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）

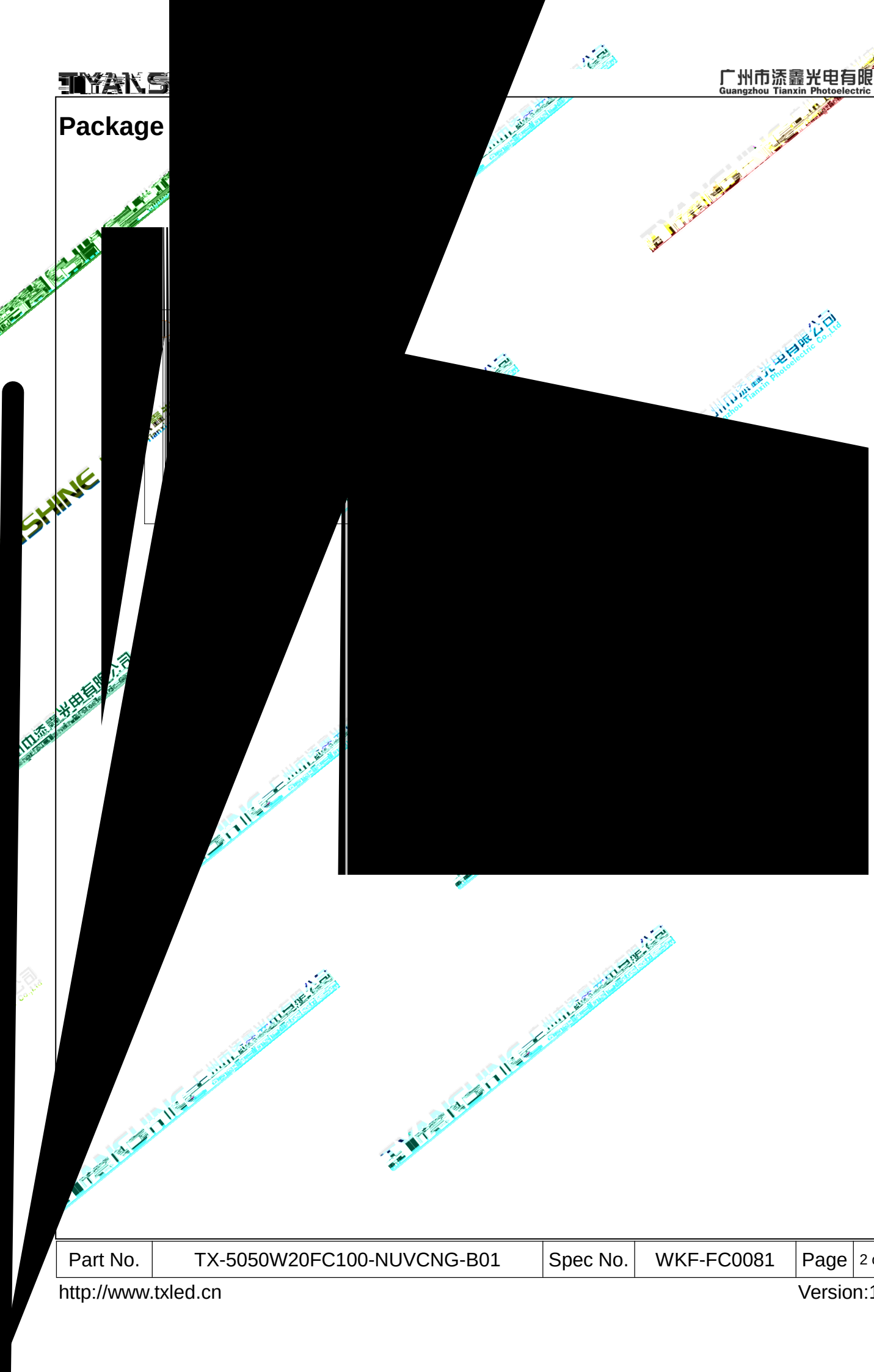
Applications:

