TX-3535RGB3FC120-OGVCND34-07

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under 350mA

◆High luminous output

◆No UV

Chip Material:

◆Red: AlGaInP

◆Green: GaNIn

◆Blue: GaNIn

Lens Color:

◆Water clear

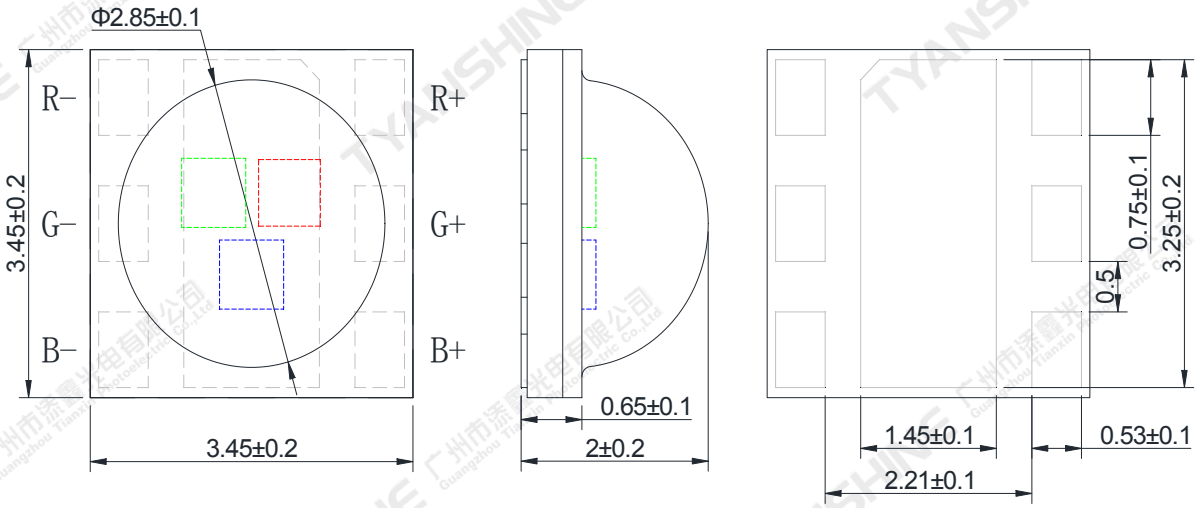
Applications:

