

TX-1212RGBL150FC120-NUVENG-01A

PRODUCT SPECIFICATION

Features:

- ◆ 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
- ◆ Lemon light: GaN

Emitting Color:

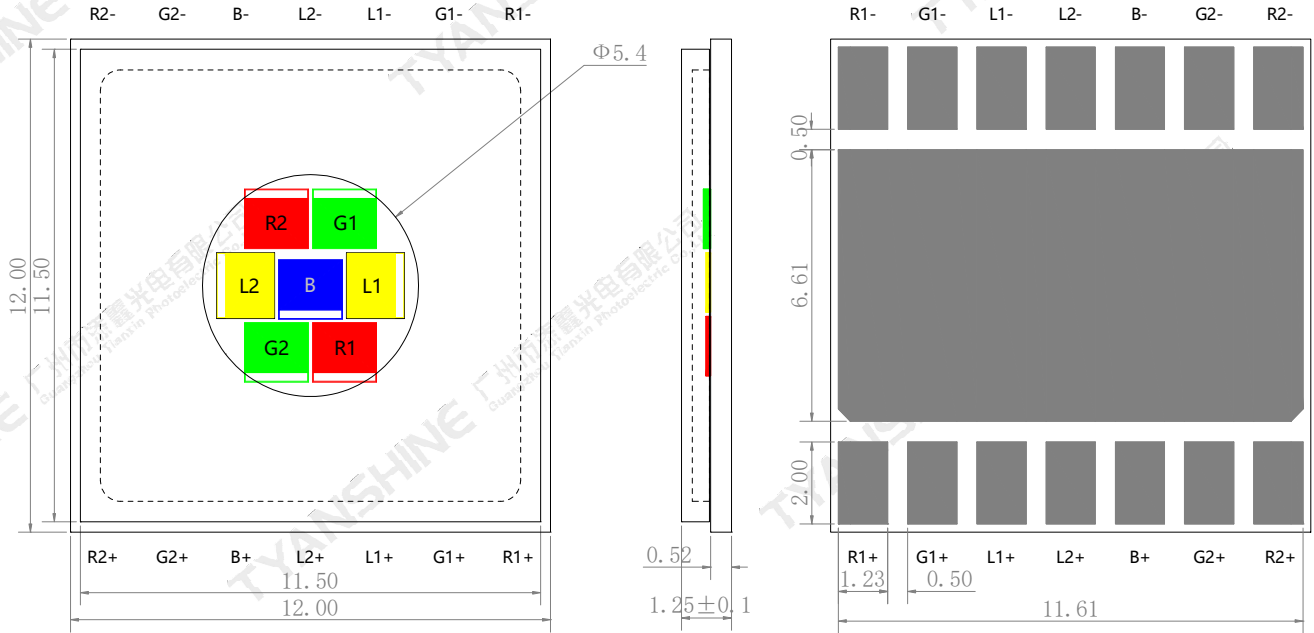
- ◆ Red (R1/R2)
- ◆ Green (G1/G2)
- ◆ Blue (B)
- ◆ Lemon light (L1/L2)

Applications:

- ◆ Entertainment lighting
- ◆ Landscape lighting
- ◆ Commercial lighting
- ◆ Decorative lighting

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Package Dimensions:



Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are ± 0.1 mm .

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Ratings	Unit	
Forward Current	IF	R1	5.0	A
		R2	5.0	
		G1	7.0	
		G2	7.0	
		B	7.0	
		L1	7.0	
		L2	7.0	
Reverse Voltage	V _R	Not designed for reverse operation	V	
Power Dissipation	P _D	R1	16	W
		R2	16	
		G1	26	
		G2	26	
		B	26.6	
		L1	26.6	
		L2	26.6	
Junction Temperature	T _j	R1/R2	115	°C
		G1/G2	150	
		B	150	
		L1/L2	150	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V	
Storage Temperature(Only for LED, not including packaging)	T _{stg}	-40~+85	°C	
Operation Temperature	T _{opr}	-40~+75		

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.