◆Auxiliary lighting

◆Ambient lighting

◆Architectural lighting

Package



Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Ratings	Unit
Forward Current	IF	5.5	A
Reverse Voltage	V_R	Not designed for reverse operation	V
Power Dissipation	P_D	24	W
Junction Temperature	Tj	150	℃
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature(Only for LED, not including packaging)	T_{stg}	-40~+85	℃
Operation Temperature	T_{opr}	-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	φ_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	$2\theta_{1/2}$	—	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	V△F/T	If=1.0A	W	—	-6.65	—	mV/℃
		If=5.5A	W	—	-6.23	—	

Notes:

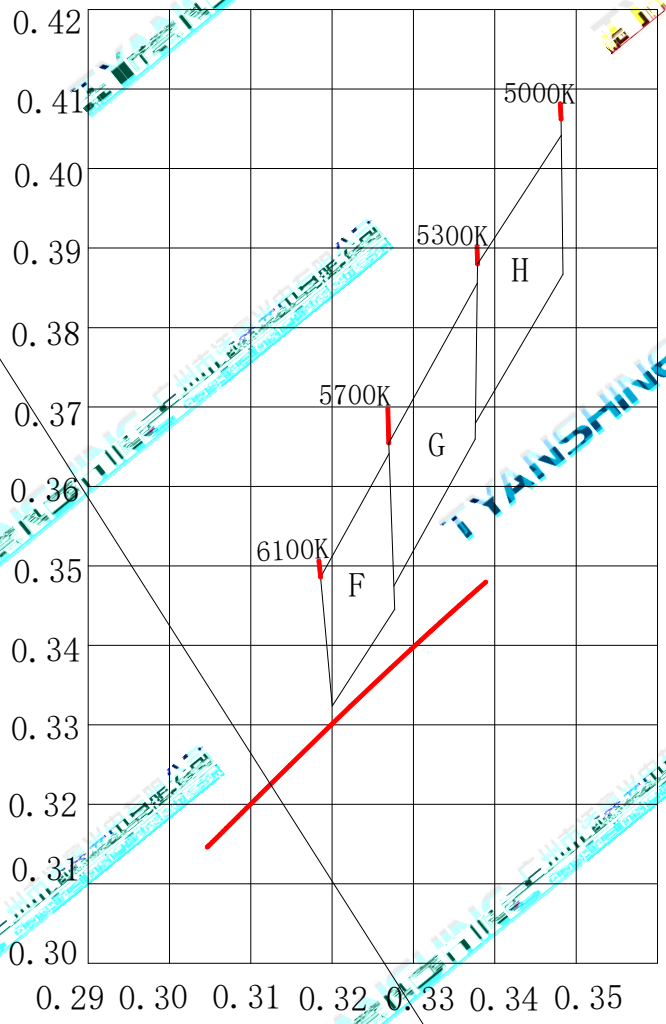
1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

2.$\theta_{1/2}$ 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.

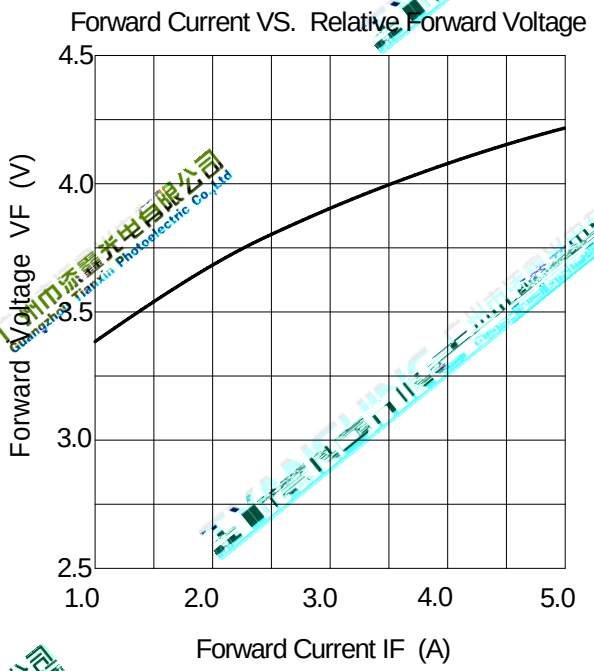
White light Color coordinate filing (IF=1.0A,Tc=25°C)

