

# TX-5050W20FC100-NUVCNG-B01

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 1.0A.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ ThinGaN

### Emitting Color:

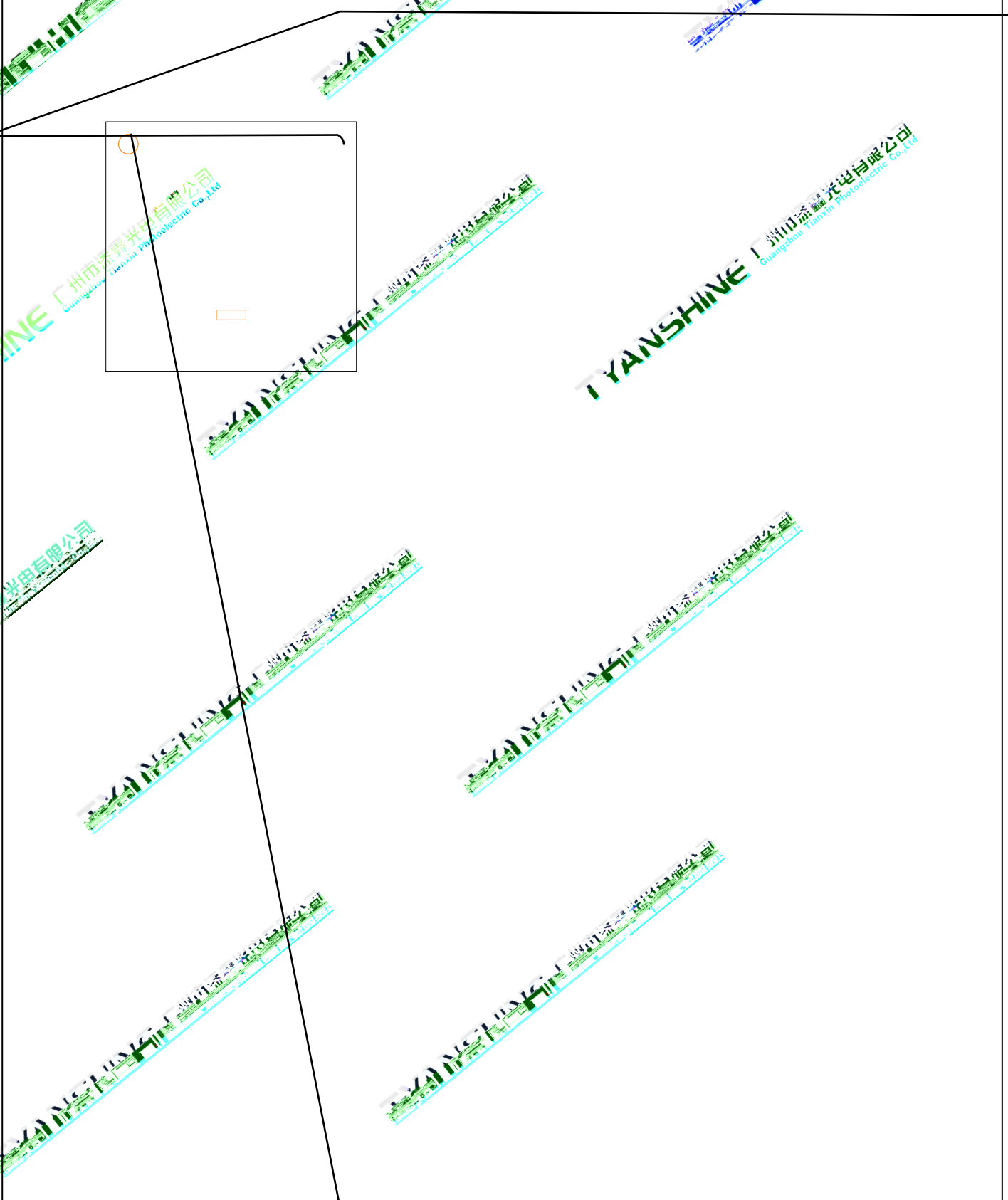
- ◆ White (W)

### Applications:

- ◆ Auxilliary lighting
- ◆ Ambient lighting
- ◆ Architectural lighting

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**Package Dimensions:**



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

Parameter	Symbol	Ratings	Unit
Forward Current	IF	5.5	A
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	24	W
Junction Temperature	Tj	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature(Only for LED, not including packaging)	Tstg	-40~+85	°C
Operation Temperature	Topr	-40~+85	

