TX-5050WS30FC180-NUVENG-03H80

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under W:2.5A*2 S:2.0A*2.

◆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

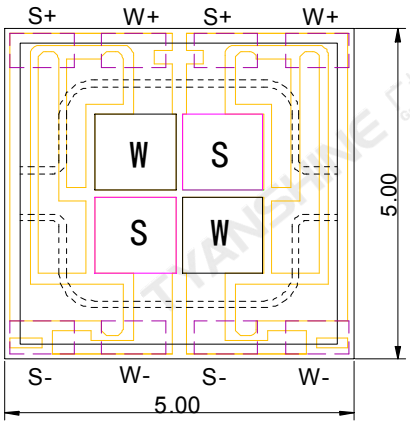
Applications:

◆Auxiliary lighting

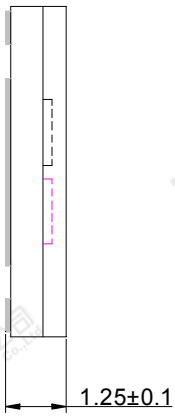
◆Ambient lighting

◆Architectural lighting

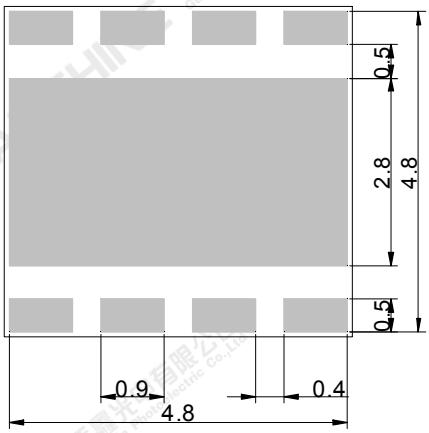
Package Dimensions:



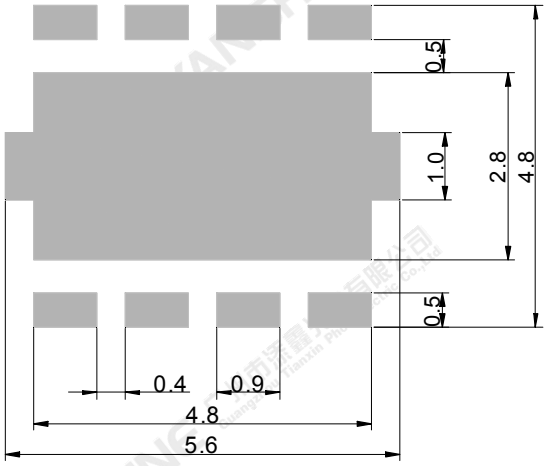
Top view



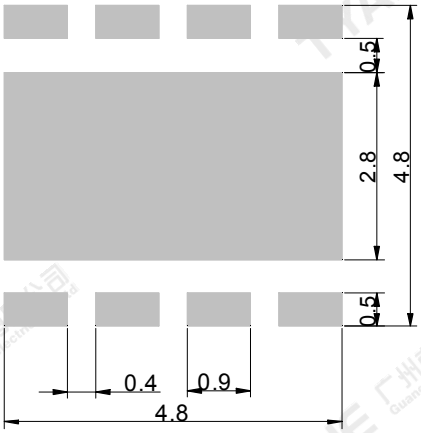
Side view



Bottom view



Recommended solder pad



Recommended stencil pattern

1

Notes:

1.All dimensions are in millimeters .

2.Tolerances unless otherwise mentioned are ±0.1mm .

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol		Ratings	Unit
Forward Current	IF	W	2.5	A
		S	2.0	
Reverse Voltage	V_R		Not designed for reverse operation	V
Power Dissipation	P_D	W	19	W
		S	15.2	
Junction Temperature	Tj	W	150	℃
		S	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	T_{stg}		-40~+70	℃
Operation Temperature	T_{opr}		-30~+100	

