TX-6070RGBYLWP25FC120-NUVCNG-02A

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under YP:0.7A RGBLW:1.0 A

◆High luminous output

◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

◆Red:AlInGaP

◆Green: GaInN

◆Blue:GaInN

◆ Yellow:AlInGaP

◆ Lime:GaInN

◆ White:GaInN

◆Purple:GaInN

Emitting Color:

◆Red

◆Green

◆Blue

◆Yellow

◆Lime

◆ White

◆Purple

Applications:

◆Auxiliary lighting

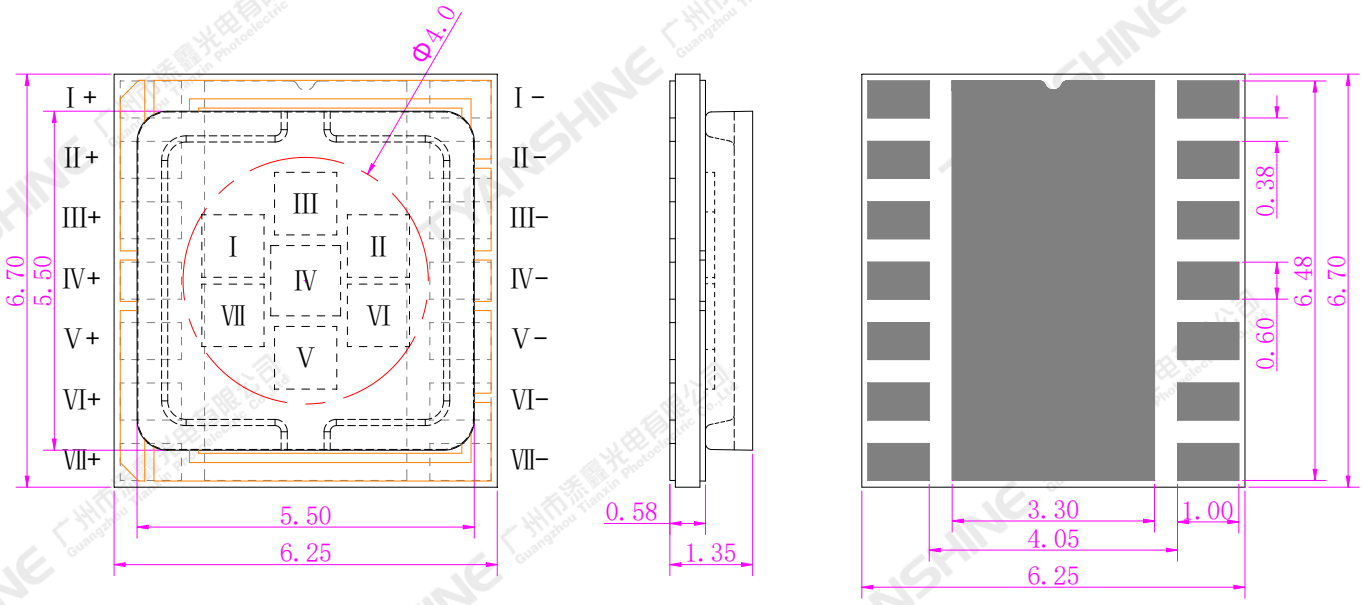
◆Ambient lighting

◆Architectural lighting

◆Entertainment lighting

◆Stage lighting

Package Dimensions:



Ⅰ:Red Ⅱ：Blue Ⅲ：Lemon Ⅳ：Purple Ⅴ：White Ⅵ：Green Ⅶ：Yellow.

