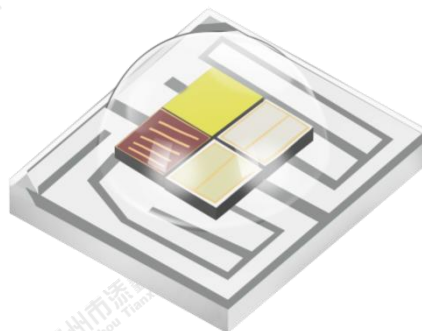


TX-3535RGBW4VSD1-0G4DB-01H80

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 450mA
- ◆High luminous output
- ◆No UV



Chip Material:

- ◆Red: AlGaInP
- ◆Green: GaInN
- ◆Blue: GaInN
- ◆White: GaInN

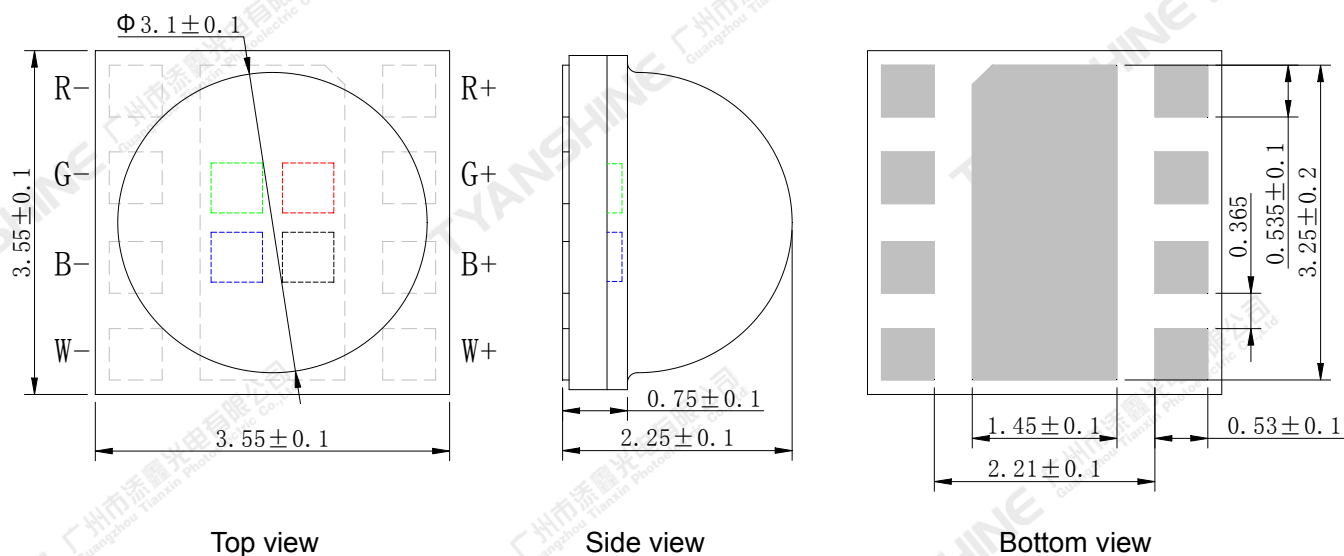
Emitting Color:

- ◆Red (R)
- ◆Green (G)
- ◆Blue (B)
- ◆White (W)

Applications:

