

TX-3535RGBW8VSD1-NG4DC-01

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 600mA
- ◆High luminous output
- ◆No UV

Chip Material:

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

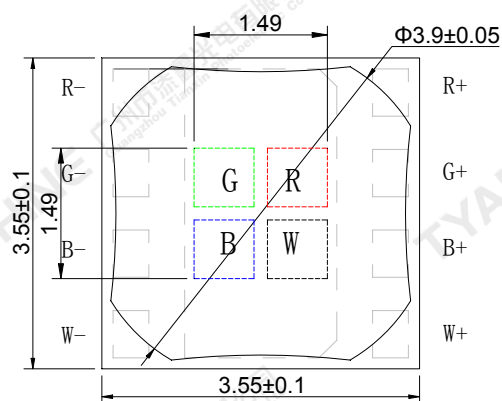
Emitting Color:

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

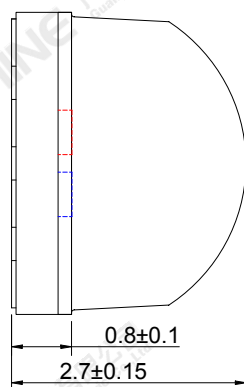
Applications:

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

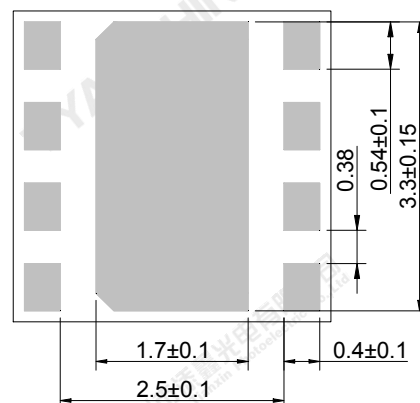
Package Dimensions:



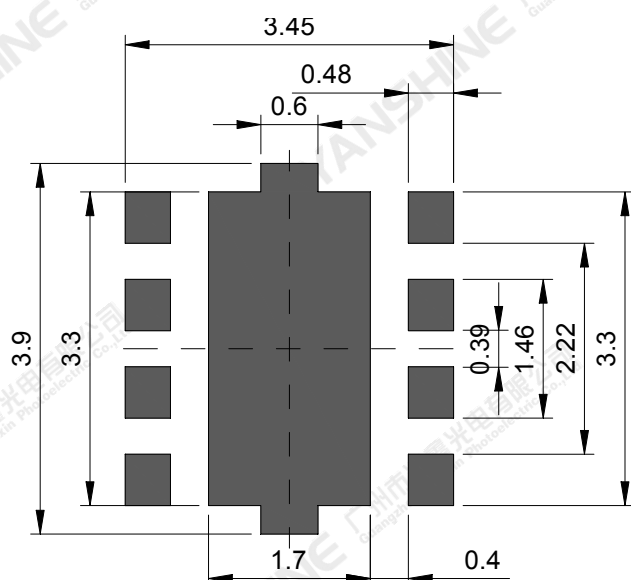
Top view



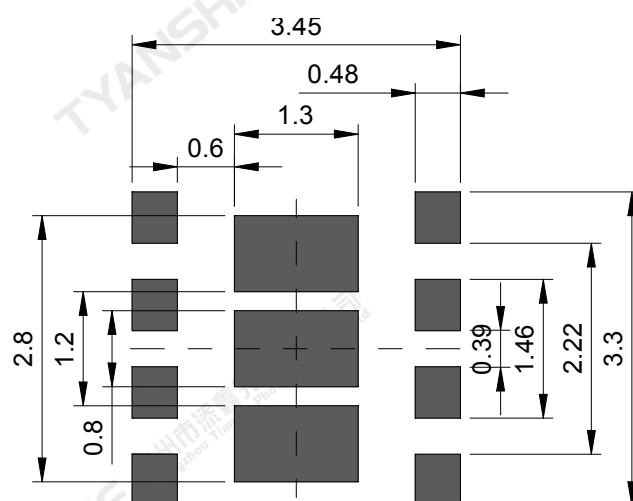
Side view



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	I _F		600	mA
Peak Forward Current (Note 1)	I _{FP}		800	
Reverse Voltage	V _R		5	V
Power Dissipation	P _D	R	1620	mW
		G	2160	
		B	2100	
		W	2160	
Junction Temperature	T _j	R	125	℃
		G	150	
		B	150	
		W	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	T _{stg}		-40~70	℃
Operation Temperature	T _{opr}		-30~85	

Note: 1. Pulse width ≤0.1 msec, duty ≤1/10.

