

TX-5050WS10FC120-NGFENW-01H80

PRODUCT SPECIFICATION

Features:

- ◆ Excellent transiting heat from LED chip operating under 800 mA.
- ◆ Provide uniform cross distribution of positive white and warm white dual color scheme, mixed pure.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ GaN

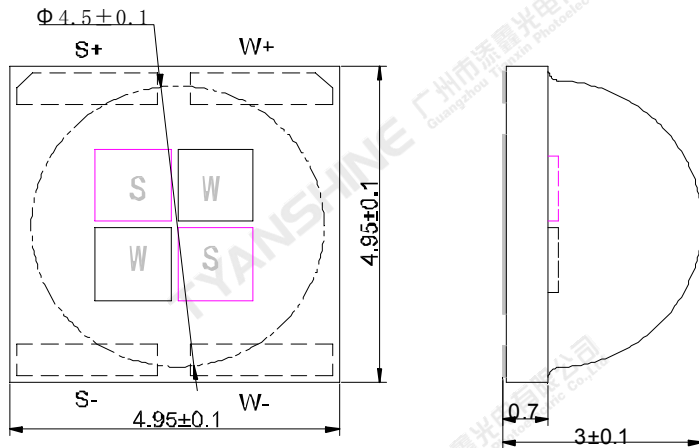
Emitting Color:

- ◆ White
- ◆ Warm white

Applications:

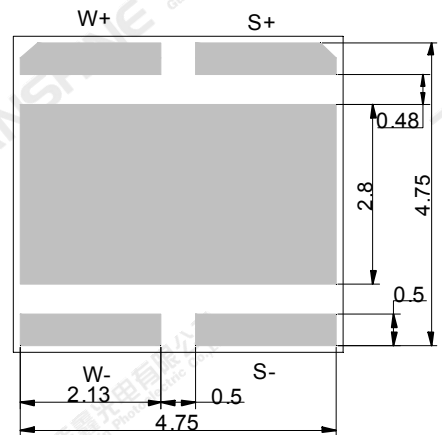
- ◆ Auxiliary lighting
- ◆ Ambient lighting
- ◆ Architectural lighting

Package Dimensions:

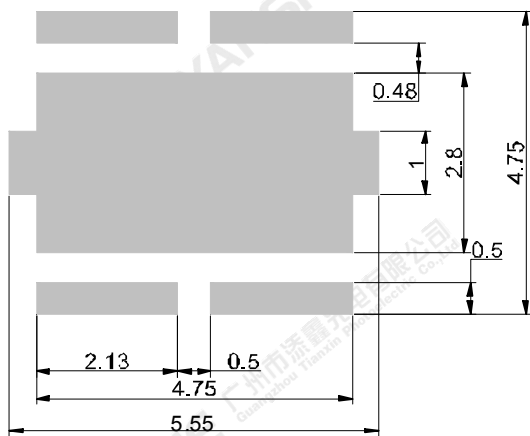


Top view

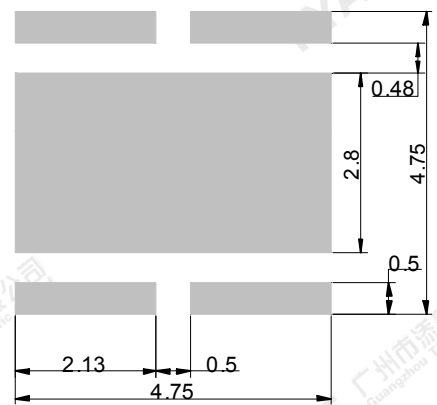
Side view



Bottom view



Recommended solder pad



Recommended stencil pattern

Notes:

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

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol		Ratings	Unit
Forward Current	IF	W	800	mA
		S	800	
Reverse Voltage	VR		Not designed for reverse operation	V
Power Dissipation	PD	W	5440	mW
		S	5440	
Junction Temperature	Tj	W	150	°C
		S	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	Tstg		-40~+70	°C
Operation Temperature	Topr		-30~+100	