- ◆Portable flashlight
- ◆Garden lighting
- ◆General lighting

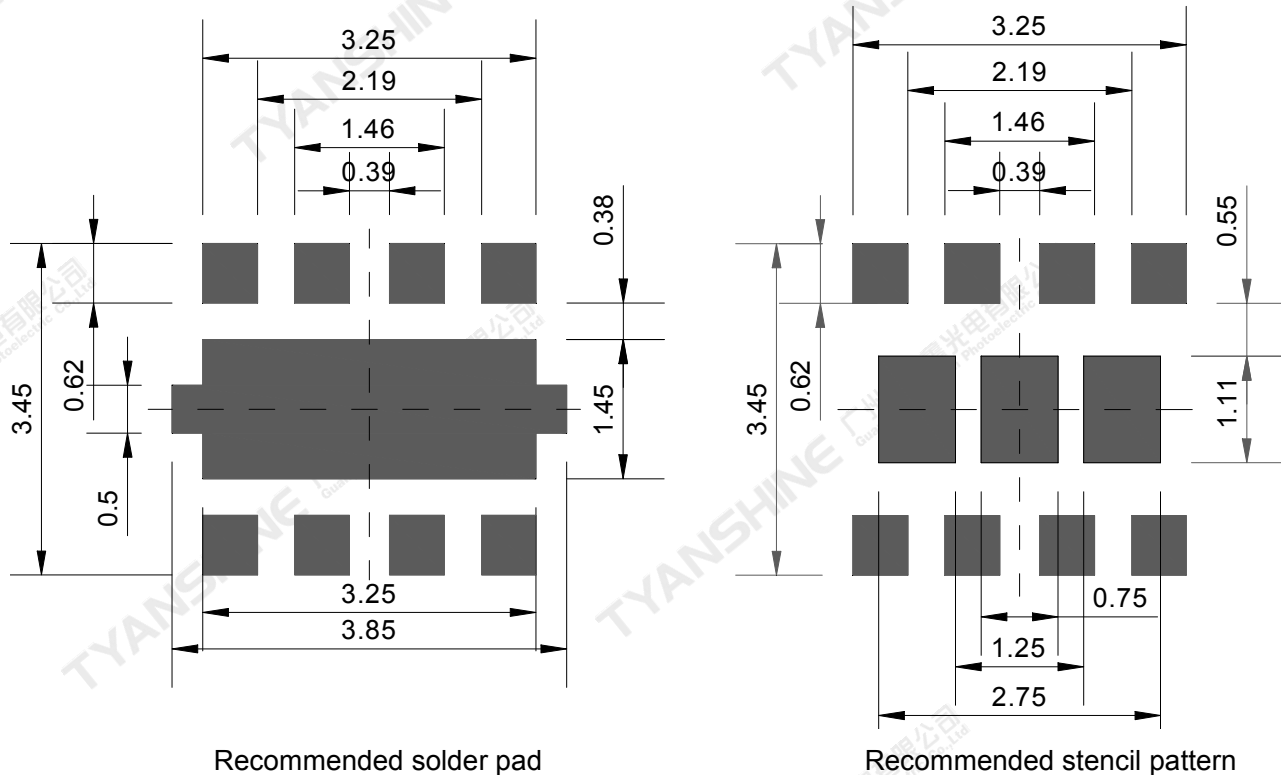
Package Dimensions:



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 ± 0.1 mm .

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Max Ratings	Unit
Forward Current	IF	400	mA
Reverse Voltage	V _R	Not designed for reverse operation	V
Power Dissipation	P _D	R	875
		G	1260
		B	1260
		W	1190
Junction Temperature	T _j	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}	R:-30~95 GBS:-30~105	

Notes:

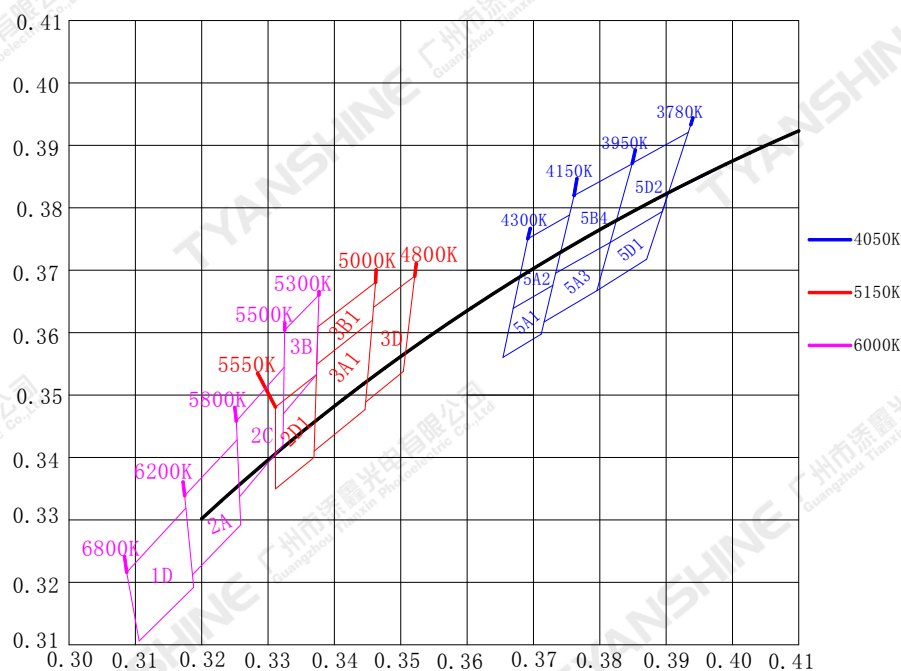
- Specifications are subject to change without notice.
- The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
- Precautions for ESD:
STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