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	R	1.0	A
		G	1.2	
		B	1.2	
		Y	0.8	
		L	1.3	
		W	1.2	
		P	0.7	
Reverse Voltage	V_R		Not designed for reverse operation	V
Power Dissipation	P_D	R	2.8	W
		G	4.32	
		B	4.32	
		Y	2.56	
		L	4.94	
		W	4.56	
		P	2.66	
Junction Temperature	Tj	R	115	℃
		G	150	
		B	150	
		Y	150	
		L	150	
		W	150	
		P	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	T_{stg}		-20~+70	℃
Operation Temperature	T_{opr}		-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（YP）=700mA If（RGBLW）=1000mA	R	90	100	110	lm
			G	215	235	255	
			B	35	40	50	
			Y	50	65	80	
			L	230	245	260	
			W	230	265	300	
Radiant Flux	Φe		P	1000	1250	1500	mW
Dominant Wavelength	λd		R	618	623	628	nm
			G	518	523	528	
			B	450	455	460	
			Y	590	595	600	
Correlated Colour Temperature	CCT		L	3850	3900	4000	K
			W	6000	6300	6800	
Peak-emission Wavelength	λp		R	625	630	635	nm
			G	510	515	520	
			B	445	450	455	
			Y	595	600	605	
			P	390	395	400	
Forward Voltage	V_f		R	2.0	2.4	2.8	V
			G	2.8	3.2	3.6	
			B	2.8	3.2	3.6	
			Y	2.8	3.0	3.2	
			L	3.2	3.5	3.8	
			W	3.2	3.5	3.8	
			P	3.2	3.5	3.8	
Reverse Current	I_R	V_R=5V	—	—	—	—	μA
Viewing Angle at 50％IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	R	—	4.2	—	K/W
			G	—	4.2	—	
			B	—	4.2	—	
			Y	—	4.2	—	
			L	—	4.2	—	
			W	—	4.2	—	
			P	—	4.0	—	

Notes:

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

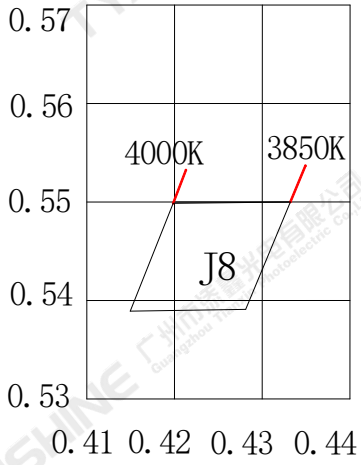
2.$\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

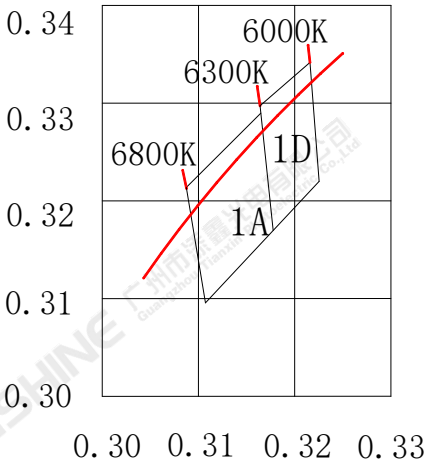
3.The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

4.Luminous flux measurement tolerance:±15%.

5.Forward voltage measurement tolerance:±0.15V.