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	ϕ_v	If=700mA	W	400	460	520	lm
			S	330	380	430	
Forward Voltage	V_f		W	6.0	6.4	6.8	V
			S	5.8	6.2	6.6	
Correlated Colour Temperature	CCT		W	5600	5860	6300	K
			S	2700	2870	3000	
Color Rendering Index	Ra		W	80	82.5	—	—
			S	80	82.5	—	
Viewing Angle at 50 % IV	$2\theta_{1/2}$		W	—	120	—	Deg
			S	—	120	—	
Reverse Current	I_R	—	W	—	—	—	μA
		—	S	—	—	—	
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=700mA	W	—	1.8	—	K/W
			S	—	1.8	—	
Temperature Coefficient of Voltage	$V\Delta F/T$		W	—	-6.0	—	mV/°C
			S	—	-4.8	—	

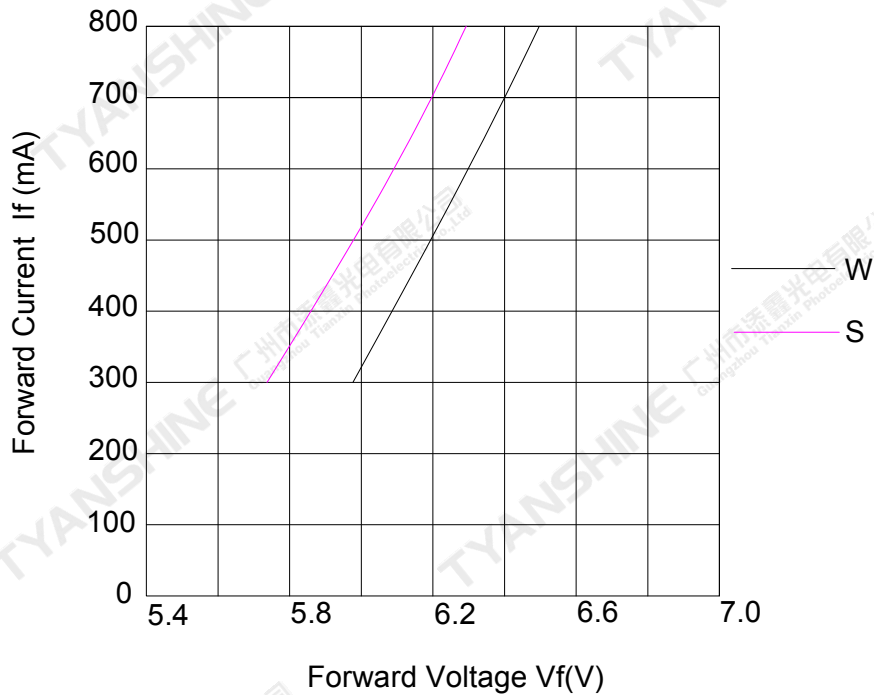
Notes:

- 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.

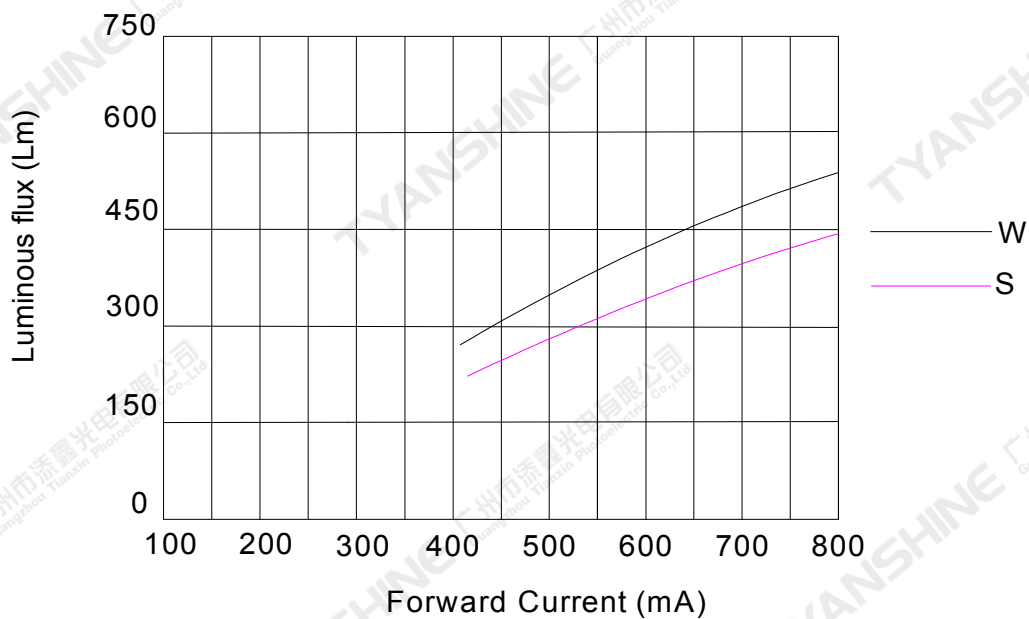
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