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Electrical Optical Characteristics (Tc=25°C , IF=350mA)

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	R	45	55	65	lm
		G	95	105	120	
		B _(λ d:470nm)	28	34	42	
		B _(λ d:457nm)	17	21	24	
		W	80	100	115	
Dominant Wavelength	λ_d	R	618	623	628	nm
		G	520	528	535	
		B _(λ d:470nm)	465	470	475	
		B _(λ d:457nm)	451	457	460	
Correlated Colour Temperature	CCT	W	3780	4050	4300	K
			4800	5150	5550	
			5300	6000	6800	
Color Rendering Index	Ra	W	80	85	—	—
Peak-emission Wavelength	λ_p	R	625	630	635	nm
		G	516	525	530	
		B _(λ d:470nm)	462	467	472	
		B _(λ d:457nm)	448	454	457	
Spectral Line Half-Width	$\Delta\lambda$	R	15	20	25	nm
		G	30	35	40	
		B	20	25	30	
		W	20	25	30	
Forward Voltage	V_f	R	2.0	2.3	2.6	V
		G	2.8	3.3	3.6	
		B	2.9	3.3	3.6	
		W	2.8	3.1	3.4	
Reverse Current	I_R	$V_R=5V$	—	—	5	μA
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	—	
		W	—	14	—	
Temperature Coefficient of Voltage	$V\Delta F/T$	R	—	-2.0	—	mV/°C
		G	—	-5.8	—	
		B	—	-1.6	—	
		W	—	-1.6	—	

White Color coordinate filing (IF=350mA)



Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
5D2	3780K	3950K	0.3894	0.3794	0.3816	0.3745	0.3849	0.3871	0.3933	0.3921
5B4	3950K	4150K	0.3816	0.3745	0.3733	0.3695	0.3761	0.3820	0.3849	0.3870
5A2	4150K	4300K	0.3729	0.3676	0.3669	0.3639	0.3692	0.3751	0.3754	0.3788
3D	4800K	5000K	0.3504	0.3538	0.3447	0.3489	0.3459	0.3641	0.3521	0.3690
3A1	5000K	5300K	0.3446	0.3477	0.3369	0.3410	0.3373	0.3549	0.3457	0.3620
3B1			0.3457	0.3620	0.3373	0.3549	0.3375	0.3610	0.3462	0.3681
2D1	5300K	5550K	0.3369	0.3400	0.3311	0.3350	0.3311	0.3481	0.3373	0.3533
3B	5300K	5500K	0.3372	0.3530	0.3323	0.3470	0.3325	0.3604	0.3377	0.3660
2C	5500K	5800K	0.3322	0.3420	0.3257	0.3337	0.3252	0.3458	0.3324	0.3544
2A	5800K	6200K	0.3259	0.3292	0.3186	0.3212	0.3174	0.3339	0.3253	0.3428
1D	6200K	6800K	0.3188	0.3192	0.3106	0.3106	0.3087	0.3216	0.3176	0.3319

Notes:

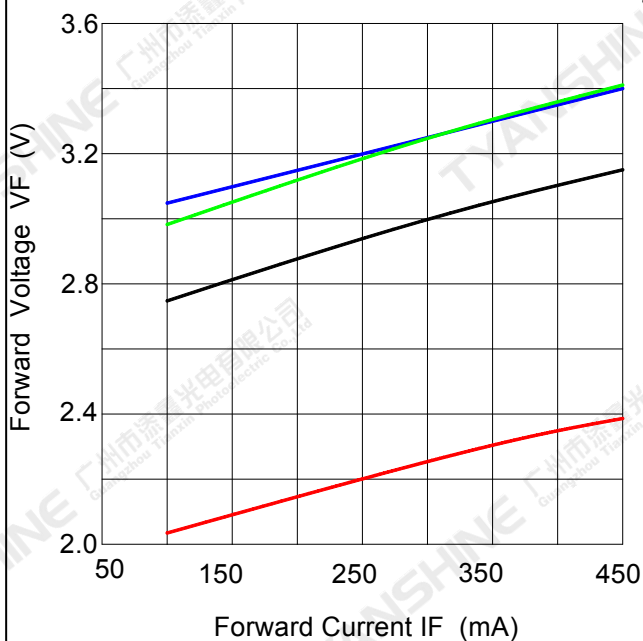
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. Luminous flux measurement tolerance: $\pm 10\%$.
4. Forward voltage measurement tolerance: $\pm 0.3V$.
5. R_a measurement tolerance: ± 2 .

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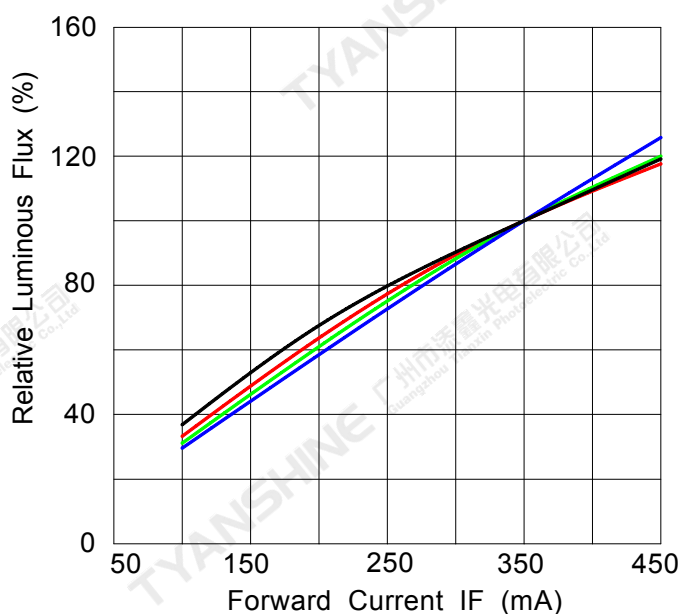
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

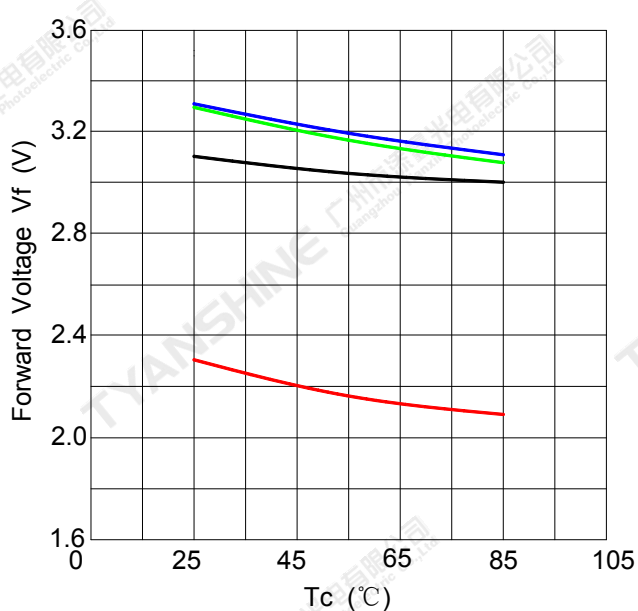
Forward Current VS. Relative Forward Voltage



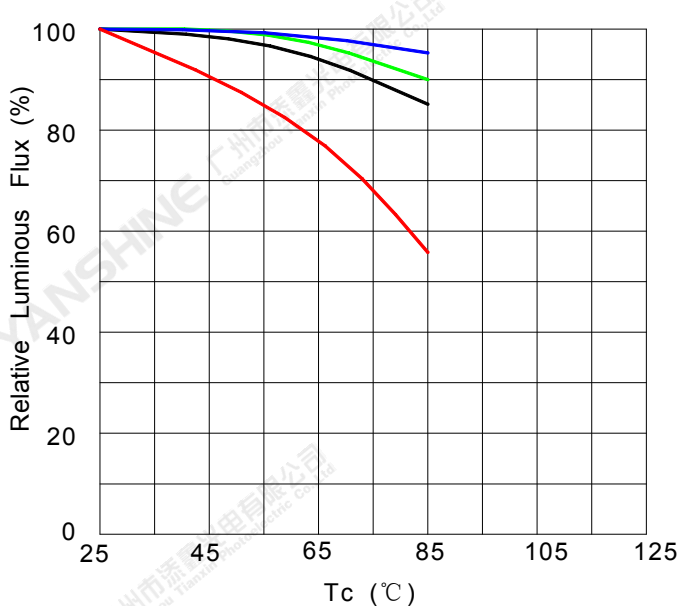
Forward Current VS. Relative Luminous Flux