White light Color coordinate filing Tc=25°C,IF=1.0A

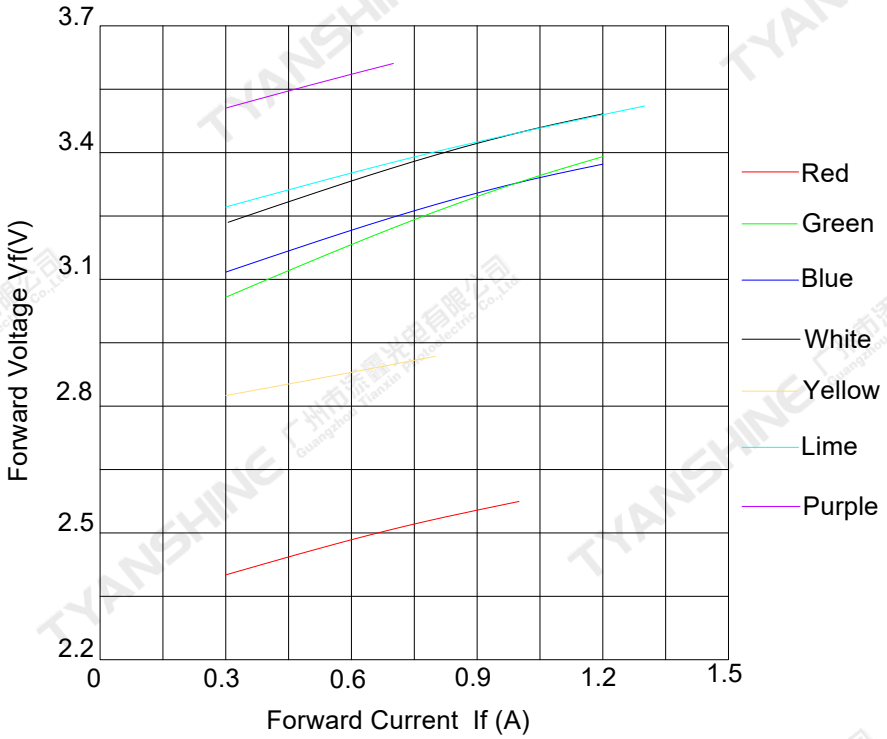




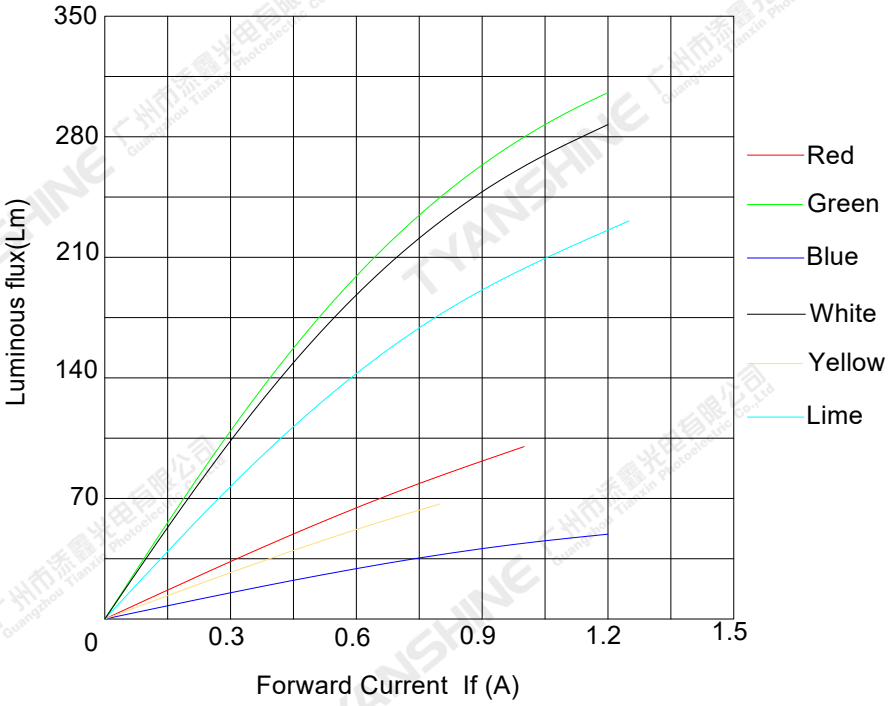
Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
J8	3850K	4000K	0.4281	0.5391	0.4332	0.55	0.4198	0.5499	0.4149	0.5389
1D	6000K	6300K	0.3225	0.322	0.3216	0.3342	0.3164	0.3297	0.3178	0.317
1A	6300K	6800K	0.3178	0.317	0.3165	0.329	0.3087	0.3214	0.3107	0.3096

