TX-6065RGBW60FC120-NUVEZG-01

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under 4.0 A.

◆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:

◆Red: AlGaInP

◆Green: GaInN

◆Blue: GaN

◆White: GaN

Emitting Color:

◆Red

◆Green

◆Blue

◆white

Applications:

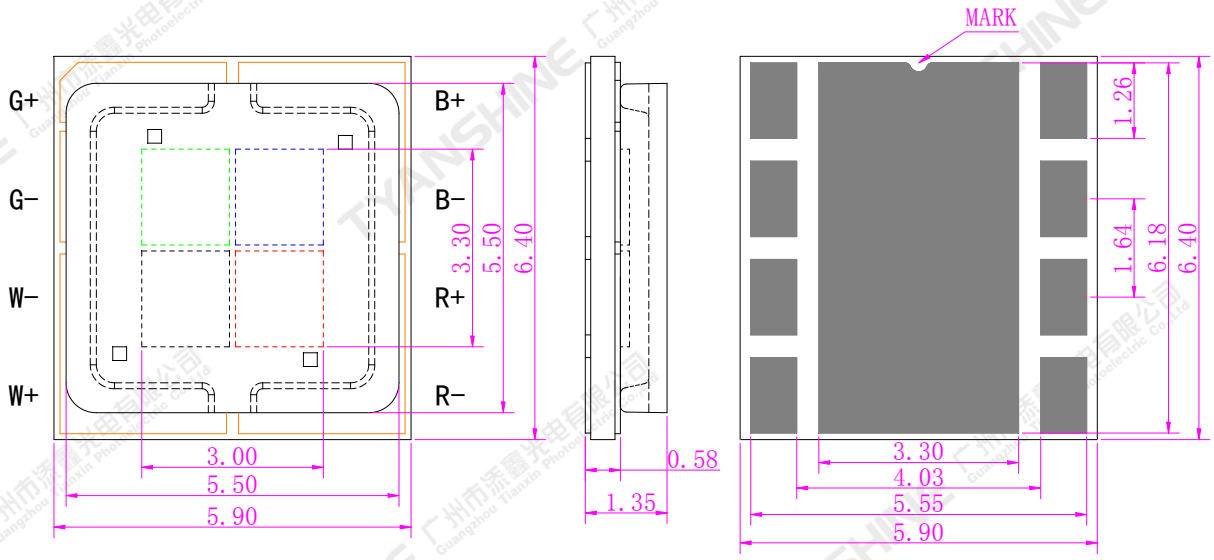
◆Entertainment lighting

◆Landscape lighting

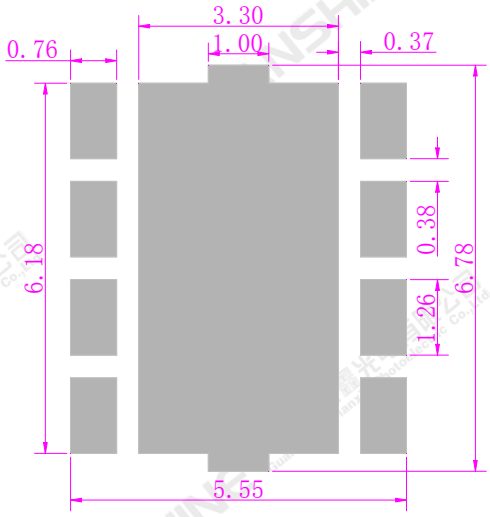
◆Commercial lighting

◆Decorative lighting

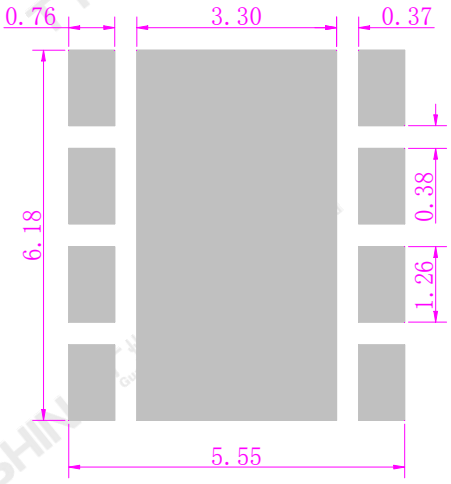
Package Dimensions:



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 ±0.1mm .