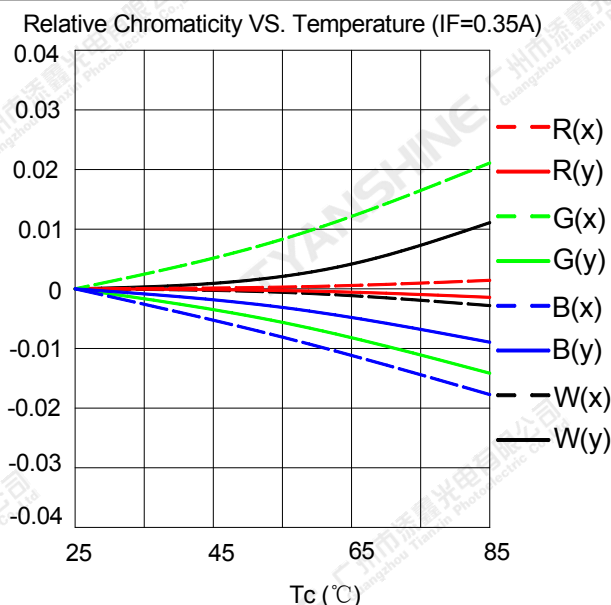
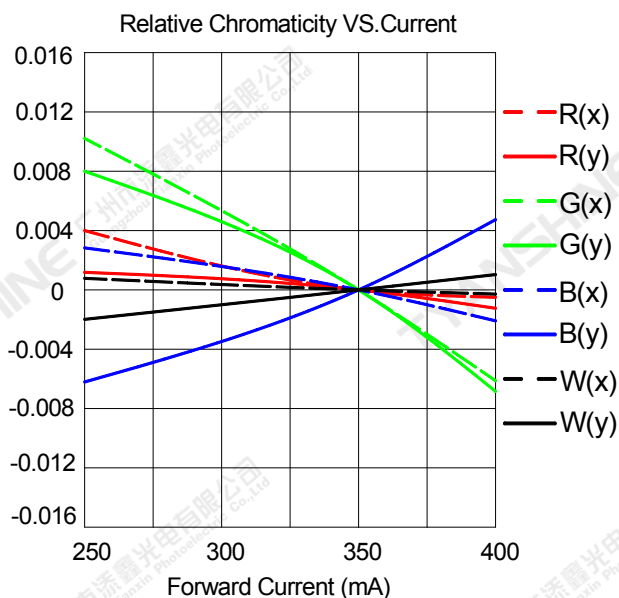
Temperature VS. Forward Voltage (IF=0.35A)



Temperature VS. Relative Luminous FLux (IF=0.35A)