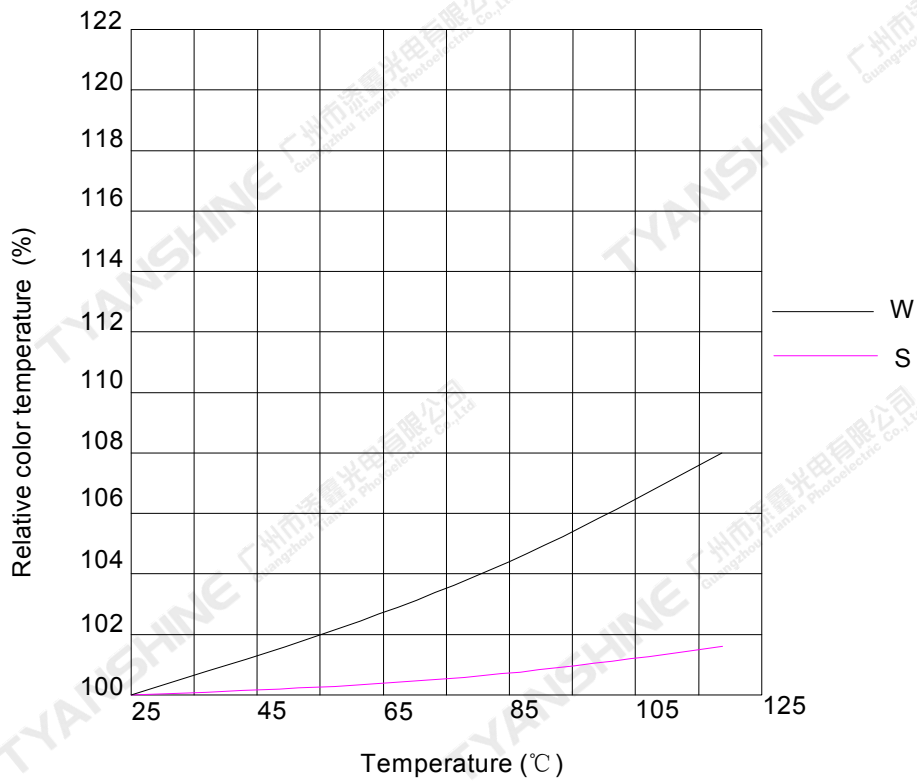
Forward Current VS. Forward Voltage



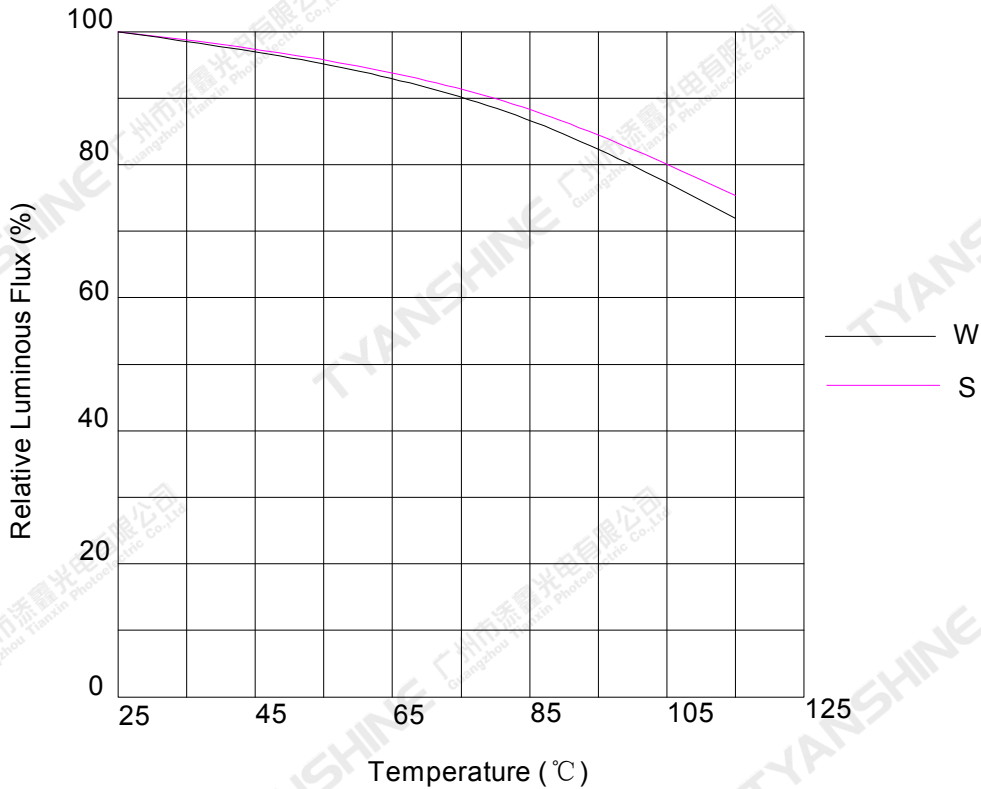