◆Stage lighting

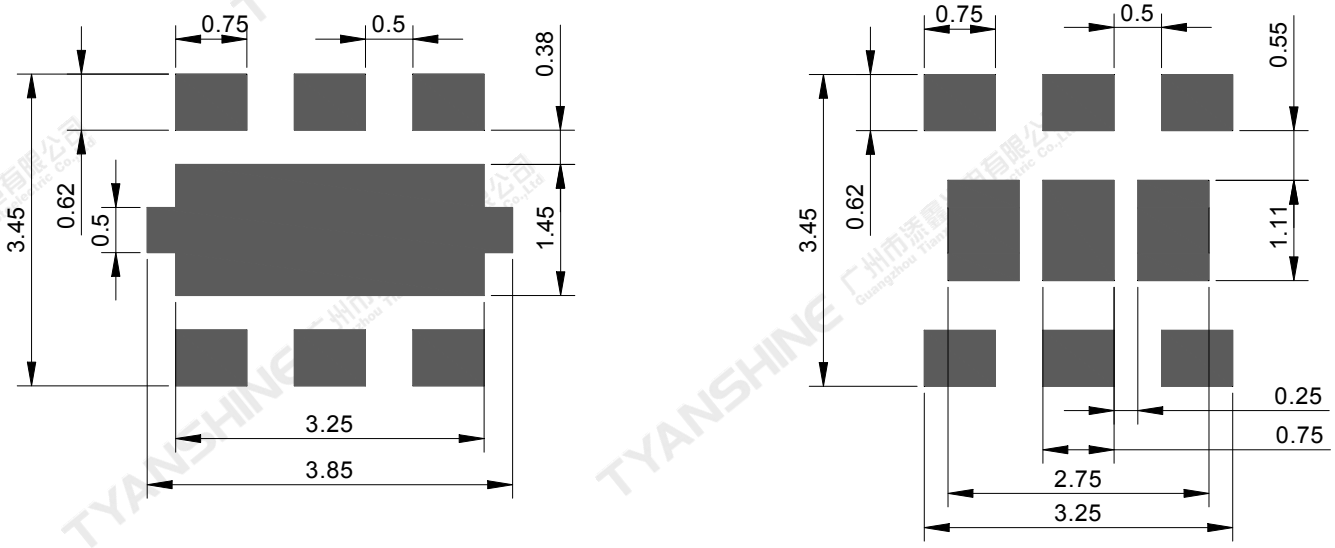
◆Garden lighting

◆Landscape 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		Max Ratings	Unit
Forward Current	IF		350	mA
Reverse Voltage	V_R		5	V
Power Dissipation	P_D	R	910	mW
		G	1260	
		B	1260	
Junction Temperature	Tj	R	115	℃
		G	150	
		B	150	
Electrostatic Discharge Threshold (ESD)	ESD		ESD sensitive device	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=300mA	R	43	50	57	lm
			G	63	70	77	
			B	17	21	25	
Dominant Wavelength	λd		R	622	624	626	nm
			G	524	526	528	
			B	469	471	473	
Peak-emission Wavelength	λp		R	632	634	636	nm
			G	519	521	523	
			B	464	466	468	
Spectral Line Half-Width	△λ		R	10	15	20	nm
			G	35	40	45	
			B	20	25	30	
Forward Voltage	V_f		R	2.0	2.2	2.6	V
			G	2.8	3.2	3.5	
			B	2.8	3.2	3.5	
Reverse Current	I_R	V_R=5V	R	—	—	2	μA
			G	—	—	2	
			B	—	—	2	
Viewing Angle at 50％IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	R	—	14	—	K/W
			G	—	14	—	
			B	—	14	—	
			Total thermal resistance	—	7.5	—	
Temperature Coefficient of Voltage	V△F/T	If=300mA	R	—	-2.7	—	mV/℃
			G	—	-3.9	—	
			B	—	-1.6	—	

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.The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single

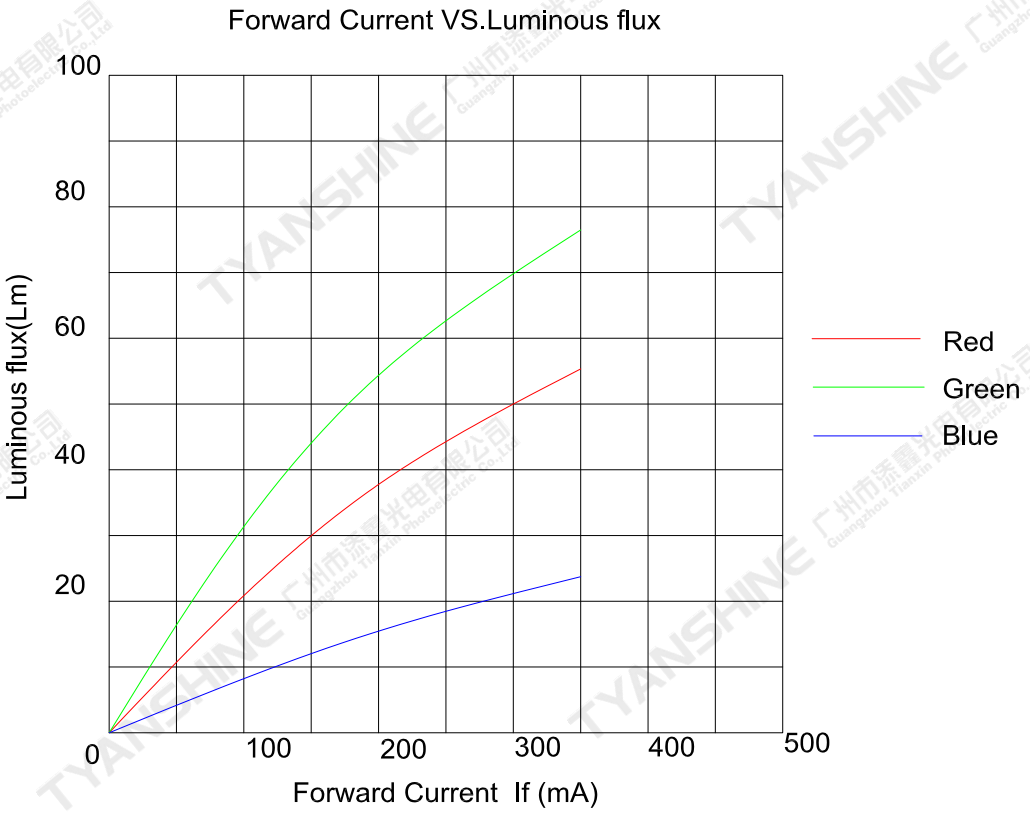
wavelength which defines the color of the device.