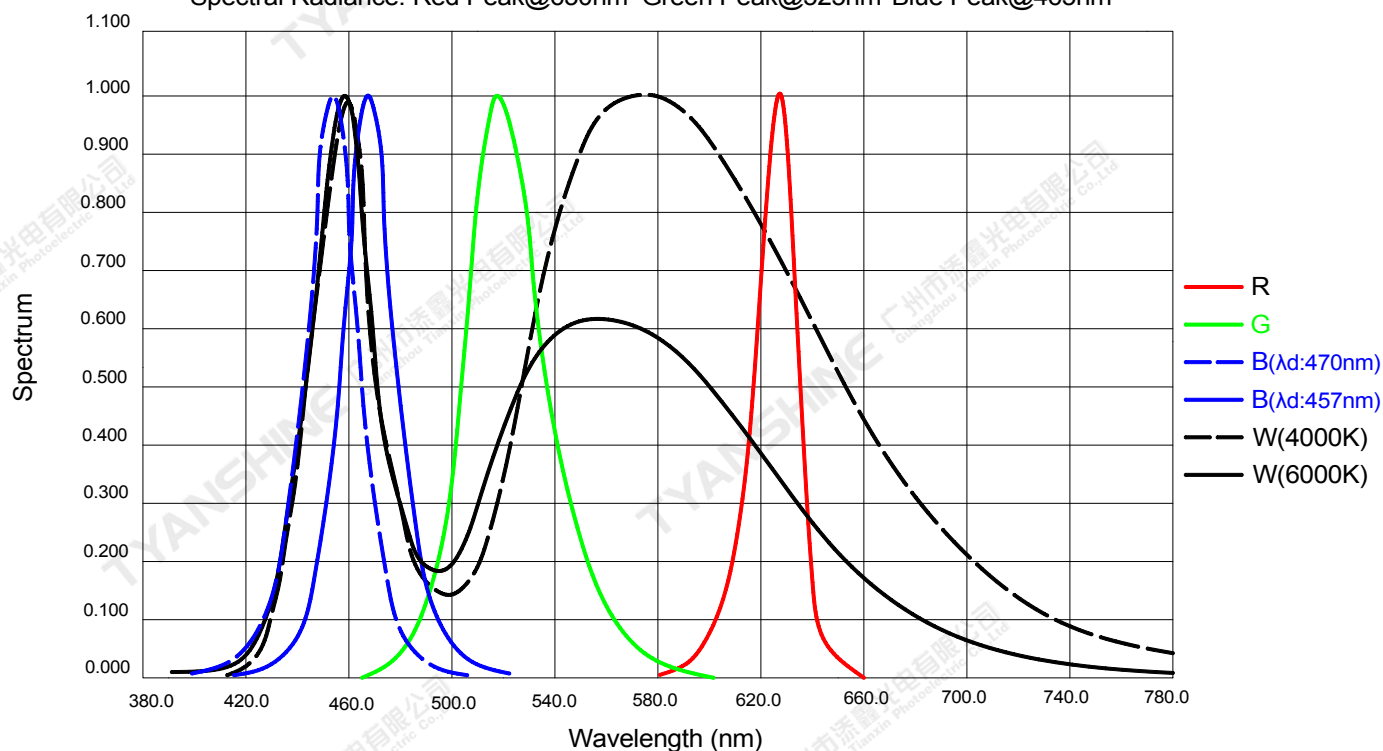
Notes: — Red (R) ; — Green (G) ; — Blue (B) ; — White (W) ;



Notes: — Red (R) ; — Green (G) ; — Blue (B) ; — White (W) ;

Relative Spectral Distribution

Spectral Radiance: Red Peak@630nm Green Peak@525nm Blue Peak@465nm



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 $\pm 5^\circ$.

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Usage Precautions

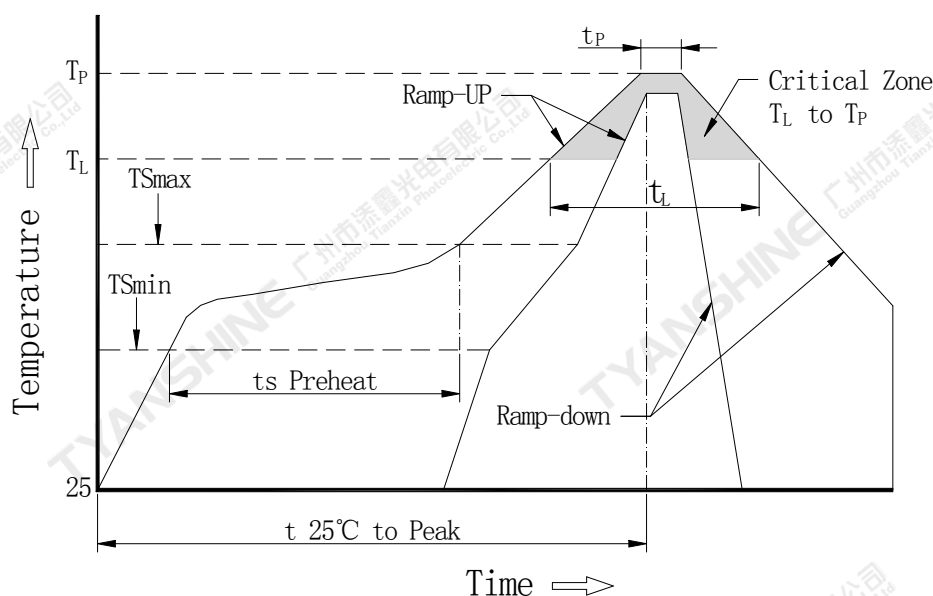
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