Forward Current VS. Luminous flux



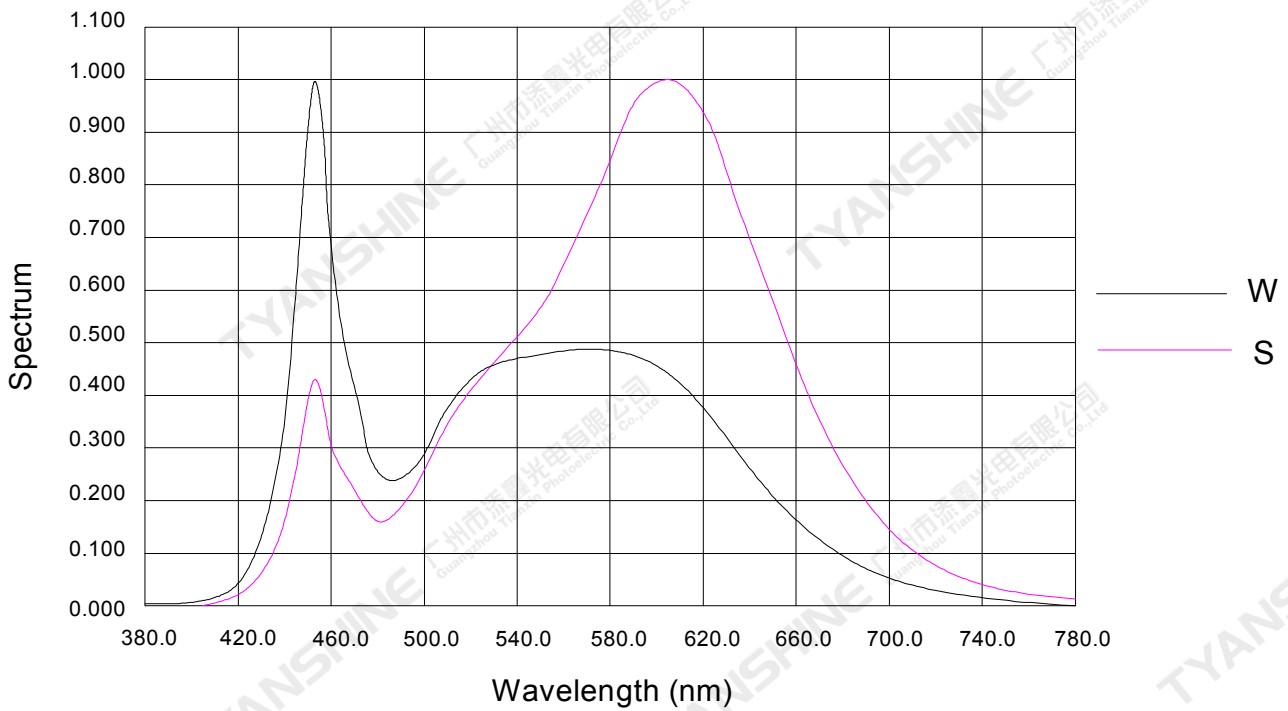
Temperature VS. Relative color temperature (IF=700mA)