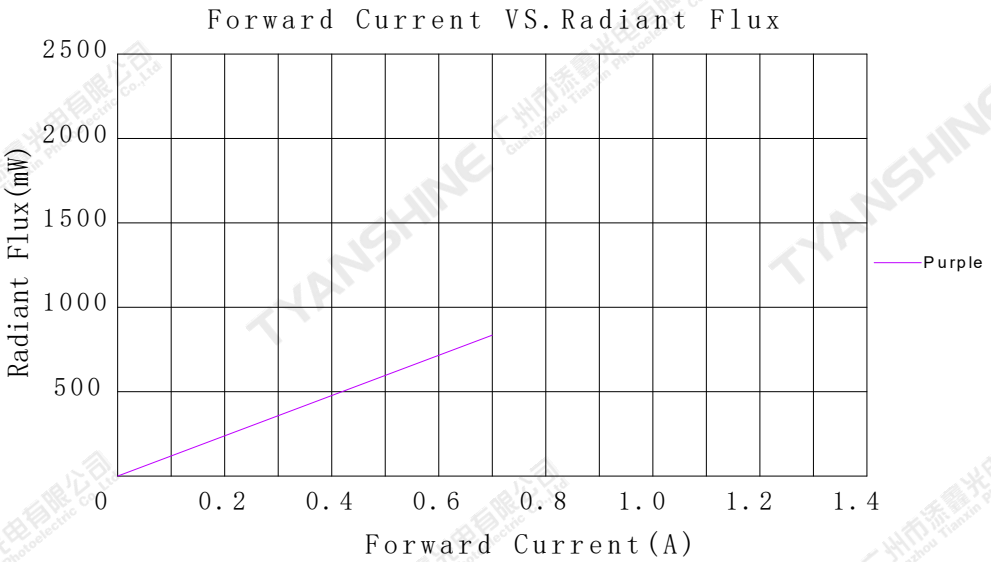
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