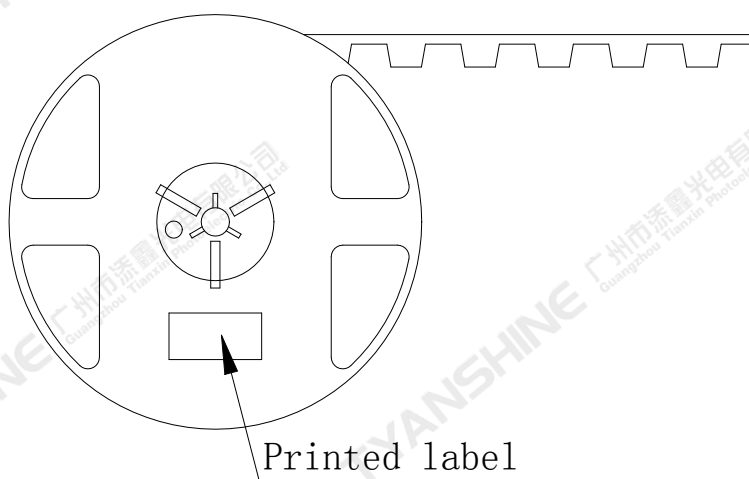
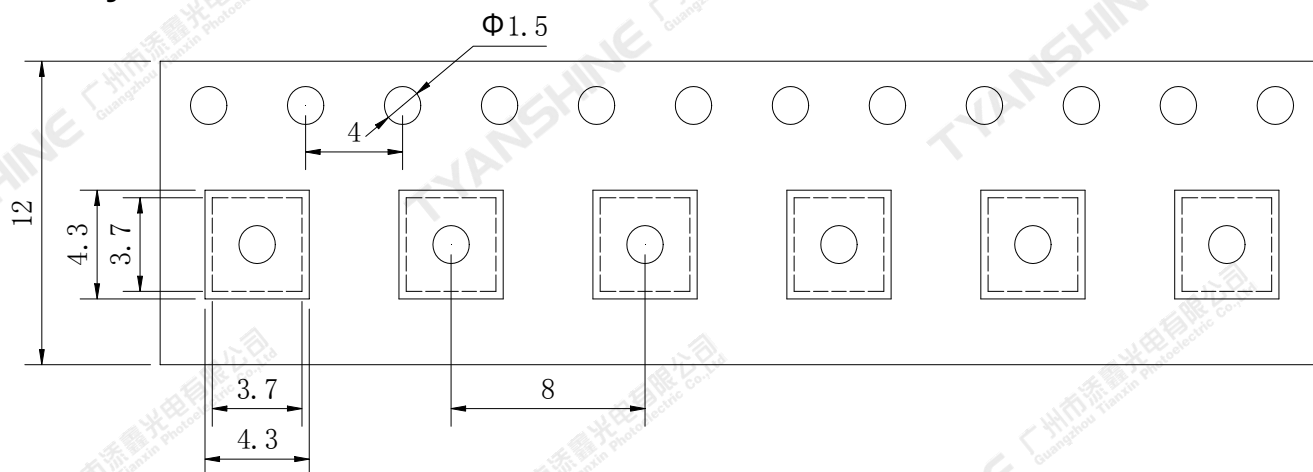
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (T_{Smax} to T_P)	3°C/second max.
Preheat: Temperature Min (T_{Smin})	100°C
Preheat: Temperature Max (T_{Smax})	150°C
Preheat: Time (T_{Smin} to T_{Smax})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183°C
Time Maintained Above: Time (T_L)	60-150 seconds
Peak/Classification Temperature (T_P)	225°C
Time Within 5°C of Actual Peak Temperature (T_P)	10-30 seconds
Ramp-Down Rate	6°C/second max.
Time 25°C 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.