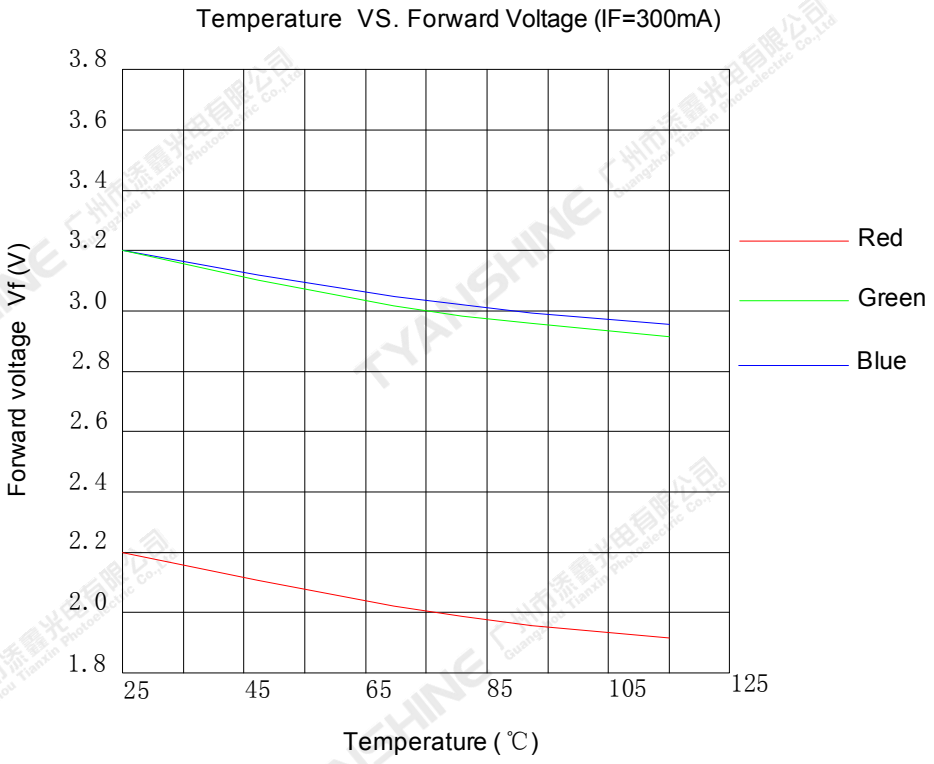
4.Luminous flux measurement tolerance:±15%.

5.Forward voltage measurement tolerance:±0.15V.