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol		Ratings	Unit
Forward Current	IF		4000	mA
Reverse Voltage	V_R		Not designed for reverse operation	V
Power Dissipation	P_D	R	12.8	W
		G	15.2	
		B	14.4	
		W	14.4	
Junction Temperature	Tj	R	115	℃
		G	150	
		B	150	
		W	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=4.0A	R	260	290	320	lm
			G	550	600	650	
			B	125	140	155	
			W	950	1100	1250	
Forward Voltage	V_f		R	2.6	2.9	3.2	V
			G	3.4	3.6	3.8	
			B	3.2	3.4	3.6	
			W	3.2	3.4	3.6	
Dominant Wavelength	λd		R	624	627	630	nm
			G	517	520	523	
			B	450	454	458	
Peak-emission Wavelength	λp		R	640	644	648	nm
			G	514	516	519	
			B	446	448	450	
Spectral Line Half-Width	△λ		R	15	20	25	nm
			G	35	40	45	
			B	15	20	25	
			W	20	25	30	
Correlated Colour Temperature	CCT	If=1.0A	W	5700	6150	6600	K
		If=4.0A	W	5910	6470	6970	
Reverse Current	I_R	—	—	—	—	2	μA
Viewing Angle at 50％IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	—	—	0.35	—	K/W
Temperature Coefficient of Voltage	V△F/T	If=4.0A	—	—	-2.5	—	mV/℃

White Color coordinate filing (IF=1.0A Tc=25℃)

Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
2S1	5700	6000	0.3272	0.3612	0.3204	0.3569	0.3196	0.3663	0.3271	0.3714
1T1	6000	6350	0.3206	0.3539	0.3132	0.3493	0.3122	0.3580	0.3199	0.3632
1S1	6350	6600	0.3134	0.3473	0.3086	0.3443	0.3074	0.3524	0.3125	0.3560

Notes:

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

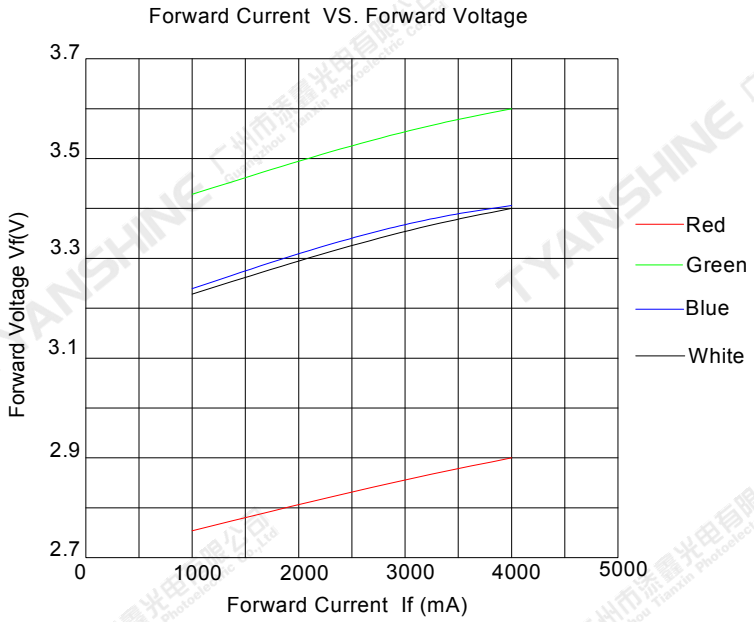
2.$\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