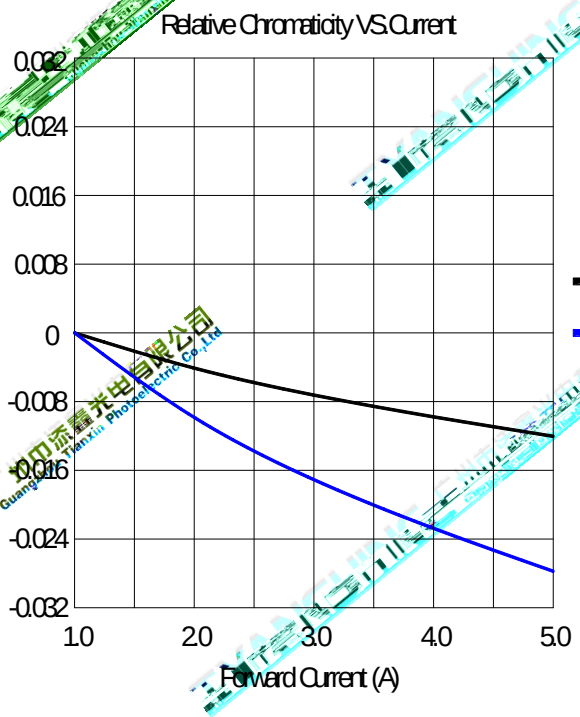


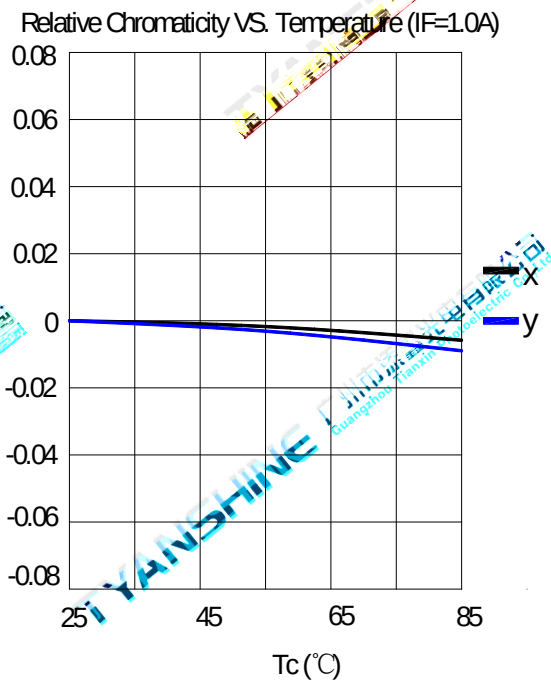
Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
H	5000K	5300K	0.3484	0.3867	0.3482	0.4042	0.3379	0.3880	0.3376	0.3680
G	5300K	5700K	0.3376	0.3659	0.3379	0.3856	0.3270	0.3655	0.3276	0.3475
F	5700K	6100K	0.3277	0.3445	0.3270	0.3642	0.3186	0.3486	0.3200	0.3324

