

TX-1818BS30FC120-NUVENG-02C

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 2.5A.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆GaN

Emitting Color:

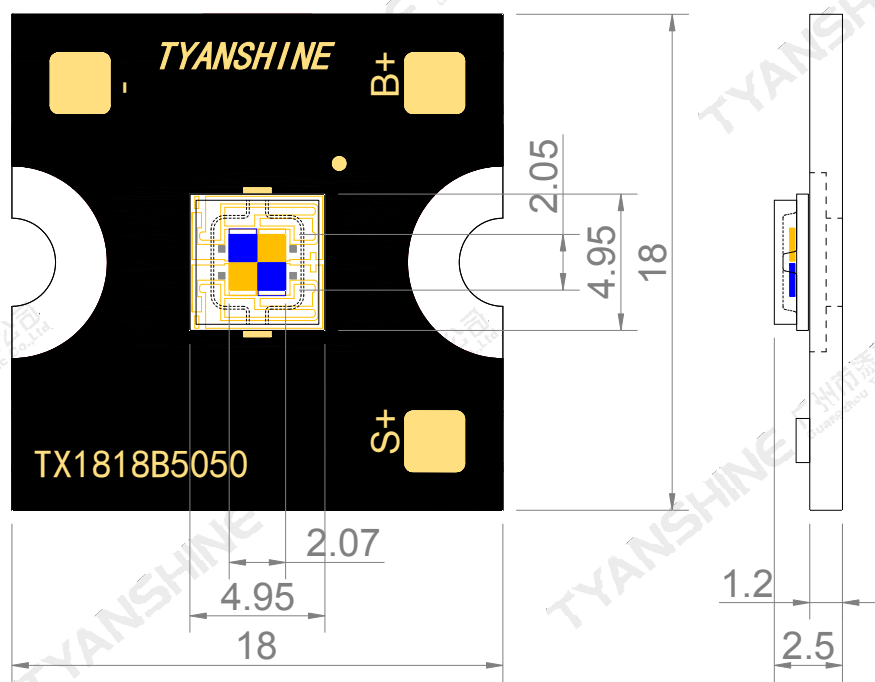
- ◆Blue (B)
- ◆Warm white (S)

Applications:

- ◆Auxiliary lighting
- ◆Architectural lighting

Part No.	TX-1818BS30FC120-NUVENG-02C	Spec No.	WKF-GC0003	Page	1 of 9
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Package Dimensions:



Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are $\pm 0.1\text{mm}$.

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol		Ratings	Unit
Forward Current	IF		2.5	A
Reverse Voltage	VR		Not designed for reverse operation	V
Power Dissipation	PD	B	18	W
		S	18	
Junction Temperature	Tj	B	150	℃
		S	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.

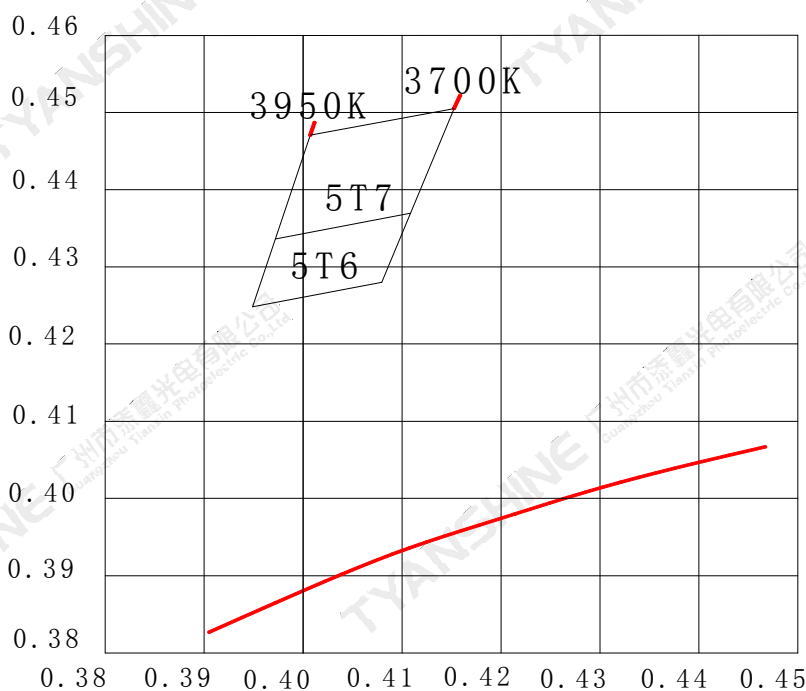
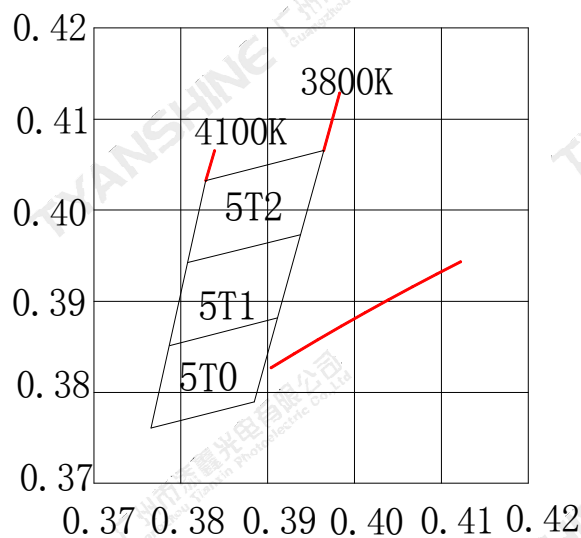
Electrical Optical Characteristics (Tc=25°C)