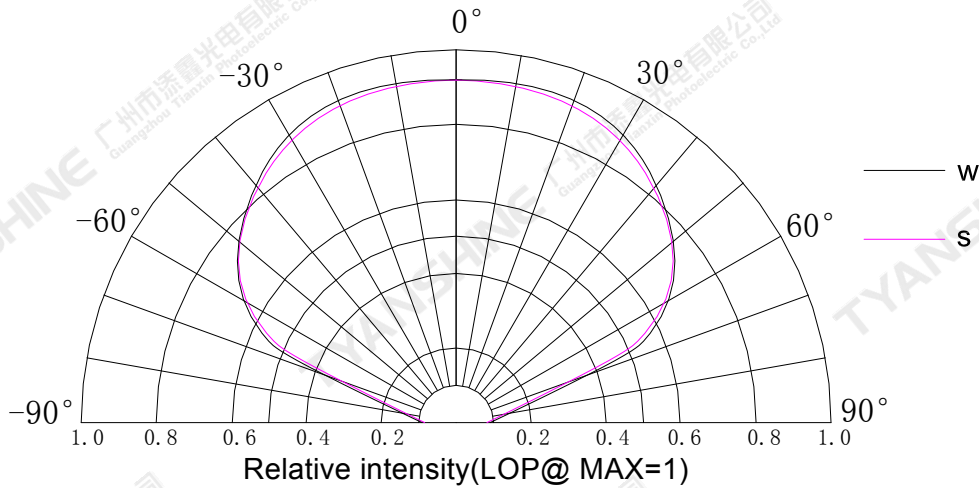
Temperature VS. Relative Luminous Flux (IF=700mA)



Relative Spectral Distribution



Beam Pattern



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 $\pm 5^\circ$.

Part No.	TX-5050WS10FC120-NGFENW-01H80	Spec No.	WKF-BE0890	Page	7 of 9
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Usage Precautions

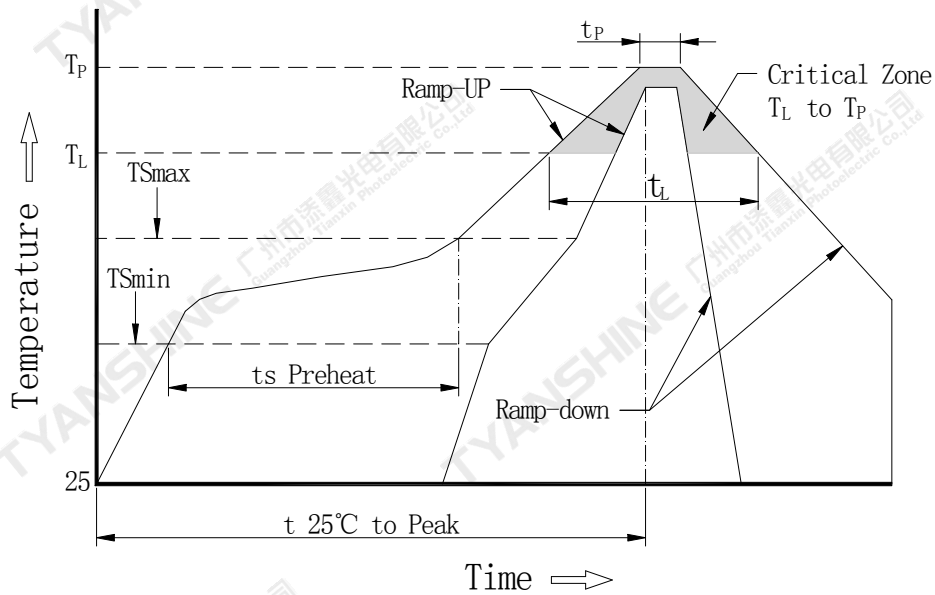
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