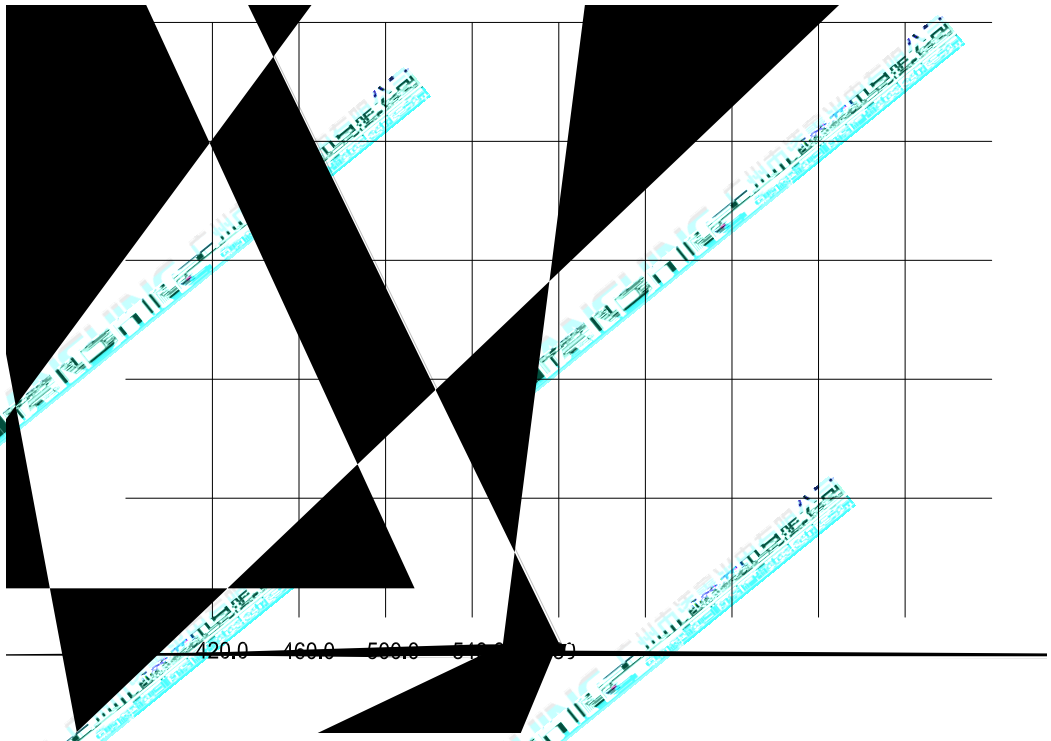
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)




Relative Chromaticity VS.Current
0.032
0.024
0.016
0.008
0
-0.008
-0.016
-0.024
-0.032
1.0
2.0
3.0
4.0
5.0
Forward Current (A)
x
y


Relative Chromaticity VS. Temperature (IF=1.0A)
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
25
45
65
85
Tc (℃)
x
y