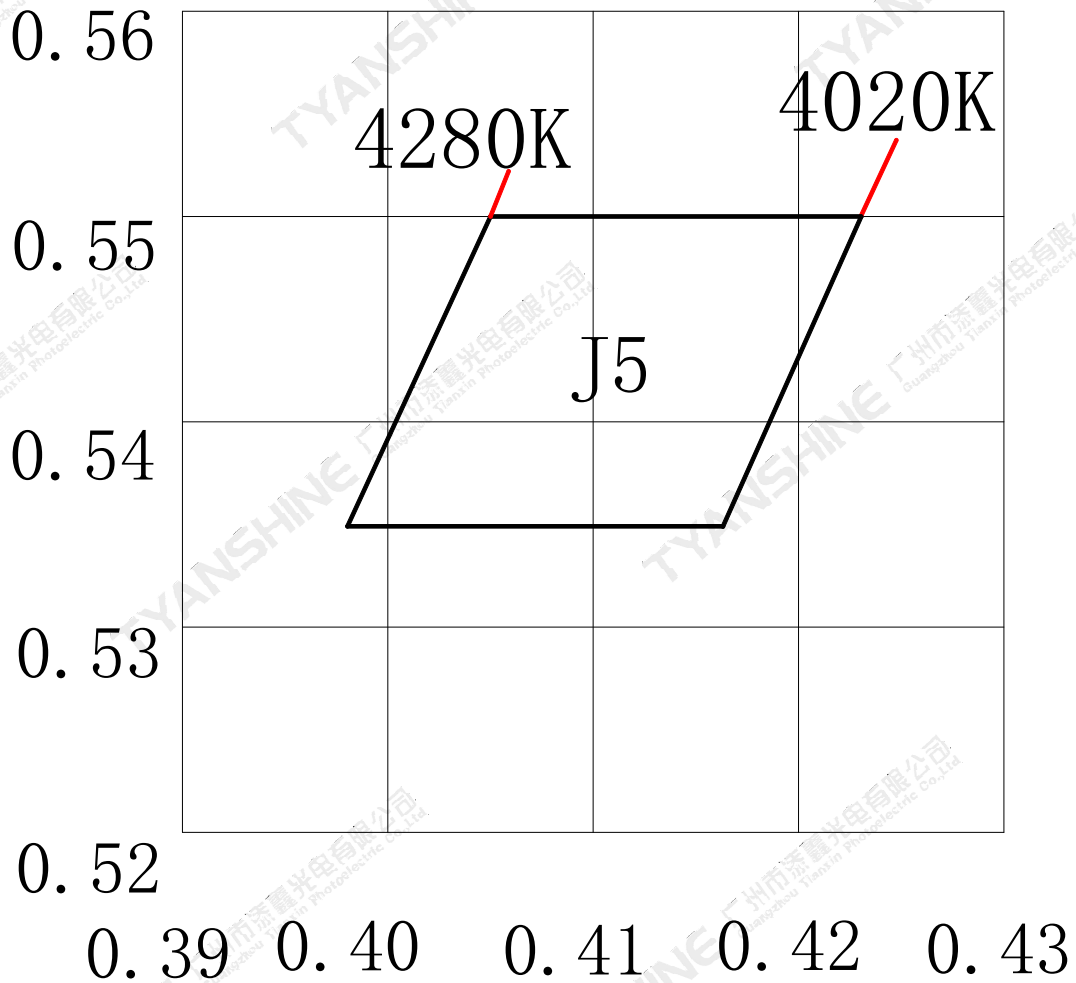
Electrical Optical Characteristics (Tc=25°C)

Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	If=1.0A	R1	110	125	145	lm
			R2	110	125	145	
			G1	290	340	390	
			G2	290	340	390	
			B	55	65	75	
			L1	415	485	550	
			L2	415	485	550	
Forward Voltage	V_f		R1/R2	2.4	2.8	3.2	V
			G1/G2	2.9	3.3	3.7	
			B	3.0	3.4	3.8	
			L1/L2	3.0	3.4	3.8	
Dominant Wavelength	λ_d		R1/R2	617	622	627	nm
			G1/G2	527	532	537	
			B	450	455	460	
Peak-emission Wavelength	λ_p	R1/R2	627	632	637	nm	
		G1/G2	519	524	529		
		B	445	450	455		
Spectral Line Half-Width	$\Delta\lambda$	R1/R2	11	16	21	nm	
		G1/G2	23	28	33		
		B	11	16	21		
		L1/L2	103	108	113		
Correlated Colour Temperature①	CCT		L1/L2	4020	—	4280	K
Reverse Current	I_R	—	—	—	—	2	μA
Viewing Angle at 50% IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Temperature Coefficient of Voltage	$V\Delta F/T$	R1/R2	—	-5.46	—	mV/°C	
		G1/G2	—	-5.36	—		
		B	—	-2.08	—		
		L1/L2	—	-3.86	—		

Notes:

- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- Luminous flux measurement tolerance: $\pm 15\%$.
- Forward voltage measurement tolerance: $\pm 0.15V$.