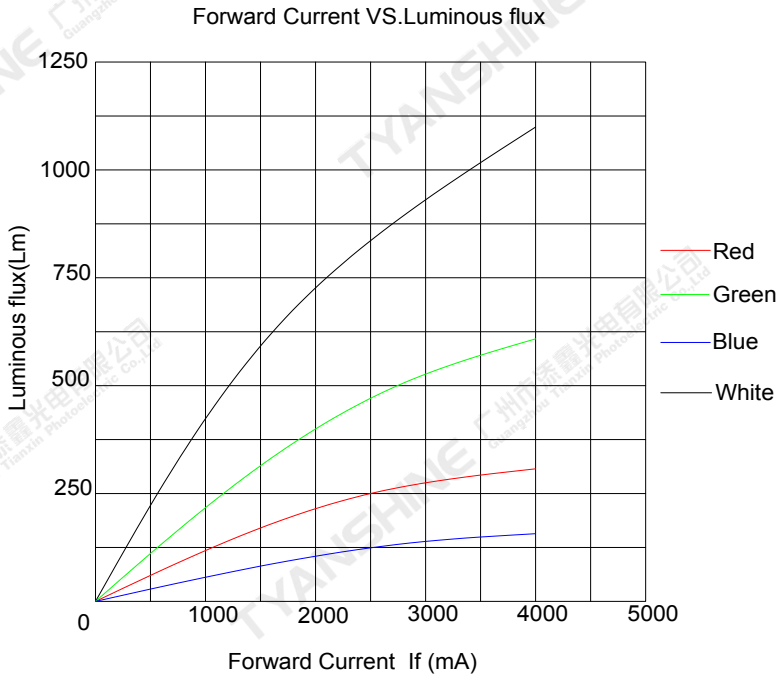
3.Luminous flux measurement tolerance:±15%.

4.Forward voltage measurement tolerance:±0.15V.

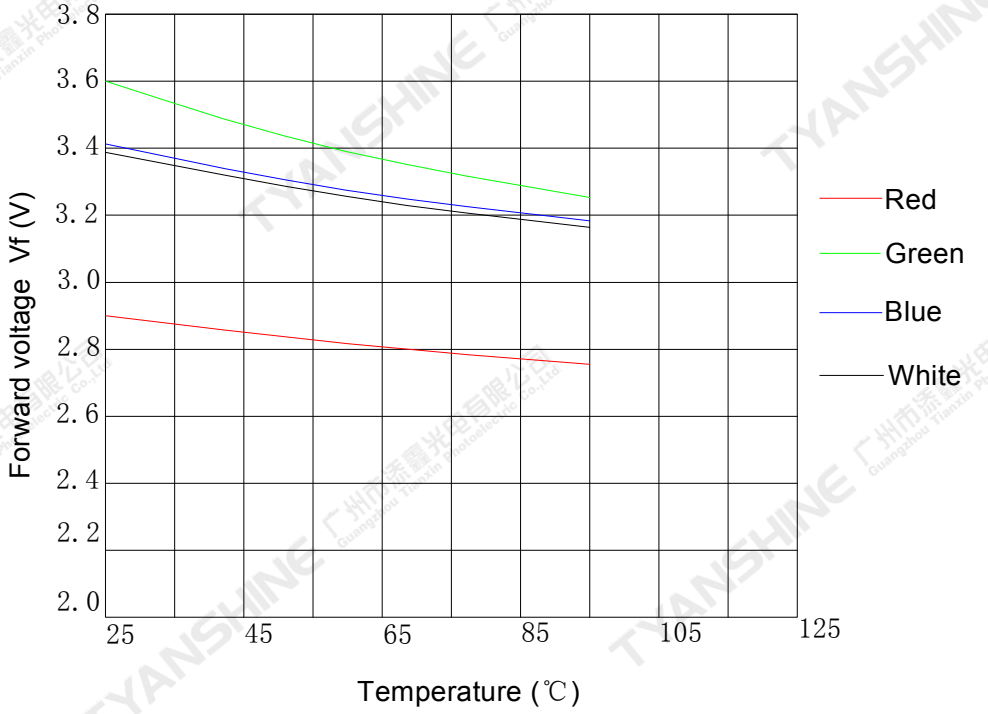
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