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*2	W	500	560	620	lm
		IF=2.5A*2	W	850	950	1050	
		IF=1.0A*2	S	420	480	540	
		IF=2.0A*2	S	660	750	840	
Forward Voltage	V_f	If(w)=2.5A*2 If(s)=2.0A*2	W	3.3	3.5	3.8	V
			S	3.3	3.5	3.8	
Correlated Colour Temperature	CCT	IF=1.0A	W	5800	6200	6600	K
			S	2590	2720	2840	
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(w)=2.5A*2 If(s)=2.0A*2	W	—	1.8	—	K/W
			S	—	1.8	—	
Temperature Coefficient of Voltage	V△F/T		W	—	-4.8	—	mV/℃
			S	—	-6.0	—	
Color Rendering Index	Ra		W	80	82.5	—	—
			S	80	82.5	—	

Notes:

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

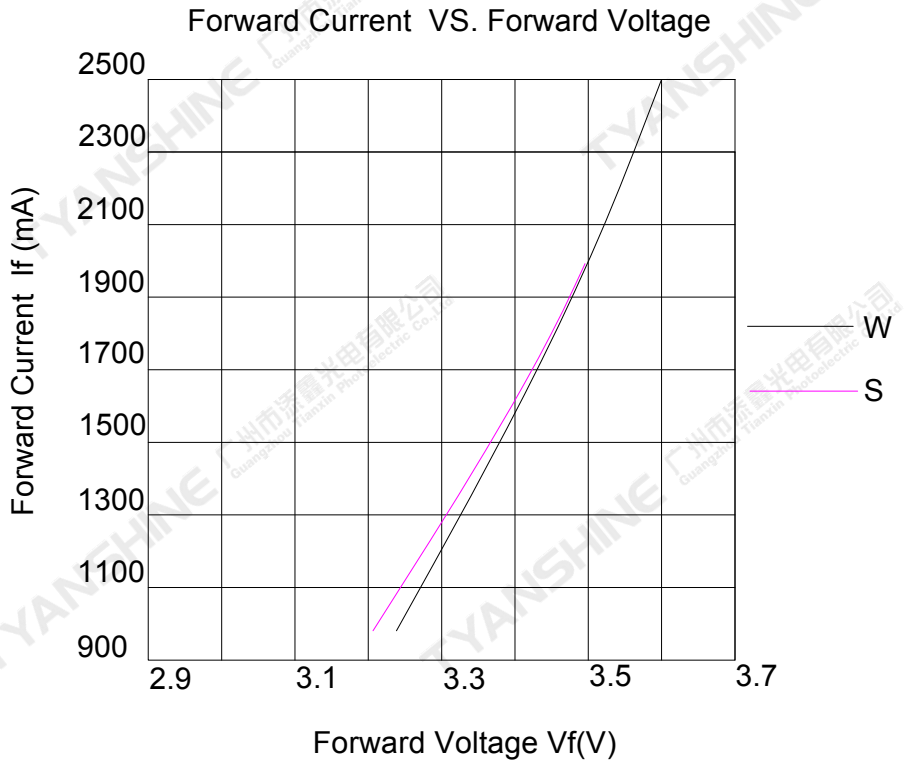
2.$\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

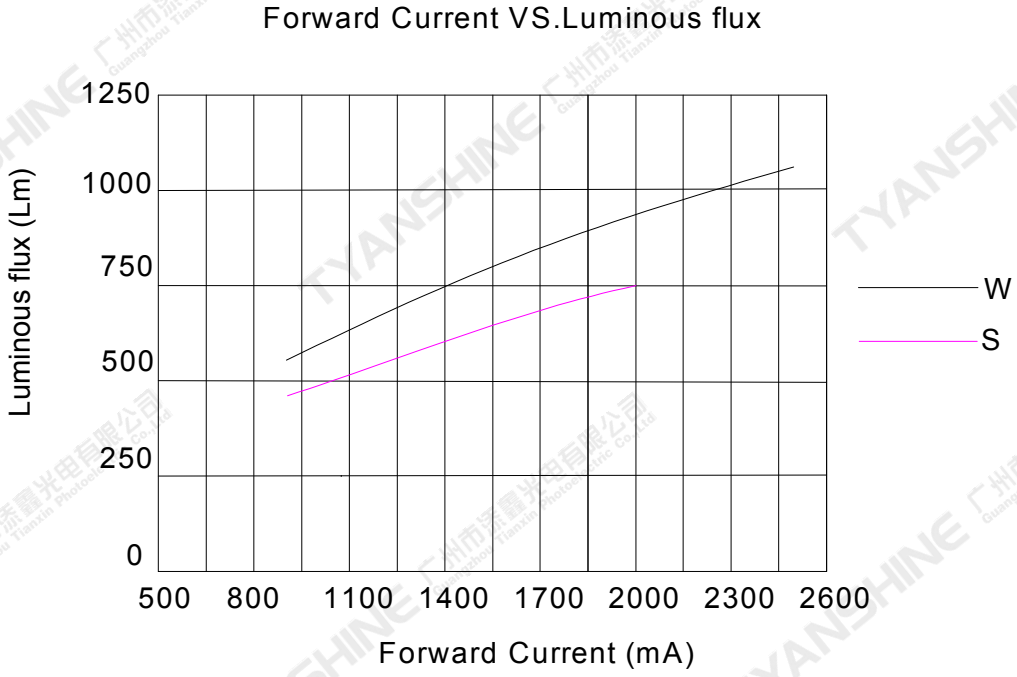
3.Luminous flux measurement tolerance:±15%.