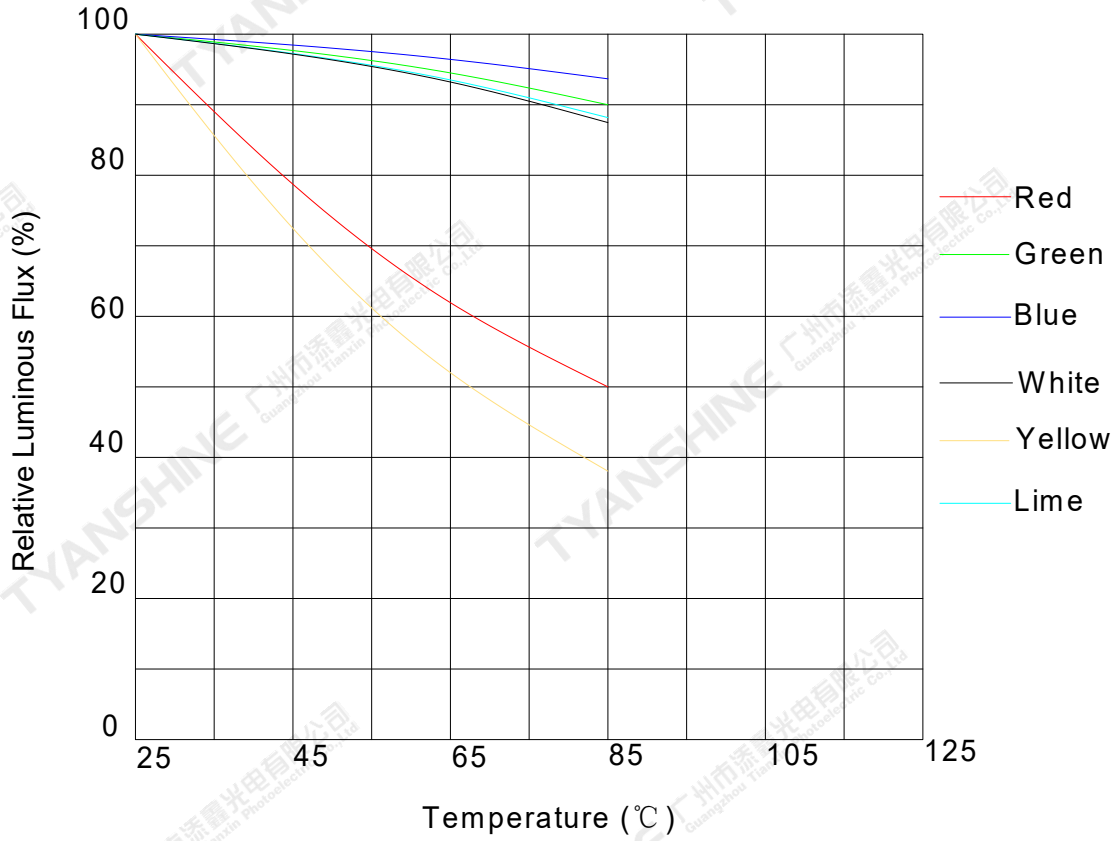


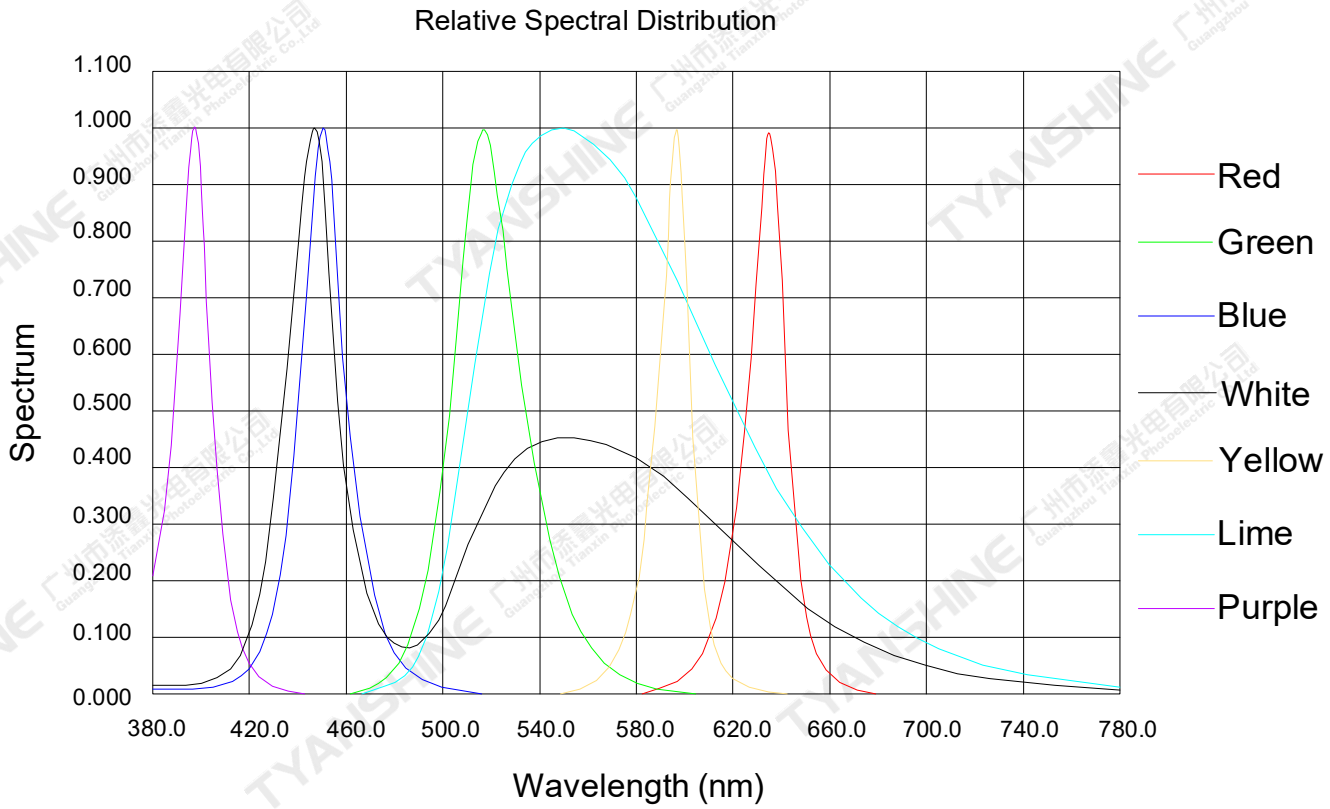
Forward Current VS.Luminous flux