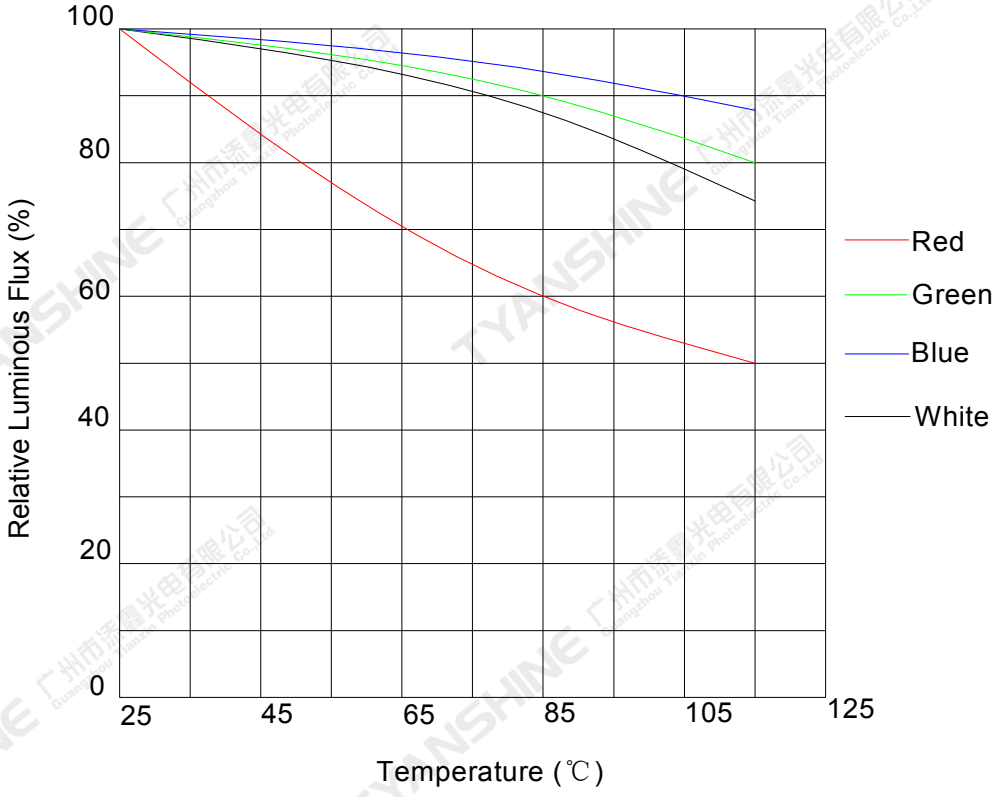




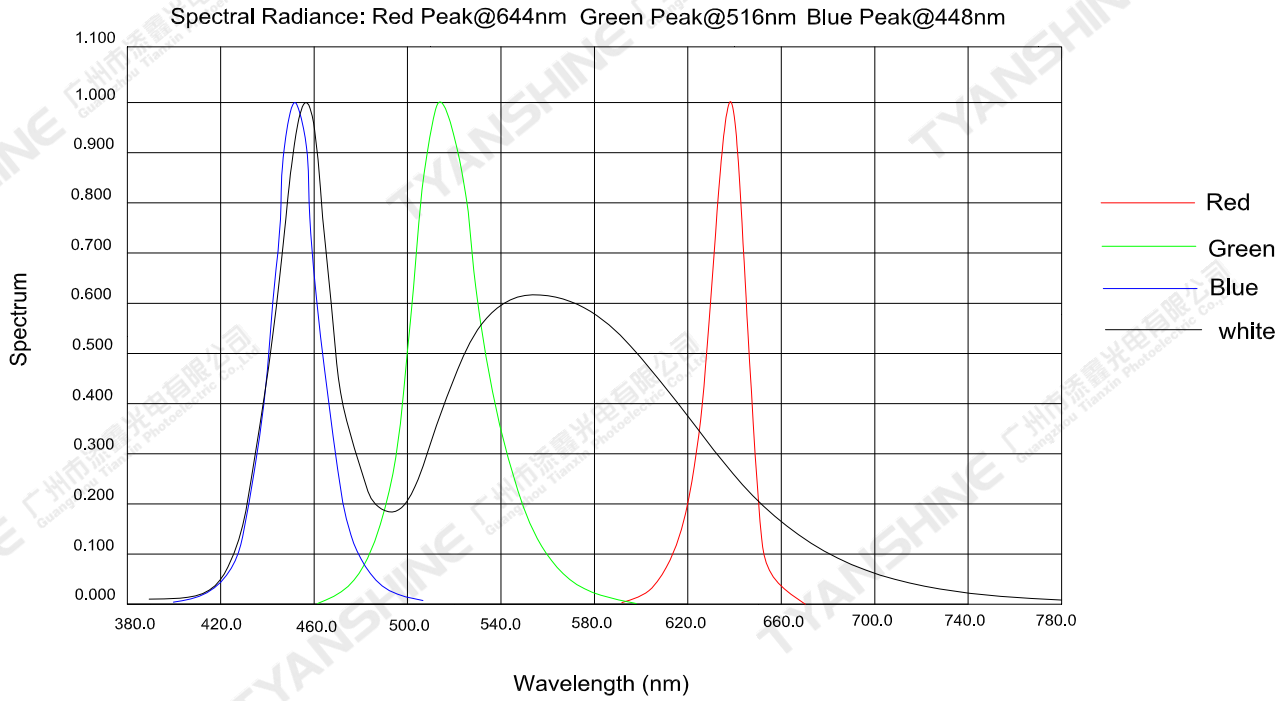
Temperature VS. Forward Voltage IF=4000mA