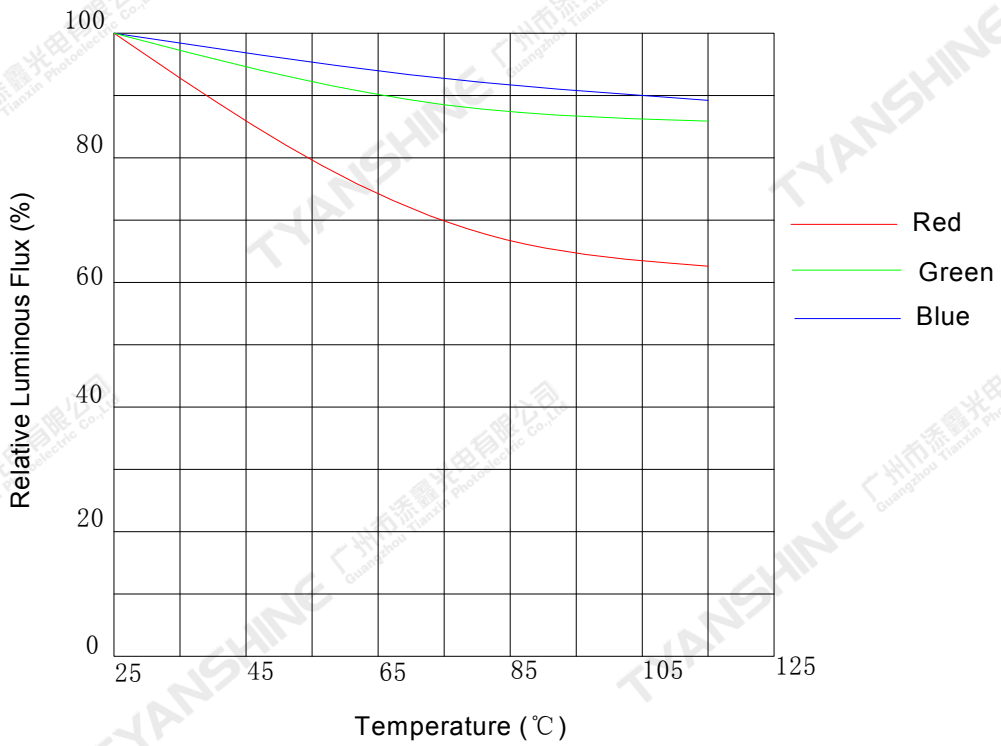
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