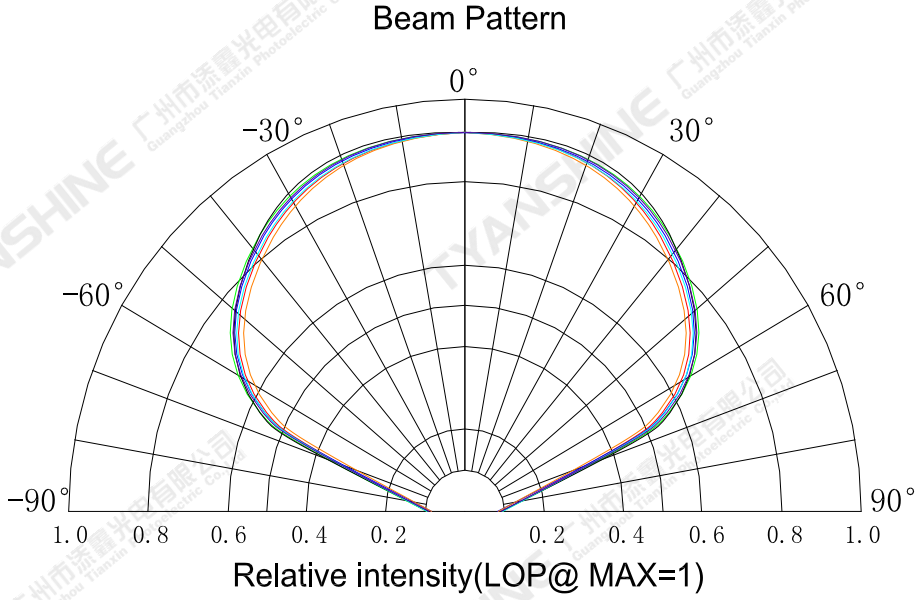




Temperature VS. Relative Luminous Flux ($IF_{(Y)}$=0.7A;$IF_{(RGBWL)}$=1.0A)