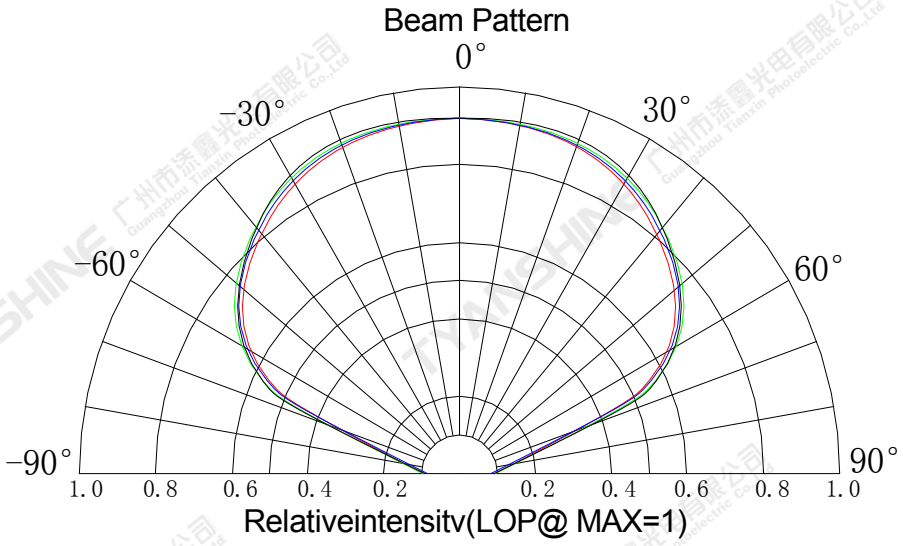


Temperature VS. Relative Luminous Flux (IF=4000mA)