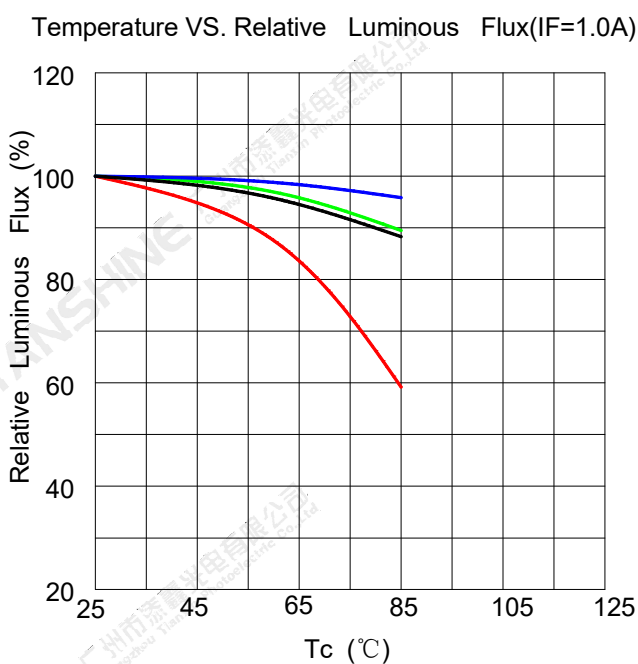
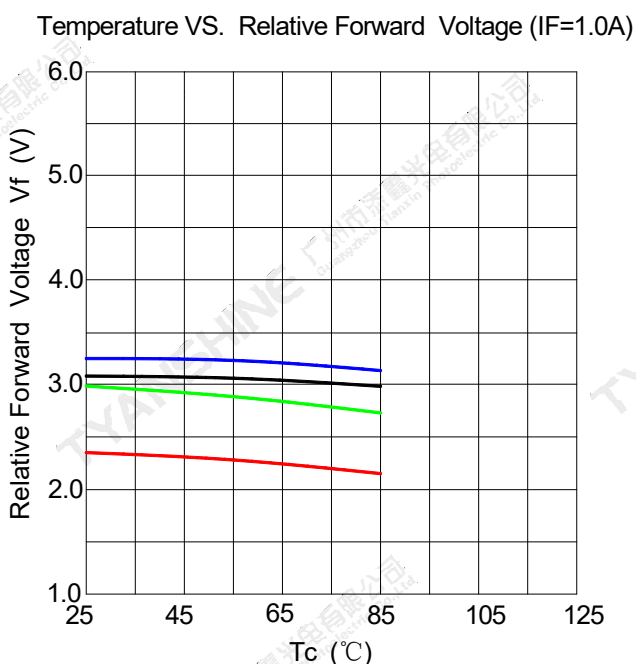
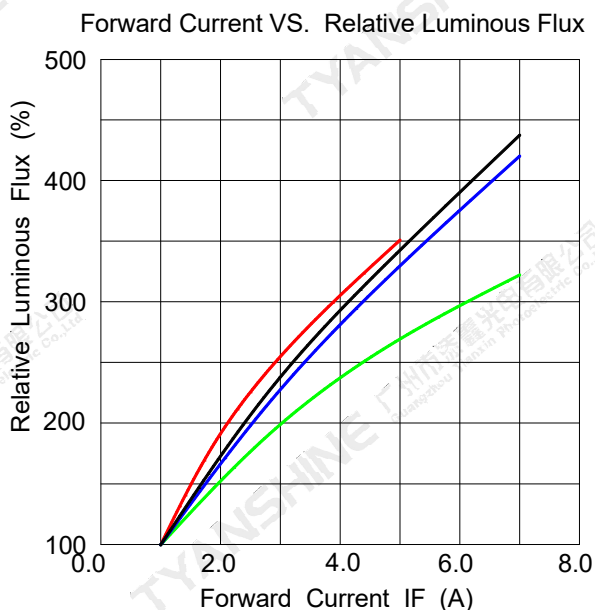
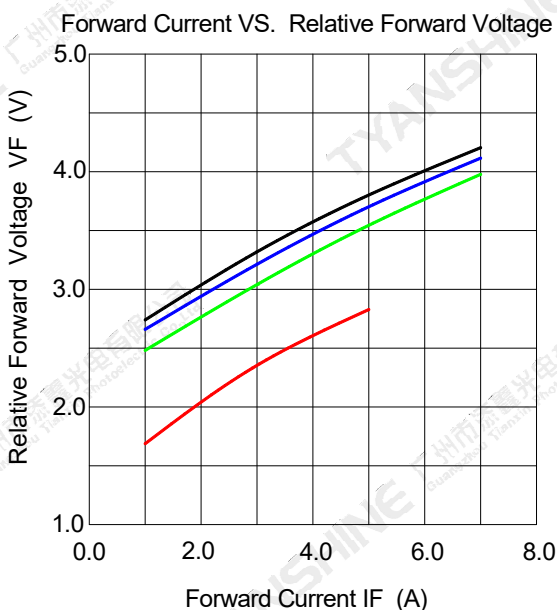
White Color coordinate filing (IF=1.0A Tc=25℃)



