

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:

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

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Package



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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:

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.

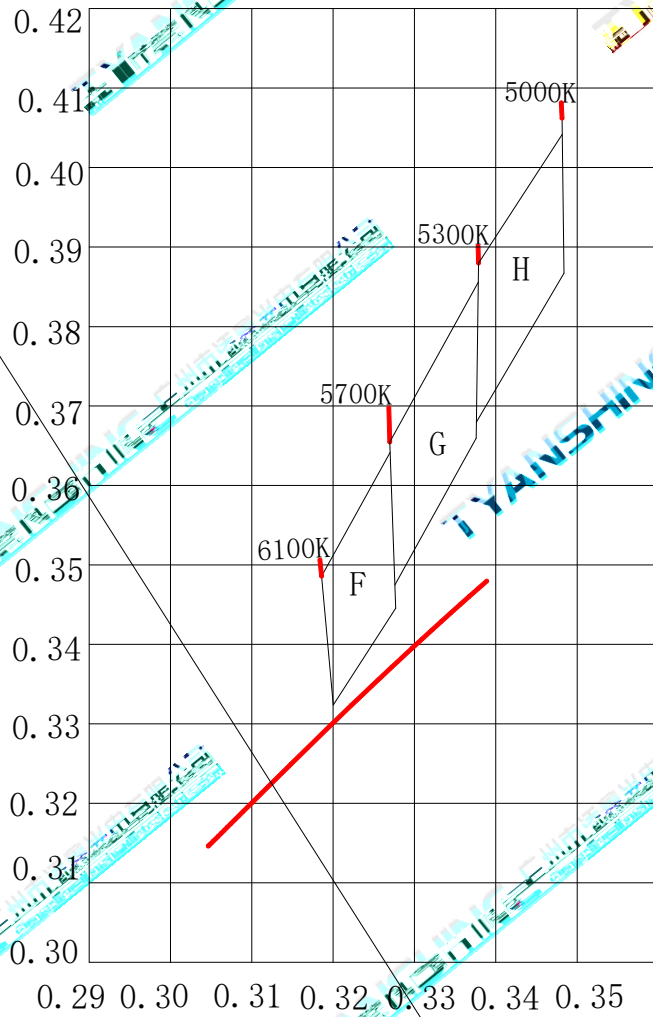
Electrical Optical Characteristics (Tc=25°C)

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	v	If=1.0A	W	390	440	490	lm
		If=5.5A	W	1240	1400	1560	
Forward Voltage	V _f	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 _R	—	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.

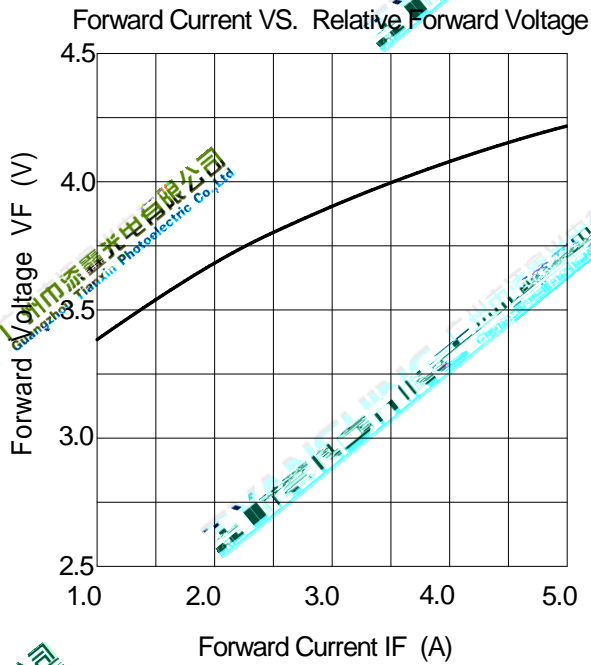
White light Color coordinate filing (IF=1.0A,Tc=25°C)