Relative Spectral Distribution





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

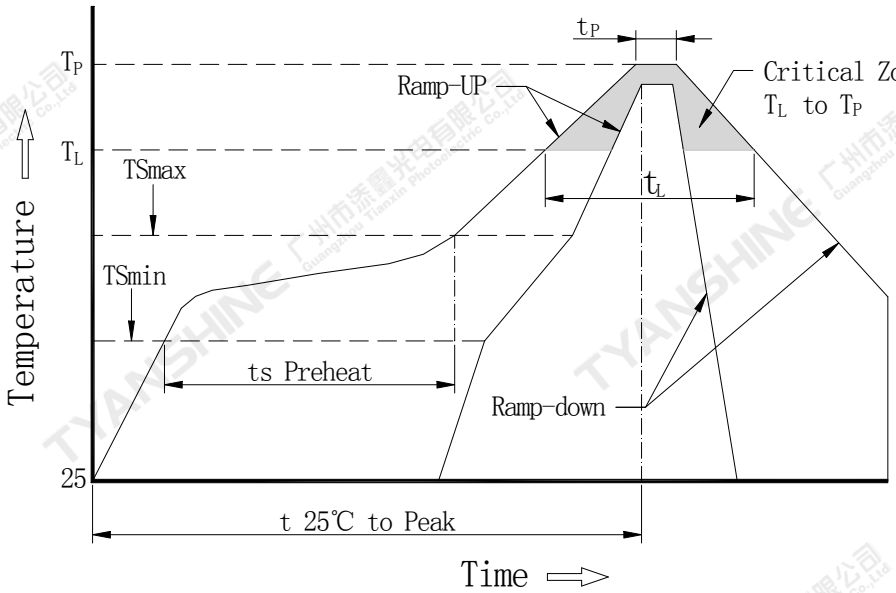
Storage Environment Condition

Temperature: 5℃ ~ 30℃ (41℉ ~ 86℉)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



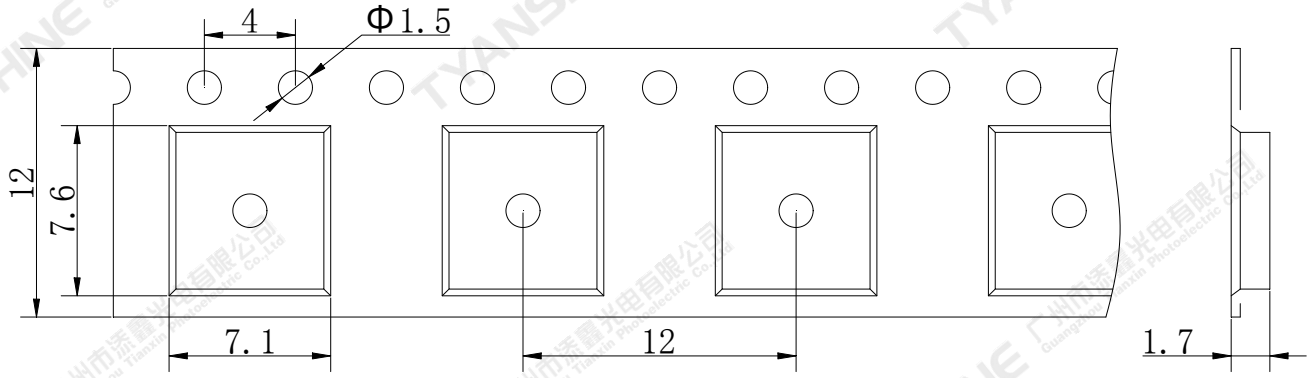
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (Ts_{max} to T_p)	3℃/second max.
Preheat: Temperature Min (Ts_{min})	100℃
Preheat: Temperature Max (Ts_{max})	150℃
Preheat: Time (Ts_{min} to Ts_{max})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183℃
Time Maintained Above: Time (T_L)	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.

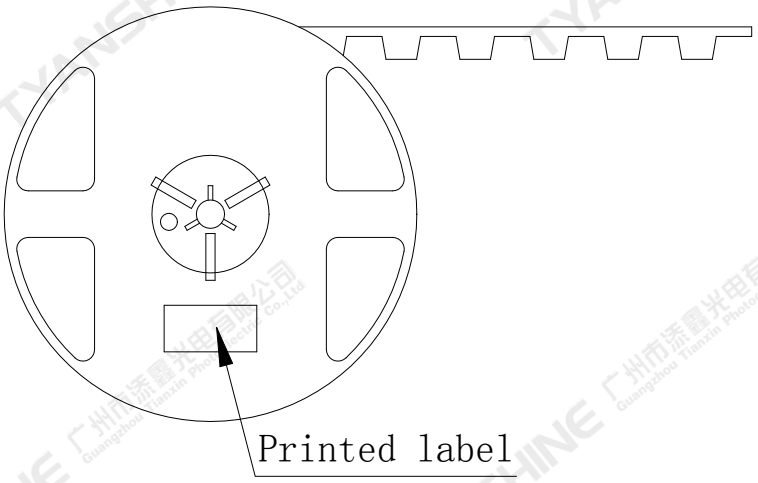
Note:

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

Dimensions For Cannulation And Packaging

Quantity:1000PCS





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.