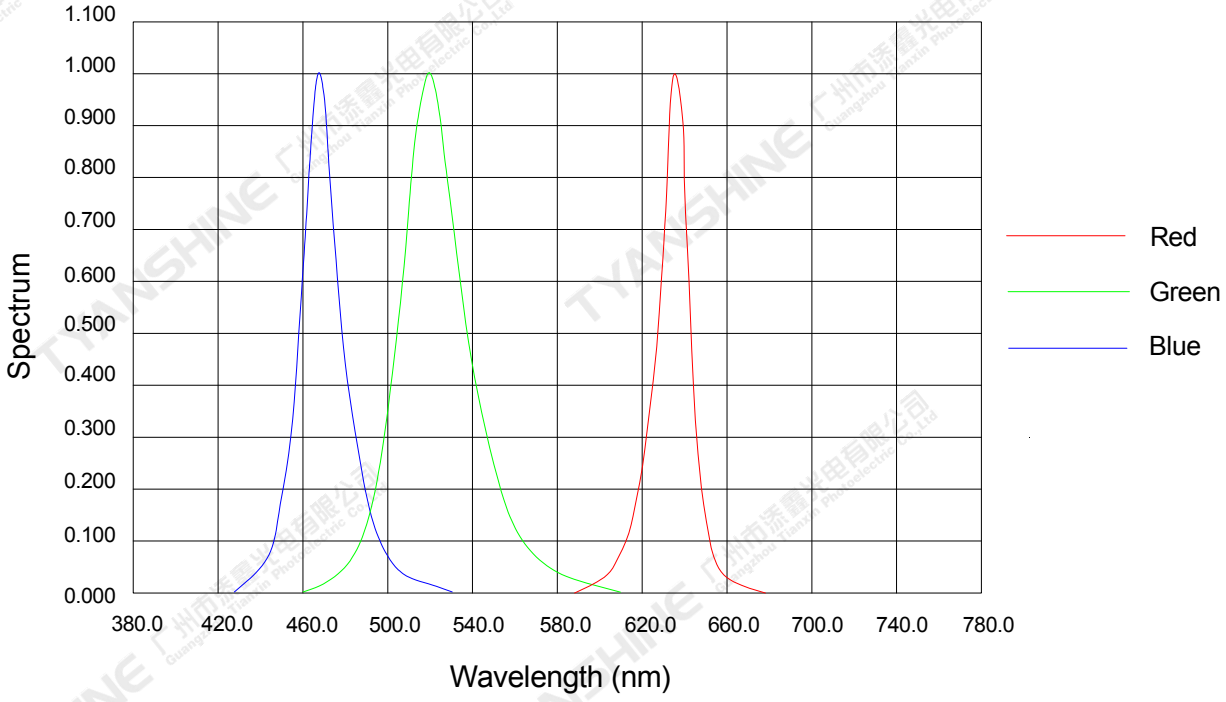

Forward Current VS.Luminous flux
Luminous flux(Lm)
100
80
60
40
20
0
100
200
300
400
500
Forward Current If (mA)
Red
Green
Blue

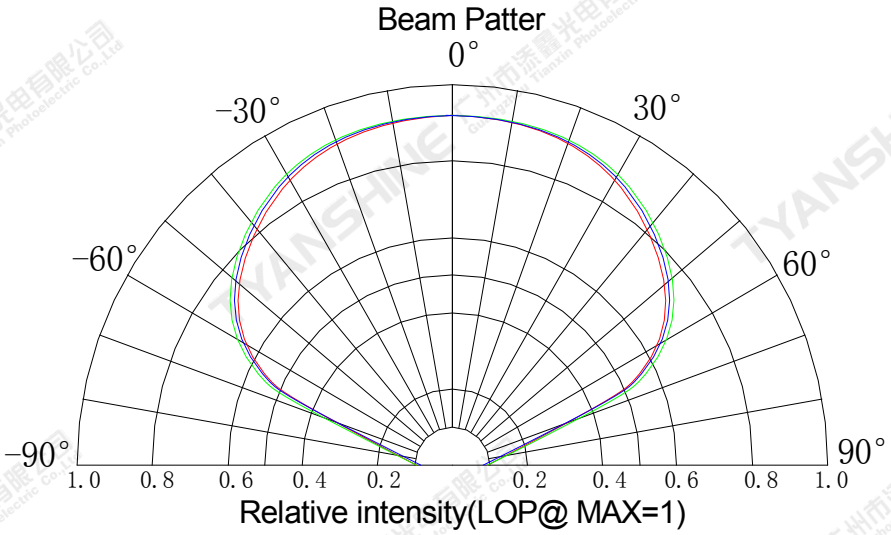

Temperature VS. Forward Voltage (IF=300mA)
Forward voltage Vf (V)
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
25
45
65
85
105
125
Temperature (℃)
Red
Green
Blue

Temperature VS. Relative Luminous Flux (IF=300mA)



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

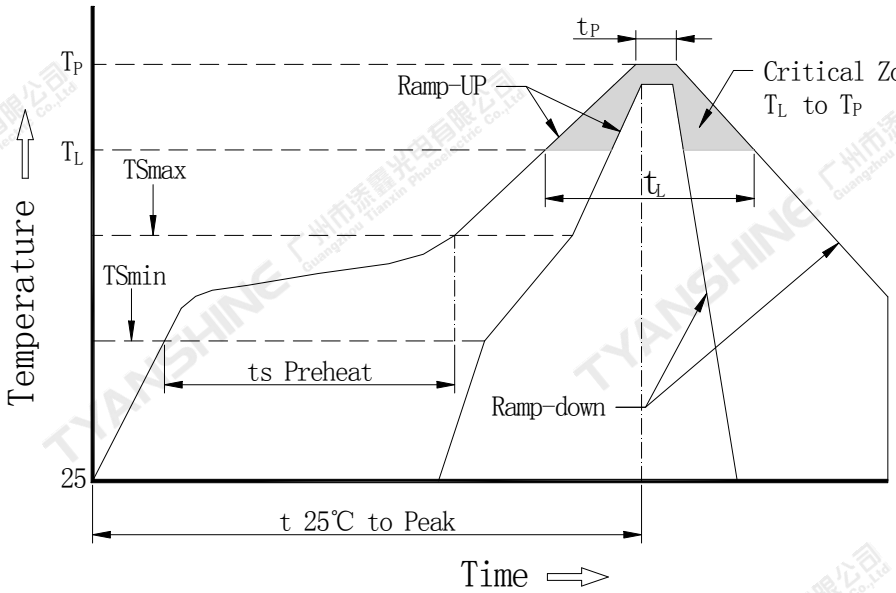
Storage Environment Condition

Temperature: 5℃ ~ 30℃ (41℉ ~ 86℉)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