4.Forward voltage measurement tolerance:±0.15V.

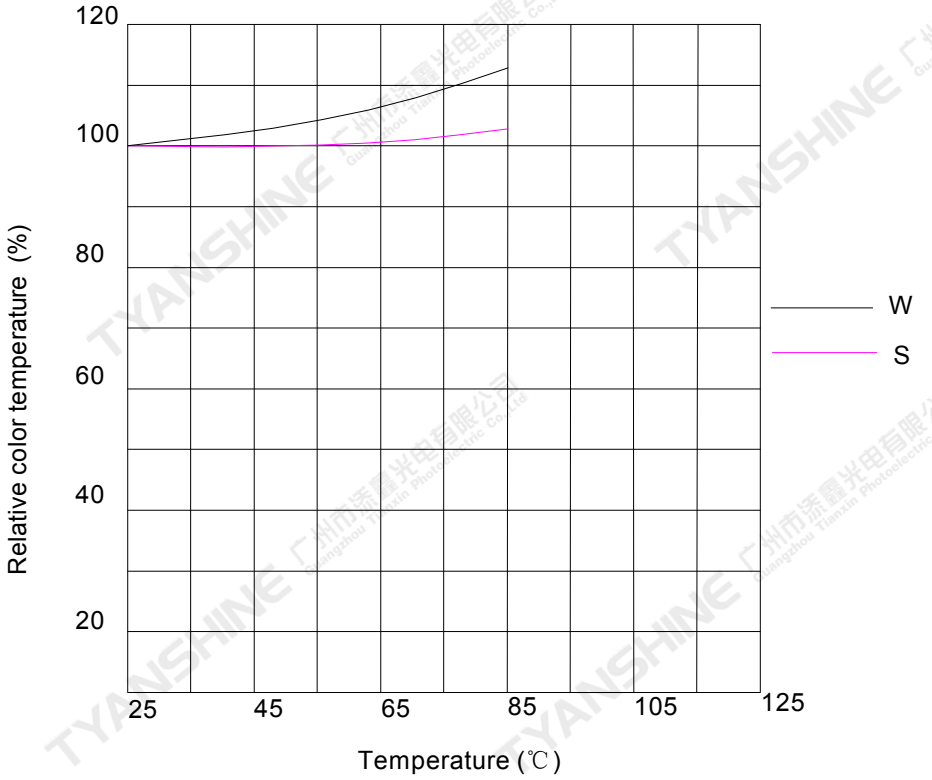
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