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	If=2.5A	B	140	—	195	lm
			S	1200	—	1450	
Dominant Wavelength	λ_d		B	448	453	458	nm
Peak-emission Wavelength	λ_p		B	443	448	453	nm
Correlated Colour Temperature	CCT		S	3700	—	3950	K
				3800	—	4100	
Spectral Line Half-Width	$\Delta\lambda$		B	15	25	30	nm
			S	115	120	125	nm
Forward Voltage	V_f		B	6.0	7.0	8.0	V
			S	6.0	7.0	8.0	
Viewing Angle at 50 % IV	$2\theta_{1/2}$		B	—	120	—	Deg
			S	—	120	—	
Reverse Current	I_R	—	B	—	—	—	μA
			S	—	—		
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=2.5A	B	—	0.88	—	K/W
			S	—	0.88	—	
Temperature Coefficient of Voltage	$V\Delta F/T$		B	—	11.5	—	mV/°C
			S	—	-3.05	—	

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.

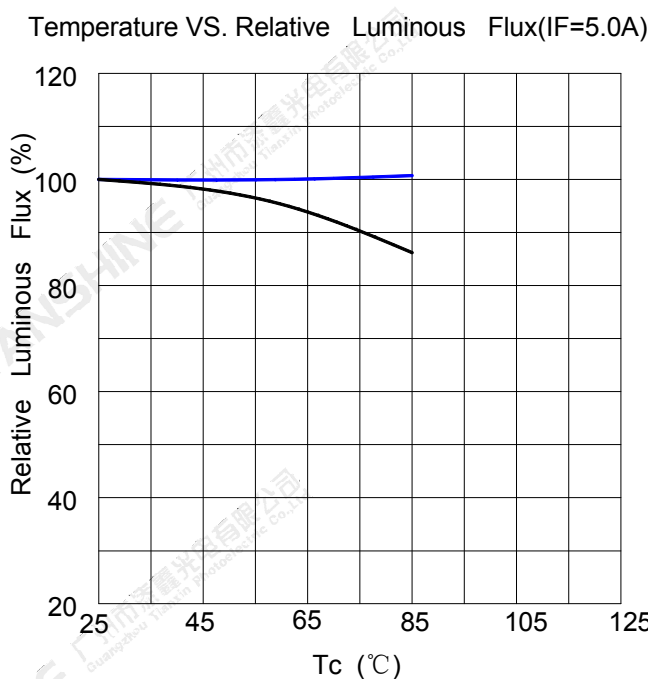
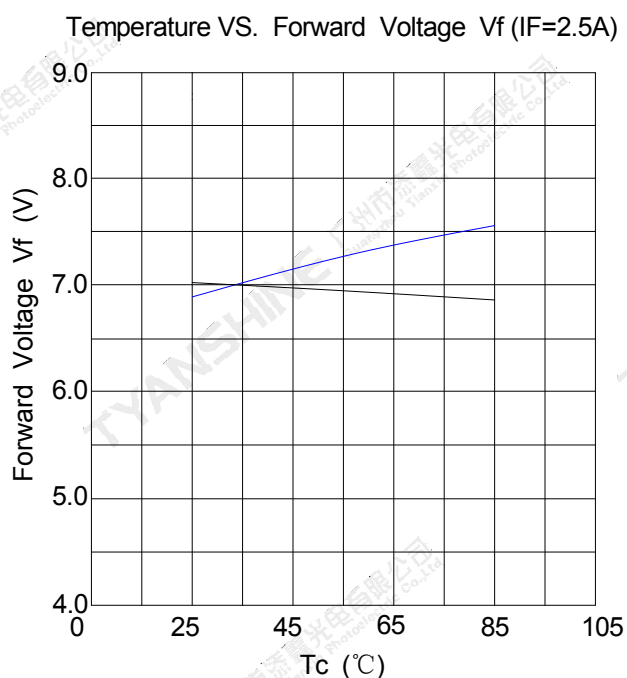
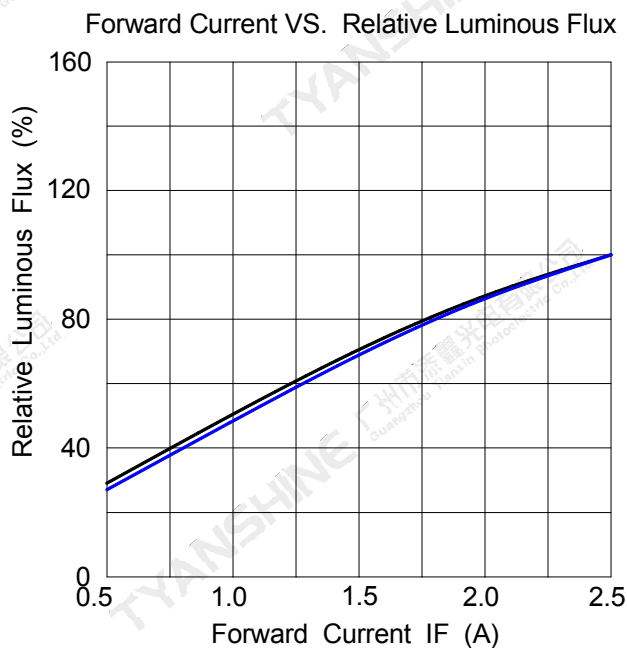
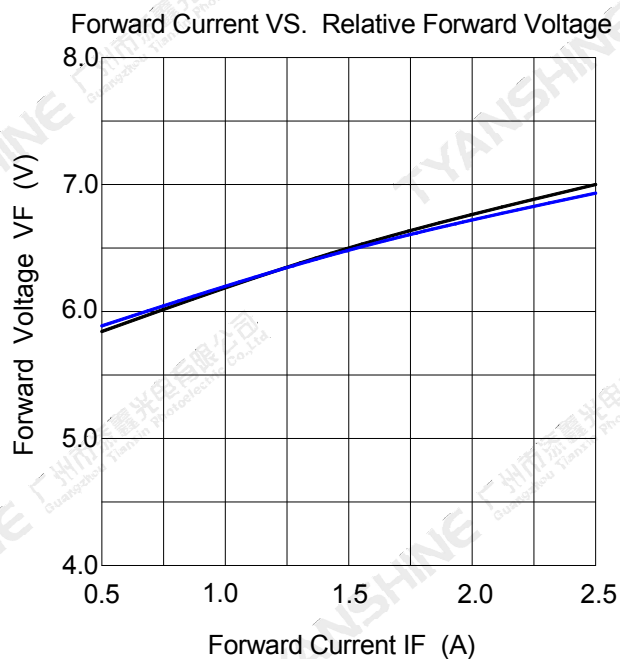
White Color coordinate filing (IF=2.5A Tc=25℃)