**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.

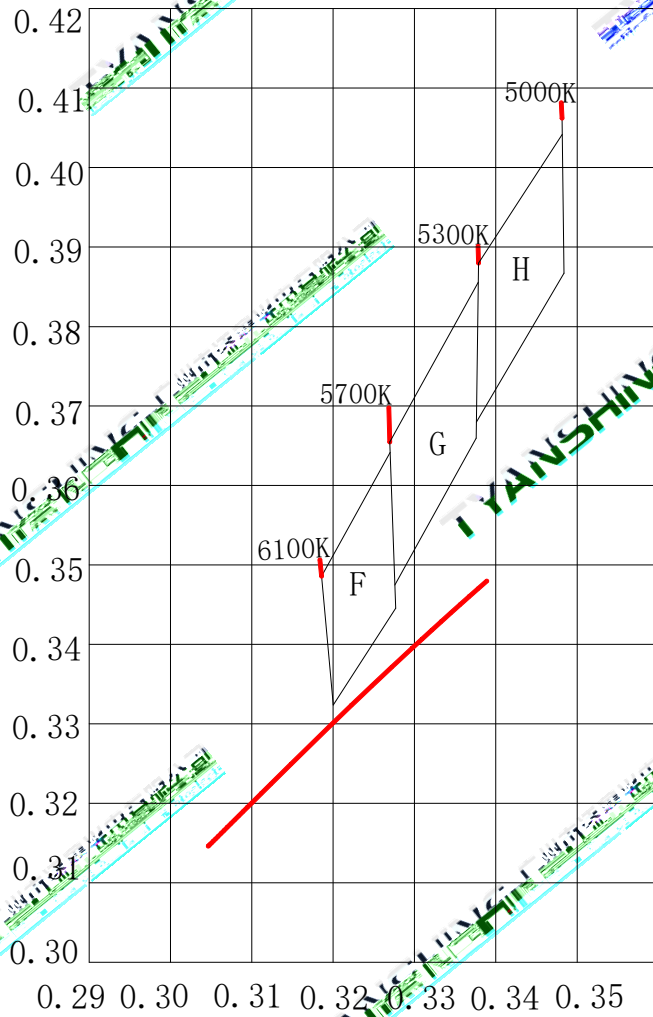
**Electrical Optical Characteristics (Tc=25°C)**

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	v	If=1.0A	W	390	440	490	lm
		If=5.5A	W	1240	1400	1560	
Forward Voltage	V <sub>f</sub>	If=1.0A	W	2.8	—	3.6	V
		If=5.5A	W	3.8	—	4.5	
Viewing Angle at 50% IV	2 1/2	—	W	—	100	—	Deg
Correlated Colour Temperature	CCT	If=1.0A	W	5000	—	6100	K
		If=5.5A	W	5400	—	6600	
Reverse Current	I <sub>R</sub>	—	W	—	—	—	μA
Temperature Coefficient of Voltage	VΔF/T	If=1.0A	W	—	-6.65	—	mV/°C
		If=5.5A	W	—	-6.23	—	

**Notes:**

- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. 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.

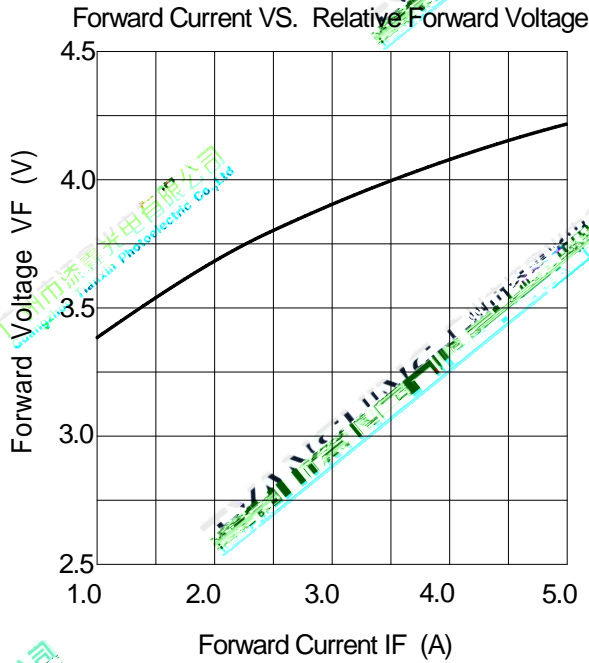
**White light Color coordinate filing (IF=1.0A,Tc=25°C )**

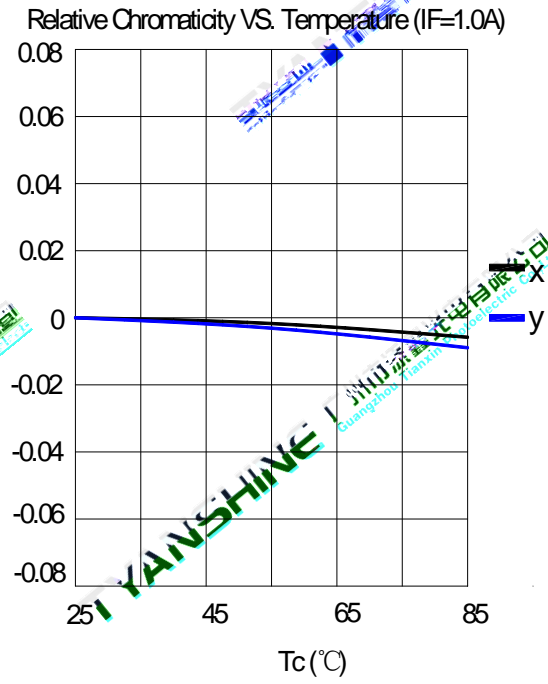
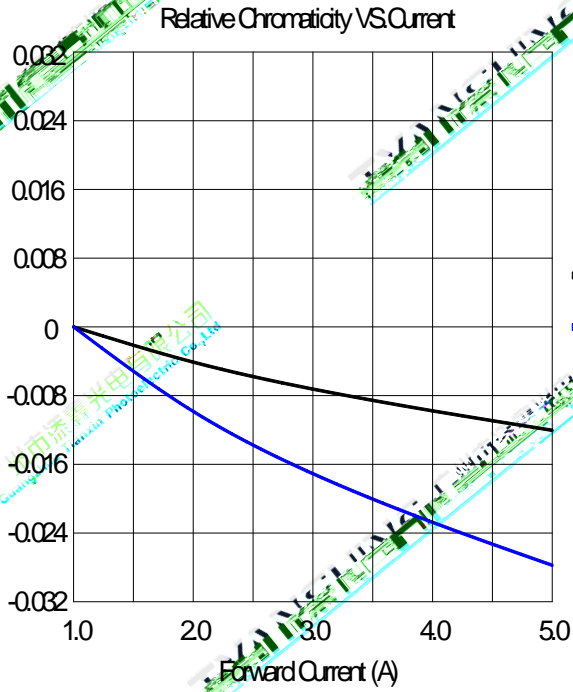


Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
H	5000K	5300K	0.3484	0.3867	0.3482	0.4042	0.3379	0.3880	0.3376	0.3680
G	5300K	5700K	0.3376	0.3659	0.3379	0.3856	0.3270	0.3655	0.3276	0.3475
F	5700K	6100K	0.3277	0.3445	0.3270	0.3642	0.3186	0.3486	0.3200	0.3324

# Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)





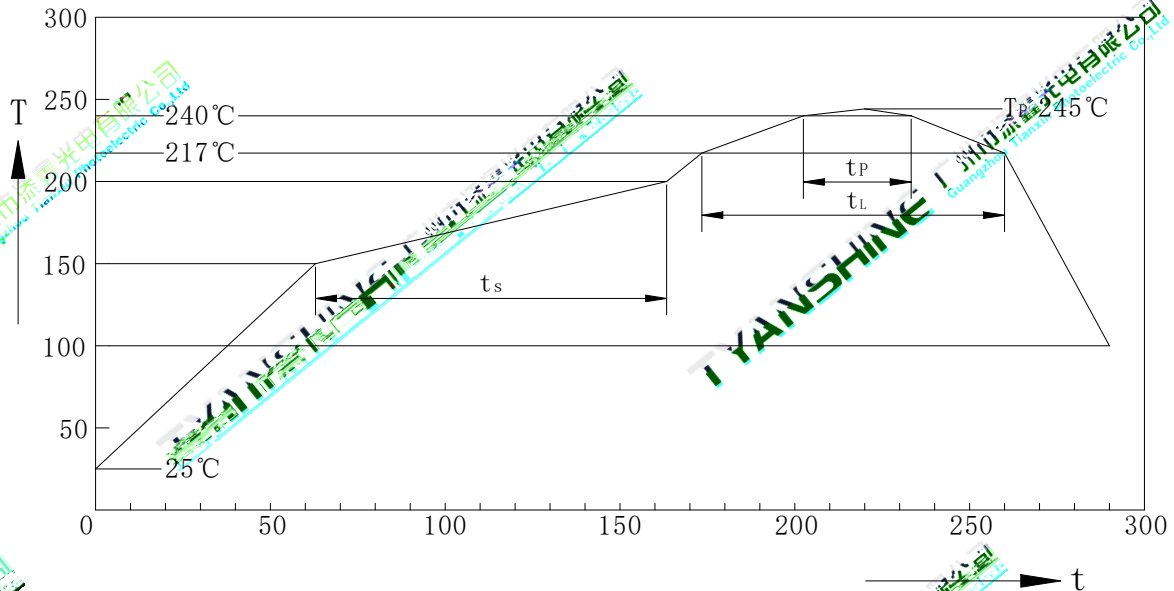
# Usage Precautions

## Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

## Soldering Condition



Profil-Charakteristik Profile Feature	Symbol	Pb-Free(SnAgCu)Assembly			Einheit Unit
		Minimum	Recommendation	Maximum	
Ramp-up Rate to Preheat 25°C to 150°C	-	-	2	3	K/s
Time $t_s$ $T_{Smin}$ to $T_{Smax}$	$t_s$	60	100	120	s
Ramp-up Rate to Peak $T_{Smax}$ to $T_p$	-	-	2	3	K/s
Liquidus Temperature	$T_L$	217			°C
Time above Liquidus temperature	$t_L$	-	80	100	s
Peak Temperature	$T_P$	-	245	255	°C
Time within 5°C of the specified peak temperature $T_p \pm 5$ K	$t_p$	10	20	30	s
Ramp-down Rate $T_p$ to 100°C	-	-	3	6	K/s
Time 25°C to $T_p$	-	-	-	480	-

**Note:**

All temperatures refer to topside of the package, measured on the package body surface.



# Dimensions For Cannulation And Packaging

Quantity:1000PCS

