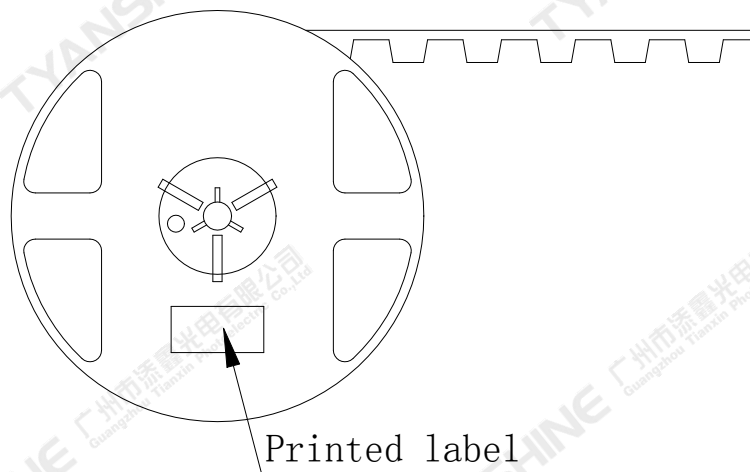
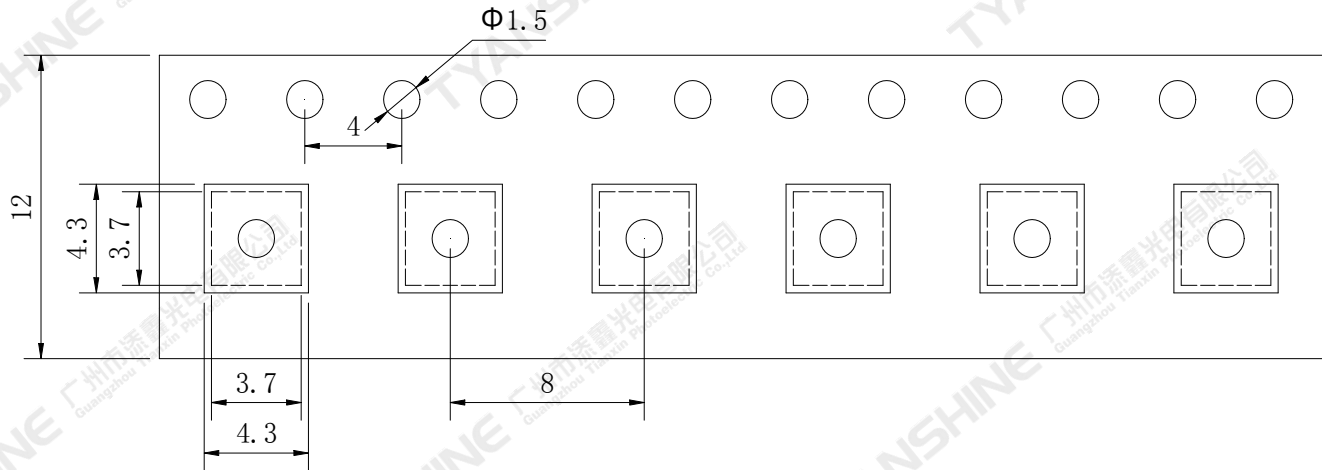
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (TS <sub>max</sub> to TP)	3°C/second max.
Preheat: Temperature Min (TS <sub>min</sub> )	100°C
Preheat: Temperature Max (TS <sub>max</sub> )	150°C
Preheat: Time (TS <sub>min</sub> to TS <sub>max</sub> )	60-120 seconds
Time Maintained Above: Temperature (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:1000 PCS**



**Notes:**

1. All dimensions are in millimeters.
2. Tolerances are  $\pm 2.0$  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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