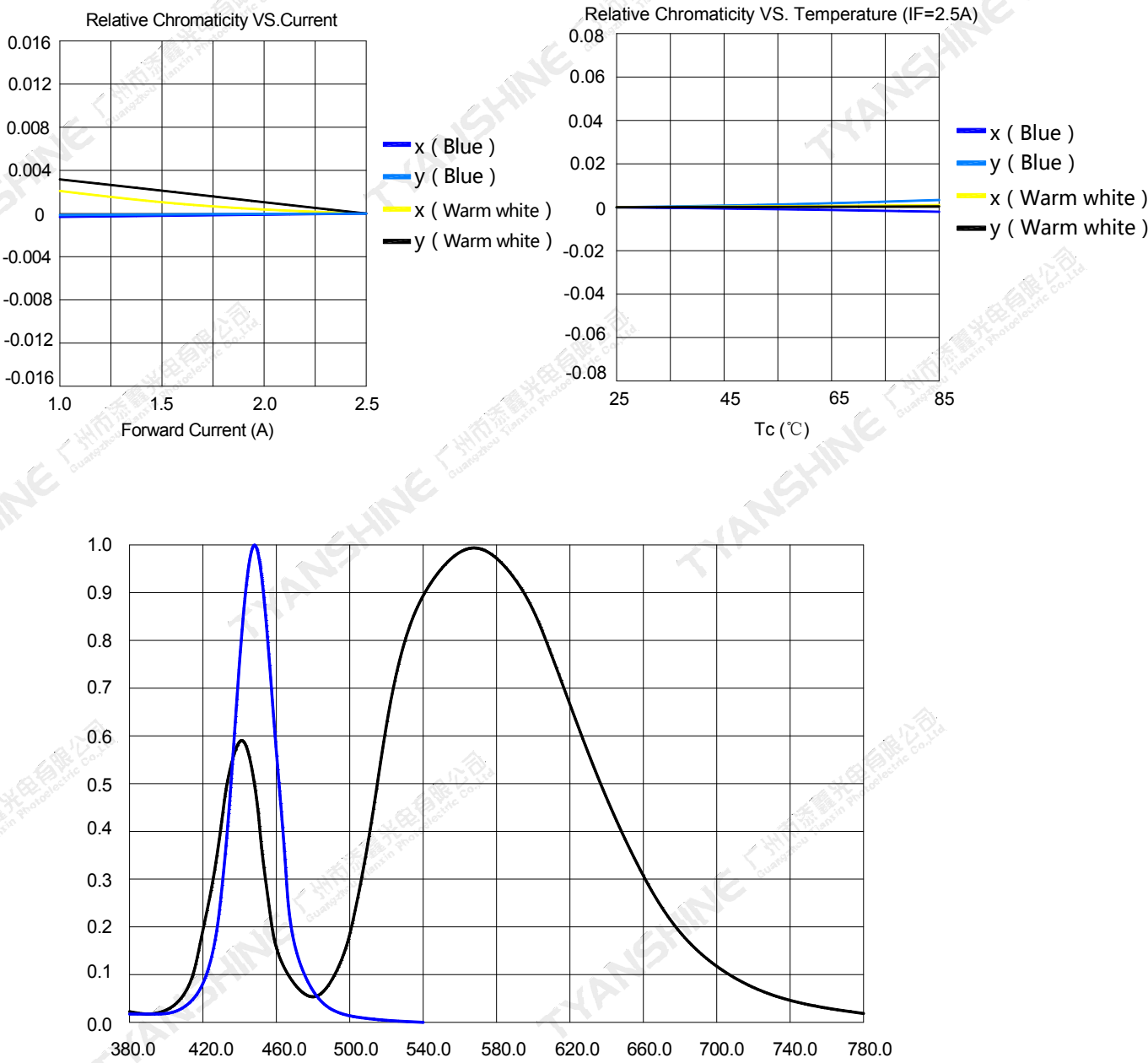
Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
5T0	3800	4100	0.3884	0.379	0.3911	0.3882	0.3787	0.3851	0.3766	0.3761
5T1	3800	4100	0.3911	0.3882	0.3938	0.3973	0.3808	0.3943	0.3787	0.3851
5T2	3800	4100	0.3938	0.3973	0.3965	0.4066	0.3829	0.4033	0.3808	0.3943
5T6	3700	3950	0.4079	0.428	0.4109	0.437	0.3972	0.4336	0.3949	0.4248
5T7	3700	3950	0.4109	0.437	0.4152	0.4505	0.4007	0.4471	0.3972	0.4336

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Notes: — Blue (B) ; — Warm white (S) ;



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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

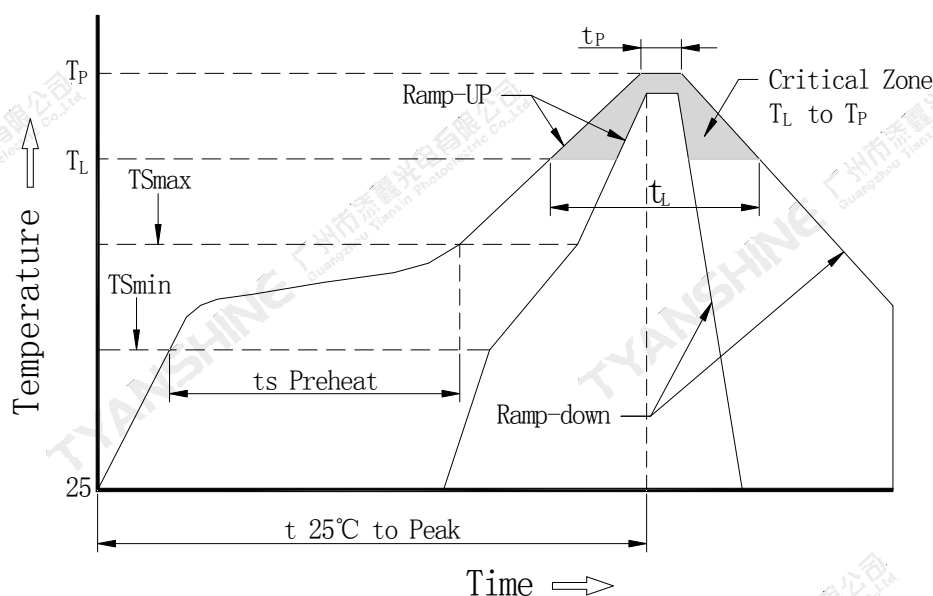
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