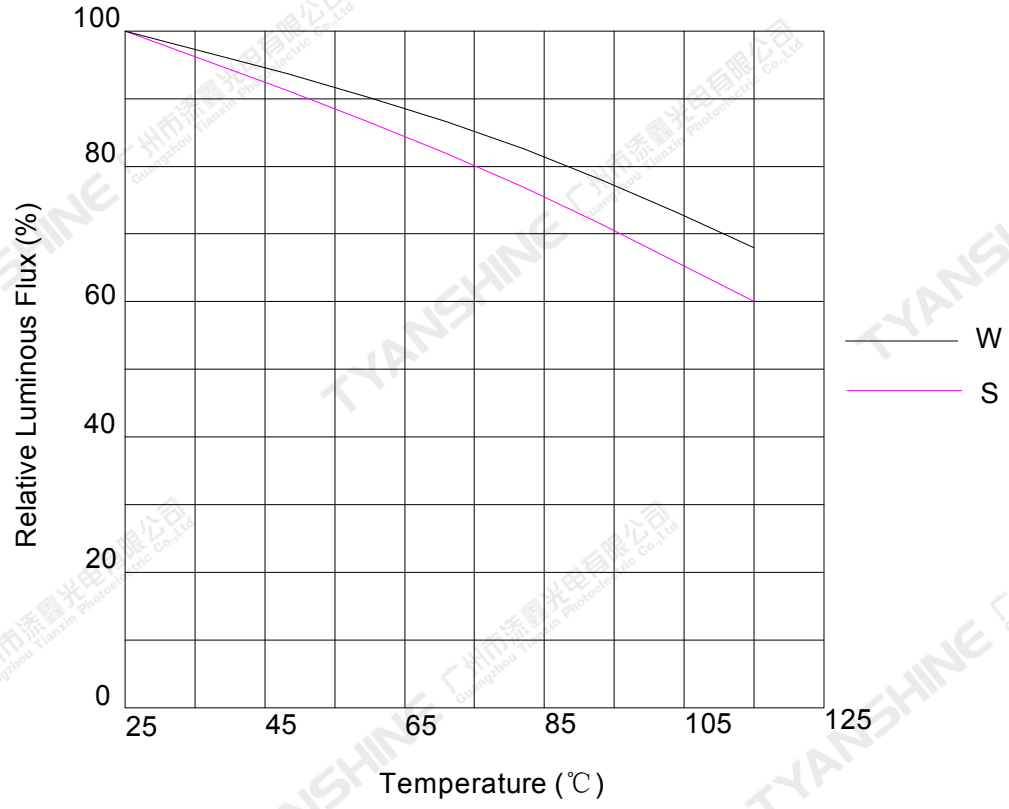




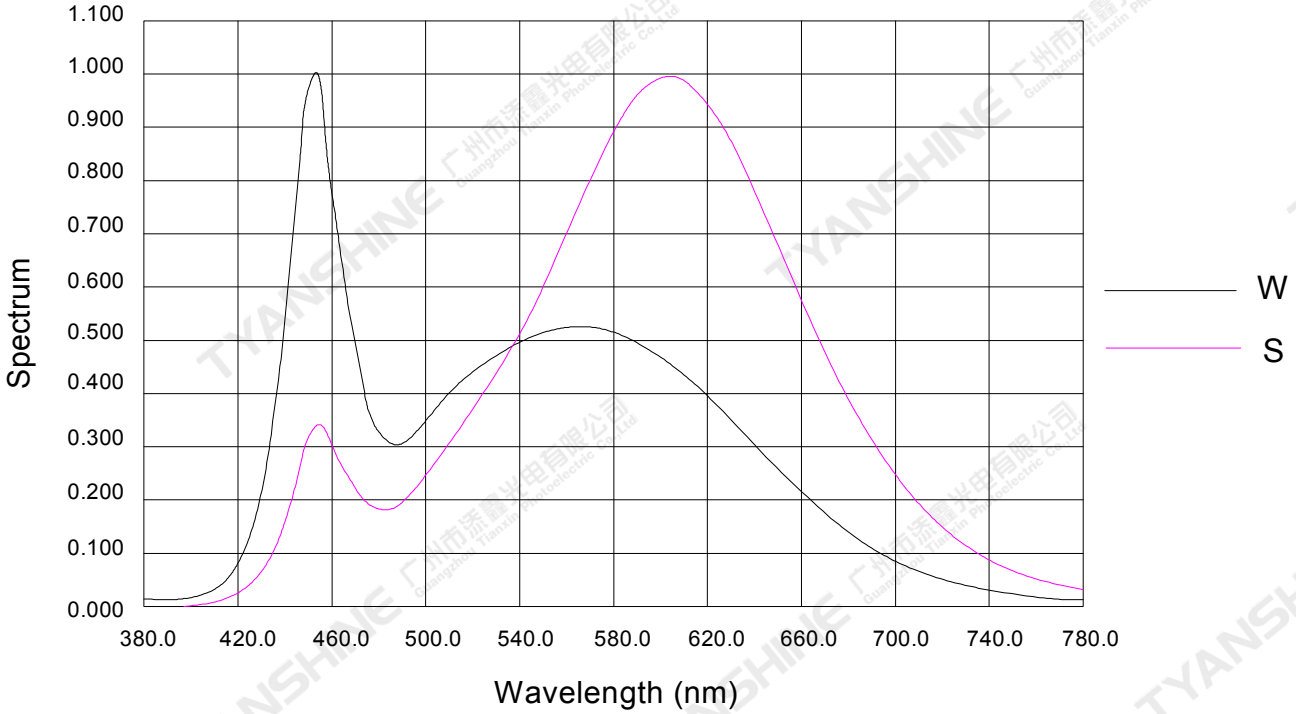
Temperature VS. Relative color temperature IF(w)=2.5A IF(s)=2.0A