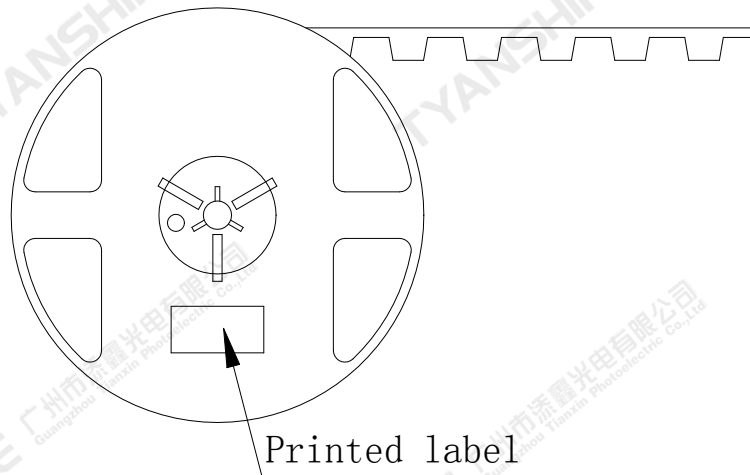
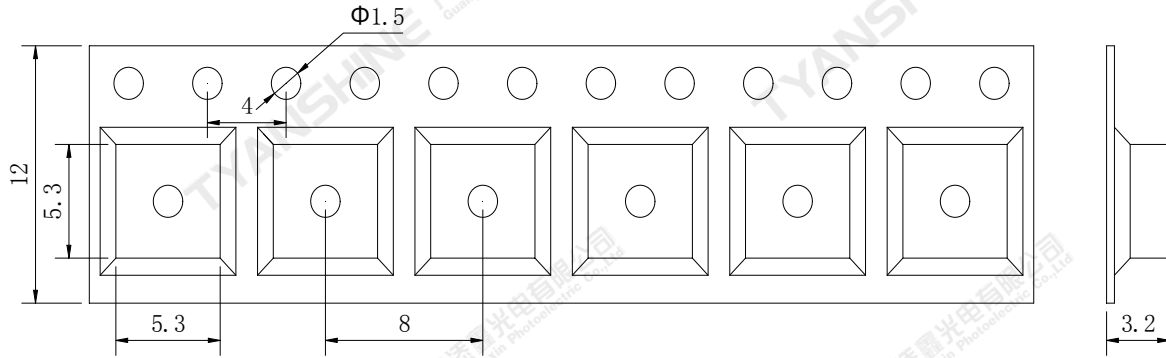
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (T _{Smax} to T _P)	3°C/second max.
Preheat: Temperature Min (T _{Smin})	100°C
Preheat: Temperature Max (T _{Smax})	150°C
Preheat: Time (T _{Smin} to T _{Smax})	60-120 seconds
Time Maintained Above: Temperature (T _L)	183°C
Time Maintained Above: Time (T _L)	60-150 seconds
Peak/Classification Temperature (T _P)	225°C
Time Within 5°C of Actual Peak Temperature (T _P)	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:500PCS



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, Irre sponsible of the Company.

Part No.	TX-5050WS10FC120-NGFENW-01H80	Spec No.	WKF-BE0890	Page	9 of 9
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