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

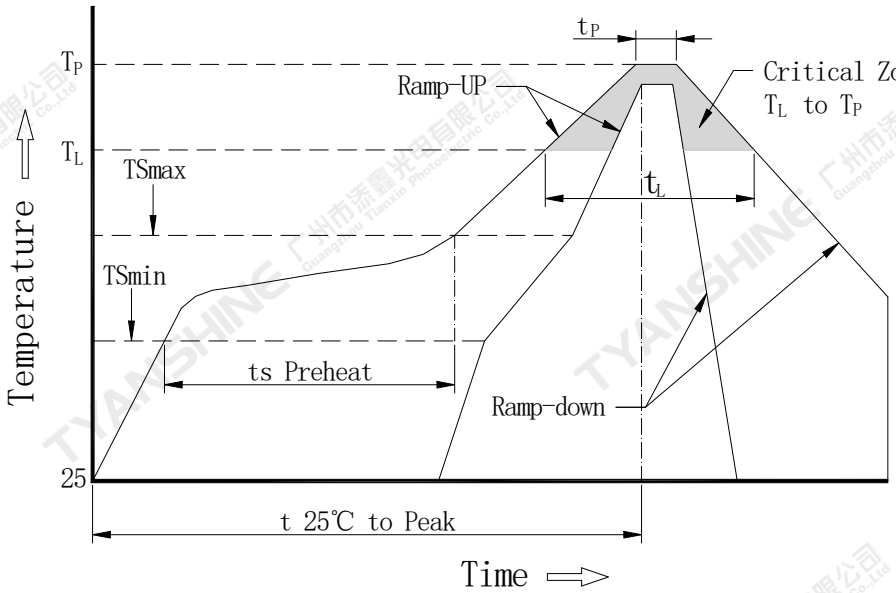
Storage Environment Condition

Temperature: 5℃ ~ 30℃ (41℉ ~ 86℉)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



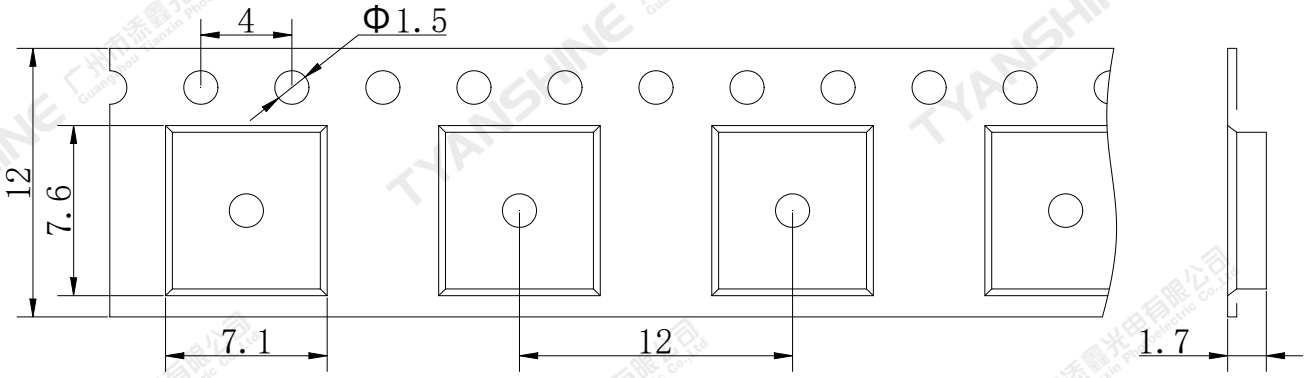
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (Ts_{max} to T_p)	3℃/second max.
Preheat: Temperature Min (Ts_{min})	100℃
Preheat: Temperature Max (Ts_{max})	150℃
Preheat: Time (Ts_{min} to Ts_{max})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183℃
Time Maintained Above: 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.

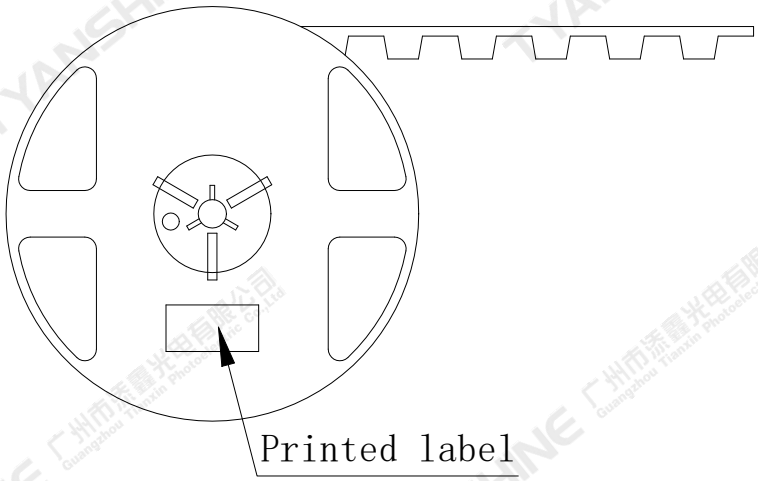
Note:

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.