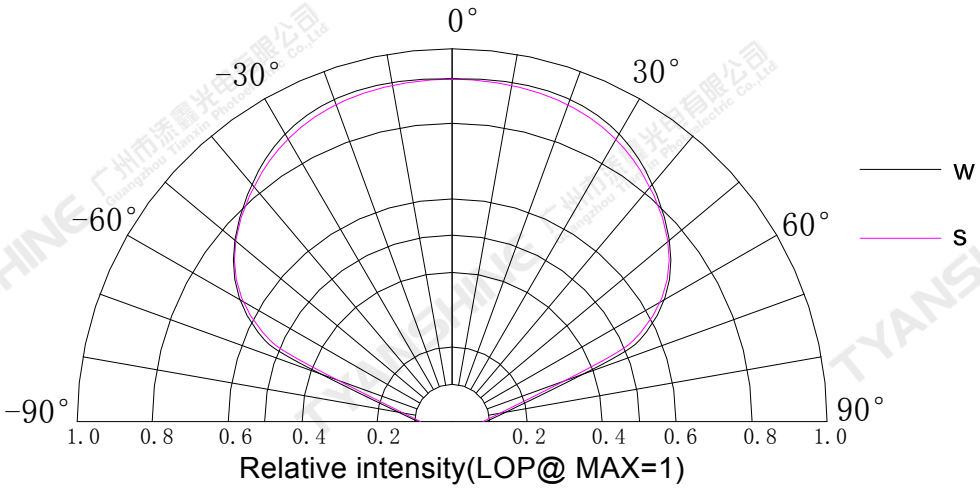
Temperature VS. Relative Luminous Flux IF(w)=2.5A IF(s)=2.0A



Relative Spectral Distribution



Beam Pattern



Notes:

1. 2θ 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 ± 5°.