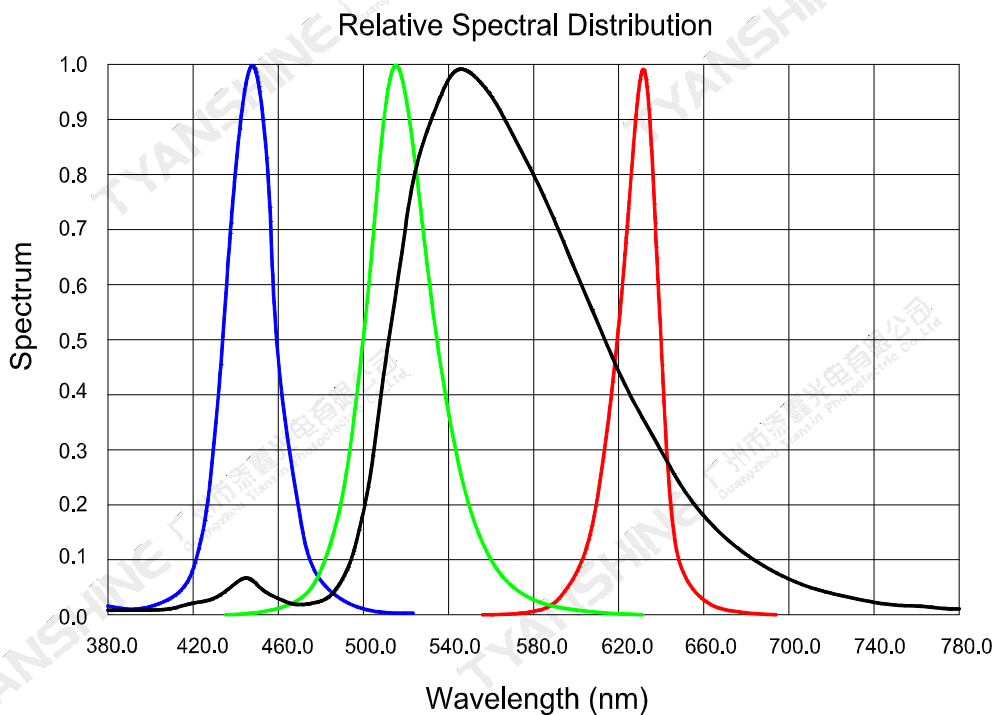
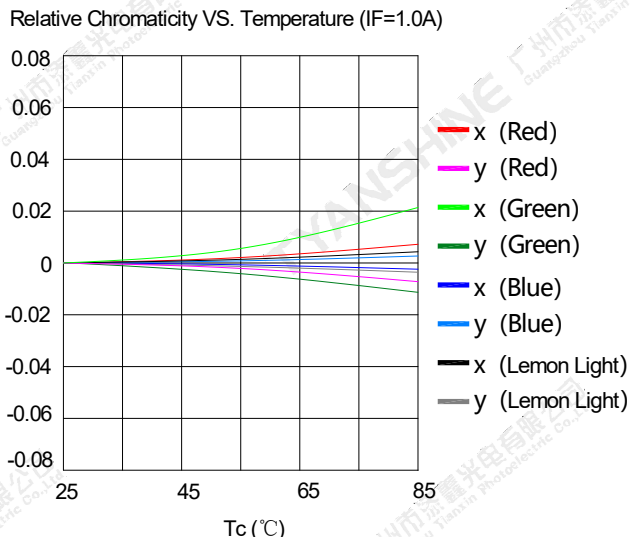
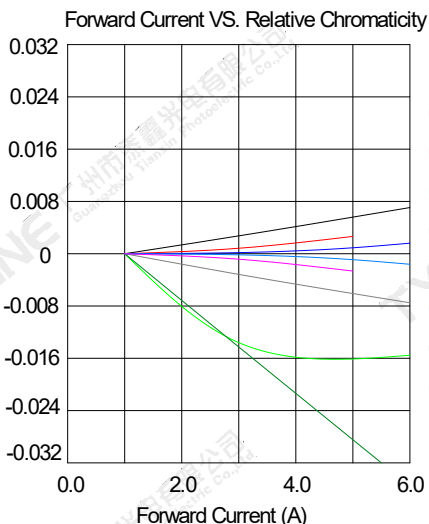
Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
J5	4020K	4280K	0.4164	0.5350	0.4231	0.5501	0.4050	0.5501	0.3981	0.5350