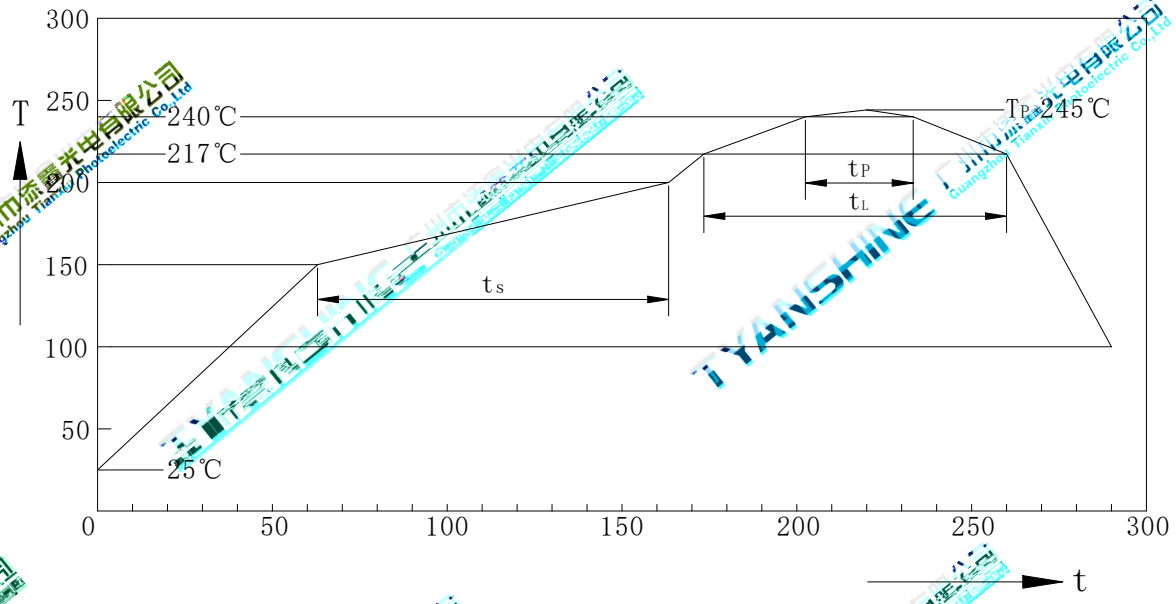
Usage Precautions

Storage Environment Condition

Temperature: 5℃ ~ 30℃ (41℉ ~ 86℉)

Humidity: 60% RH Max.

Soldering Condition



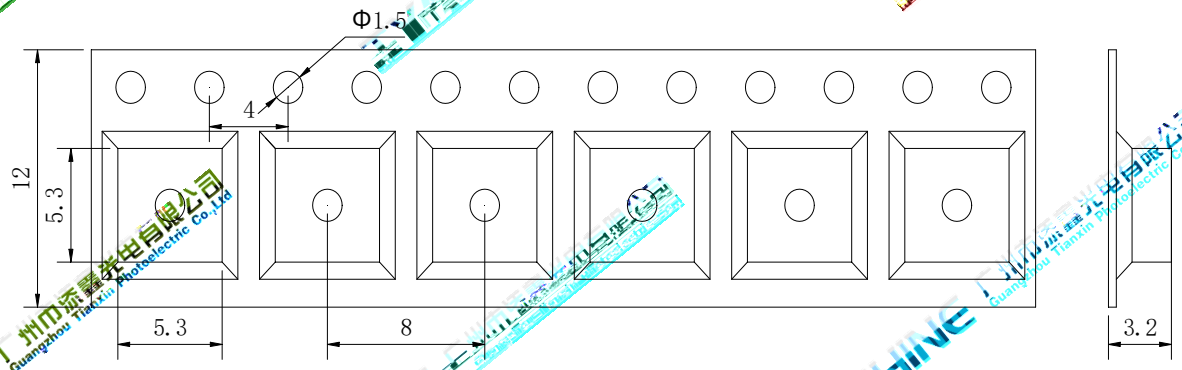
Profil-Charakteristik Profile Feature	Symbol	Pb-Free(SnAgCu)Assembly			Einheit Unit
		Minimum	Recommendation	Maximum	
Ramp-up Rate to Preheat 25℃ to 150℃	-	-	2	3	K/s
Time t_s T_{Smin} to T_{Smax}	t_s	60	100	120	s
Ramp-up Rate to Peak T_{Smax} to T_p	-	-	2	3	K/s
Liquidus Temperature	T_L	217			℃
Time above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

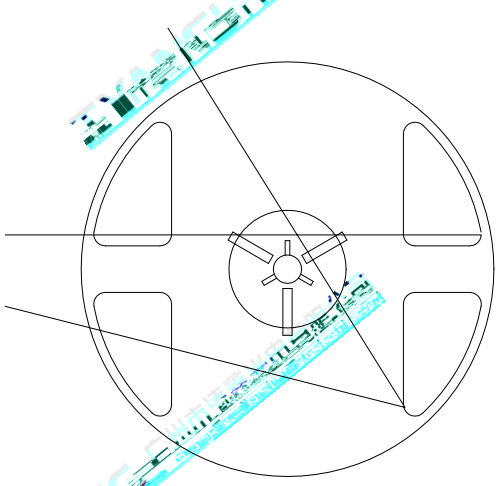
Note:

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

Dimensions For Cannulation And Packaging

Quantity:1000PCS





产品　书变　履历

	变　内容		
	变　前内容	变　后内容	
1.0	初　发	-	