Usage Precautions

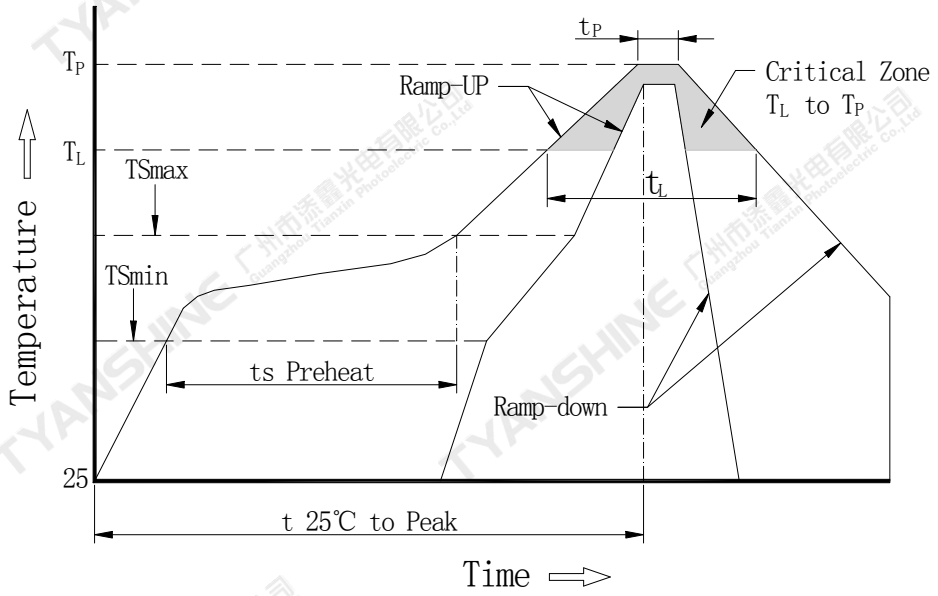
Storage Environment Condition

Temperature: 5℃ ~ 30℃ (41℉ ~ 86℉)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



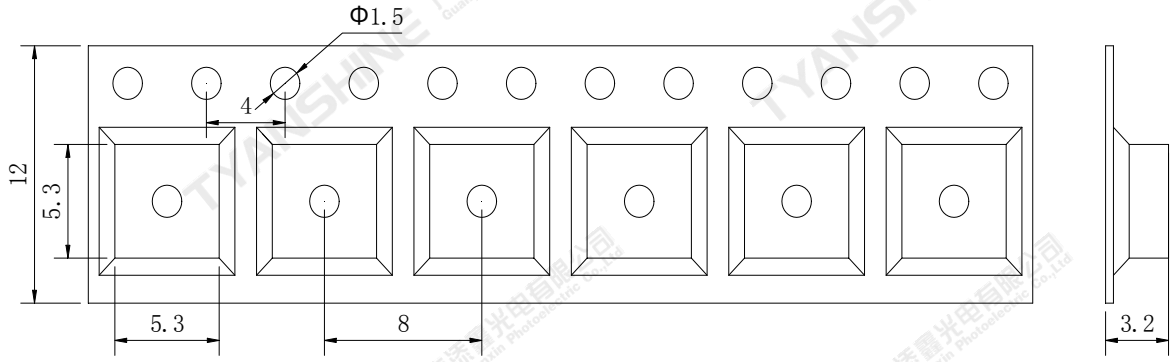
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (Ts_{max} to T_p)	3℃/second max.
Preheat: Temperature Min (Ts_{min})	100℃
Preheat: Temperature Max (Ts_{max})	150℃
Preheat: Time (Ts_{min} to Ts_{max})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183℃
Time Maintained Above: Time (T_L)	60-150 seconds
Peak/Classification Temperature (T_P)	225℃
Time Within 5℃ of Actual Peak Temperature (T_P)	10-30 seconds
Ramp-Down Rate	6℃/second max.
Time 25℃ to Peak Temperature	6 minutes max.

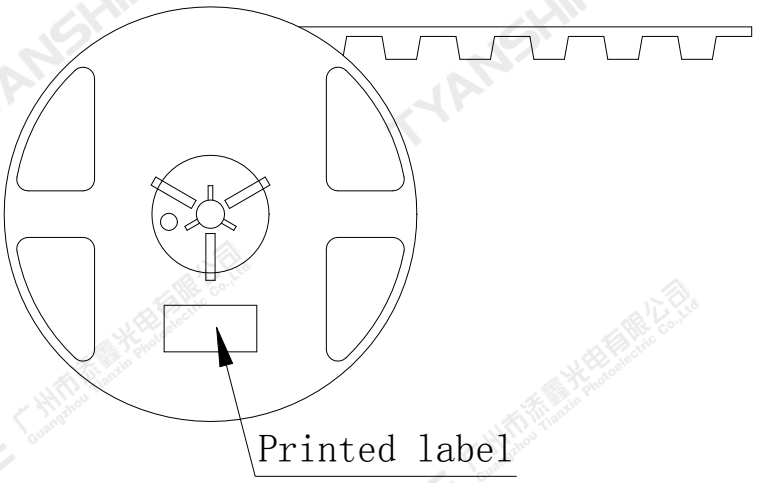
Note:

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.