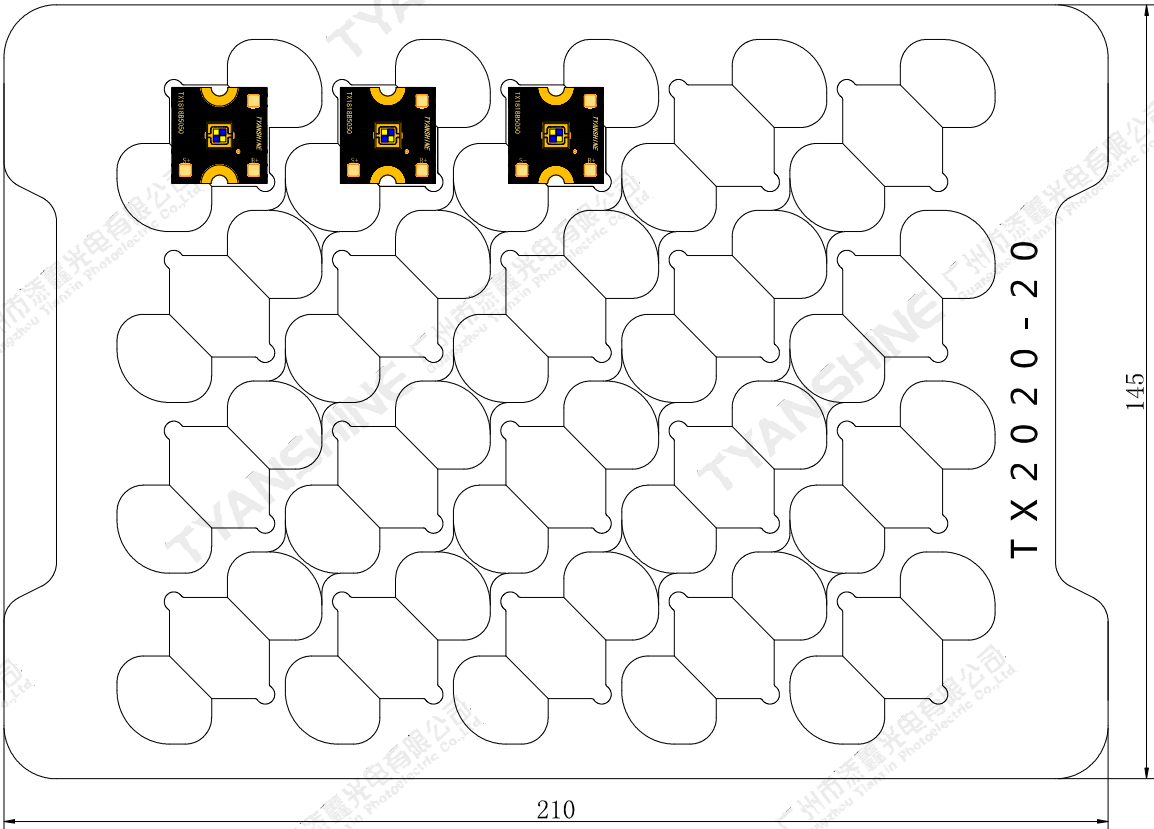
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (Tsmax to Tp)	3°C/second max.
Preheat: Temperature Min (Tsmin)	100°C
Preheat: Temperature Max (Tsmax)	150°C
Preheat: Time (Tsmin to Tsmax)	60-120 seconds
Time Maintained Above: Temperature (Tl)	183°C
Time Maintained Above: Time (Tl)	60-150 seconds
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:20 PCS



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.

Part No.	TX-1818BS30FC120-NUVENG-02C	Spec No.	WKF-GC0003	Page	9 of 9
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