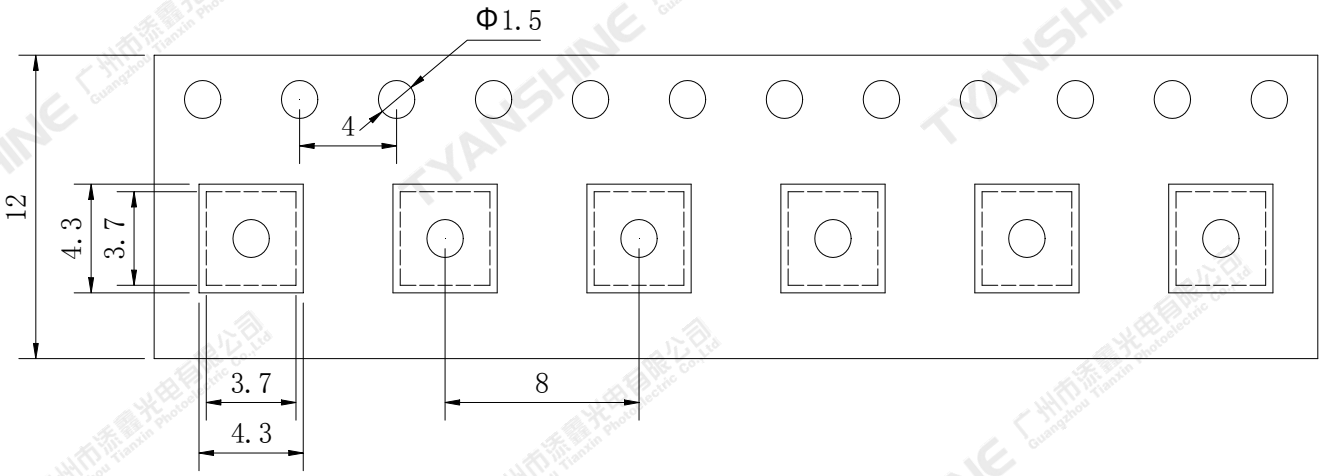
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate (Ts_{max} to T_p)	3℃/second max.
Preheat: Temperature Min (Ts_{min})	100℃
Preheat: Temperature Max (Ts_{max})	150℃
Preheat: Time (Ts_{min} to Ts_{max})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183℃
Time Maintained Above: Time (T_L)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

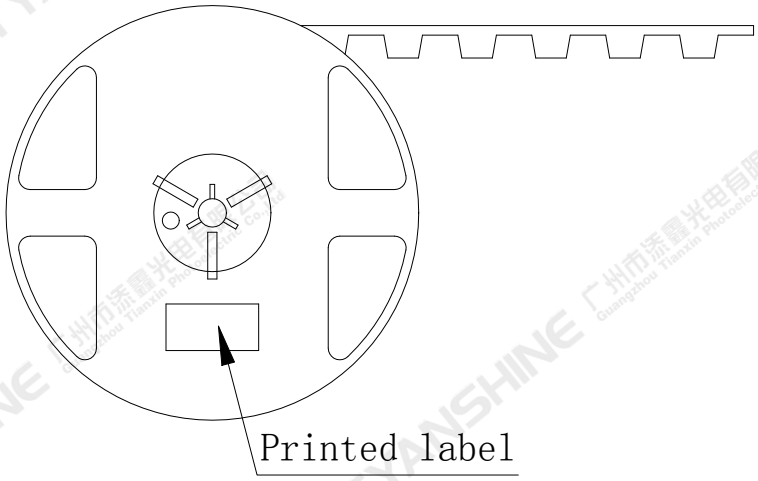
Note:

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, Irresponsible of the Company.