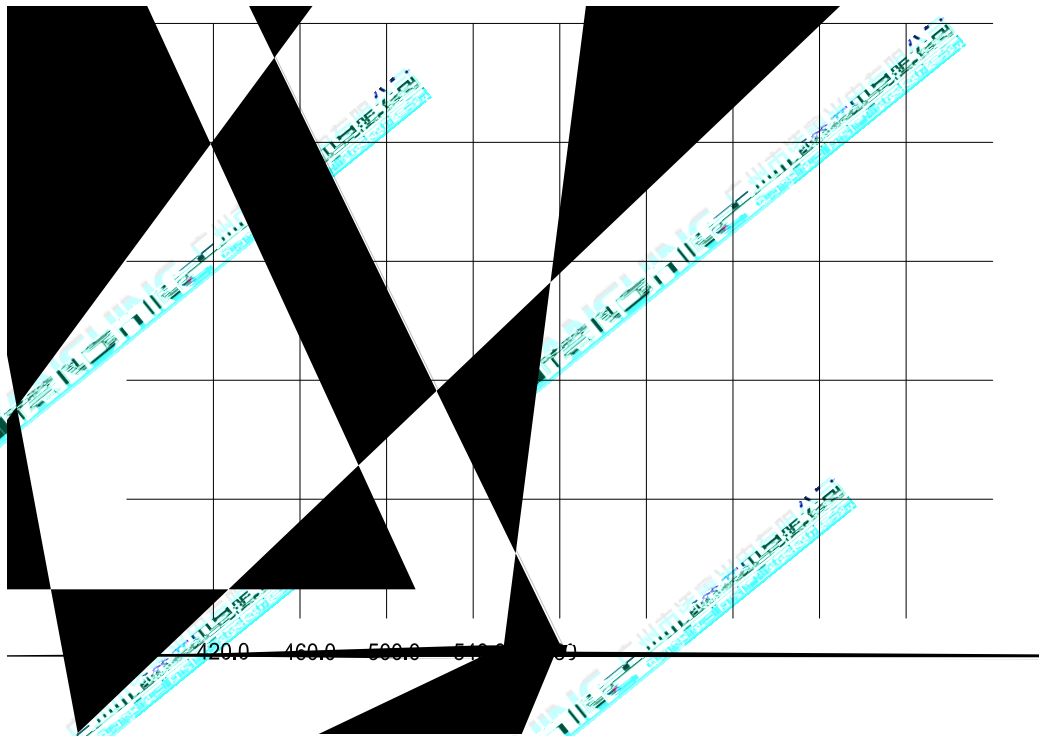
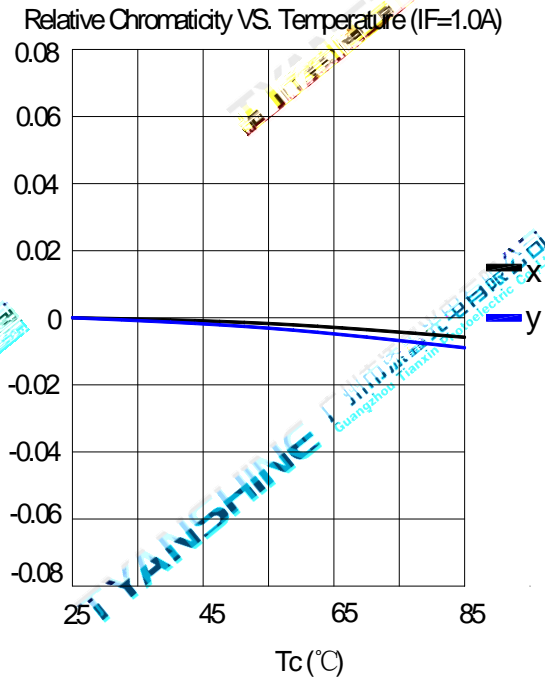
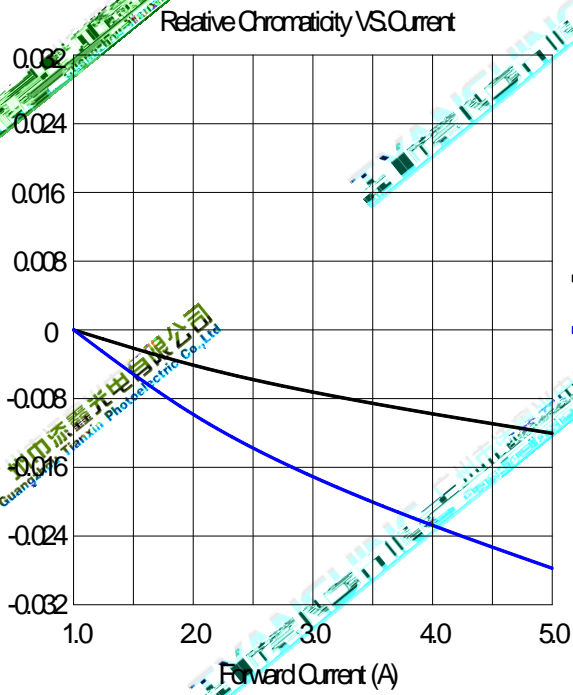


Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
H	5000K	5300K	0.3484	0.3867	0.3482	0.4042	0.3379	0.3880	0.3376	0.3680
G	5300K	5700K	0.3376	0.3659	0.3379	0.3856	0.3270	0.3655	0.3276	0.3475
F	5700K	6100K	0.3277	0.3445	0.3270	0.3642	0.3186	0.3486	0.3200	0.3324

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)





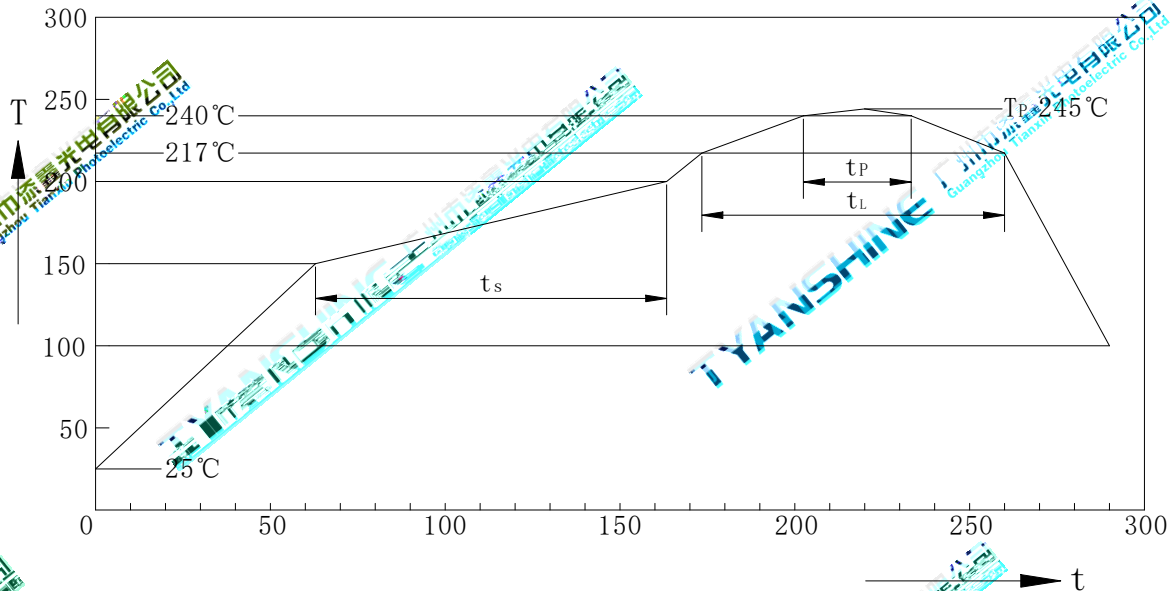
Usage Precautions

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 -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