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Notes: — Red; — Green; — Blue; — Lemon light;



Notes: — Red; — Green; — Blue; — Lemon light;

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 $\pm 5^\circ$.

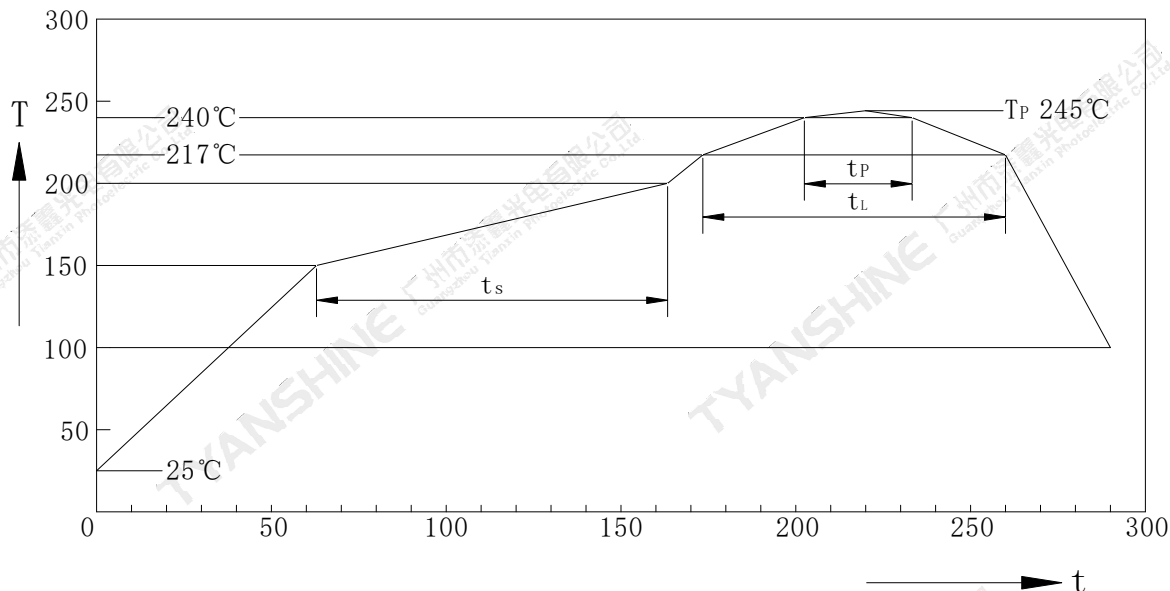
Usage Precautions

Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition



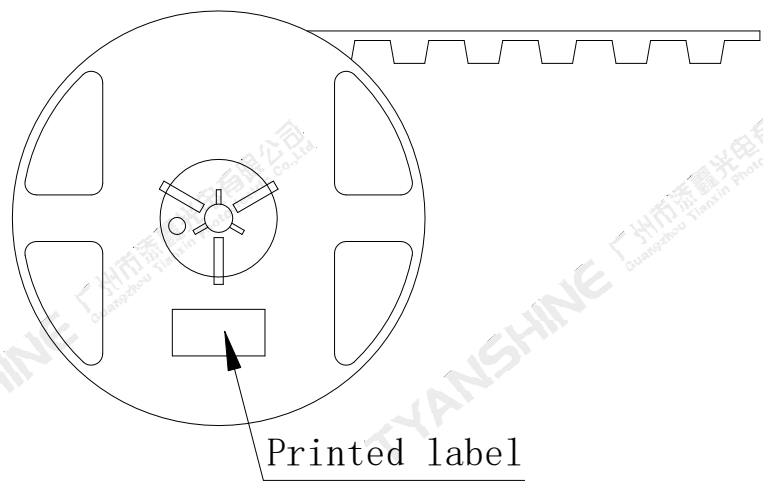
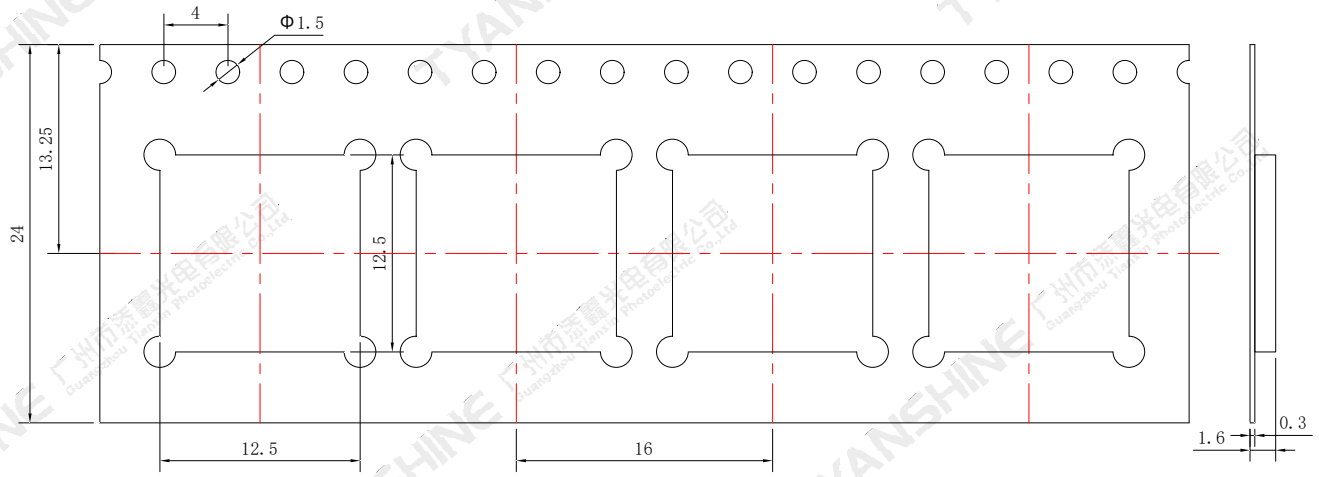
Profil-Charakteristik Profile Feature	Symbol	Pb-Free(SnAgCu)Assembly			Einheit Unit
		Minimum	Recommendation	Maximum	
Ramp-up Rate to Preheat 25°C to 150°C	-	-	2	3	K/s
Time t_s T_{Smin} to T_{Smax}	t_s	60	100	120	s
Ramp-up Rate to Peak T_{Smax} to T_p	-	-	2	3	K/s
Liquidus Temperature	T_L	217			°C
Time above Liquidus temperature	t_L	-	80	100	s
Peak Temperature	T_P	-	245	255	°C
Time within 5°C of the specified peak temperature T_p-5 K	t_p	10	20	30	s
Ramp-down Rate T_p to 100°C	-	-	3	6	K/s
Time 25°C to T_p	-	-	-	480	-

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.

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