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.

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Electrical Optical Characteristics (Tc=25°C , IF=500mA)

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	R	72	80	90	lm
		G	130	140	150	
		B	20	28	35	
		W	135	155	175	
Correlated Colour Temperature	CCT	W	6000	6500	7000	K
Dominant Wavelength	λ_d	R	618	623	628	nm
		G	519	524	529	
		B	451	456	461	
Peak-emission Wavelength	λ_p	R	625	630	635	nm
		G	514	519	524	
		B	447	452	457	
Spectral Line Half-Width	$\Delta\lambda$	R	14	16	18	nm
		G	30	35	40	
		B	18	21	24	
		W	21	24	27	
Forward Voltage	V_f	R	2.0	2.4	2.7	V
		G	2.9	3.2	3.6	
		B	2.8	3.1	3.5	
		W	2.9	3.2	3.6	
Reverse Current	I_R	$V_R=5V$	—	—	2	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	—	

Notes:

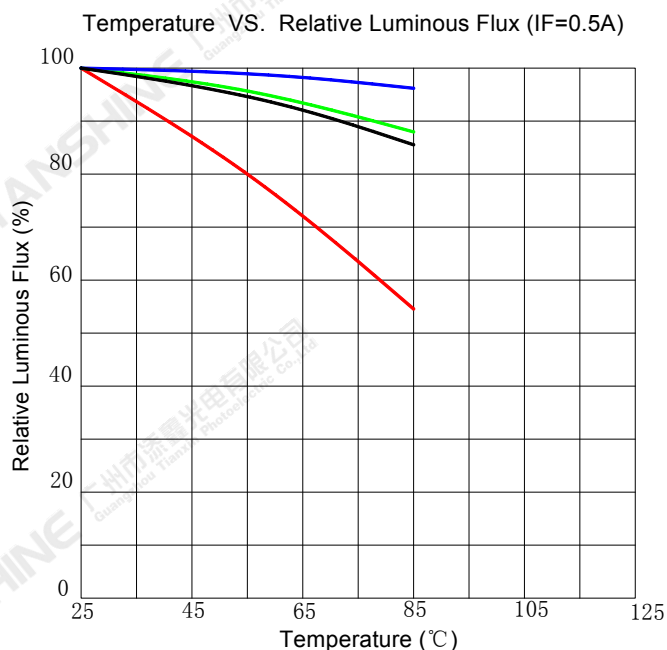
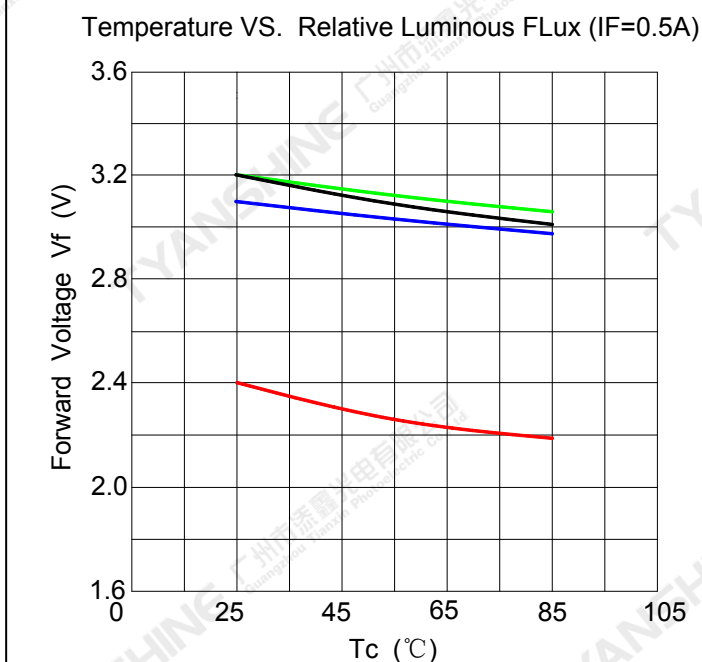
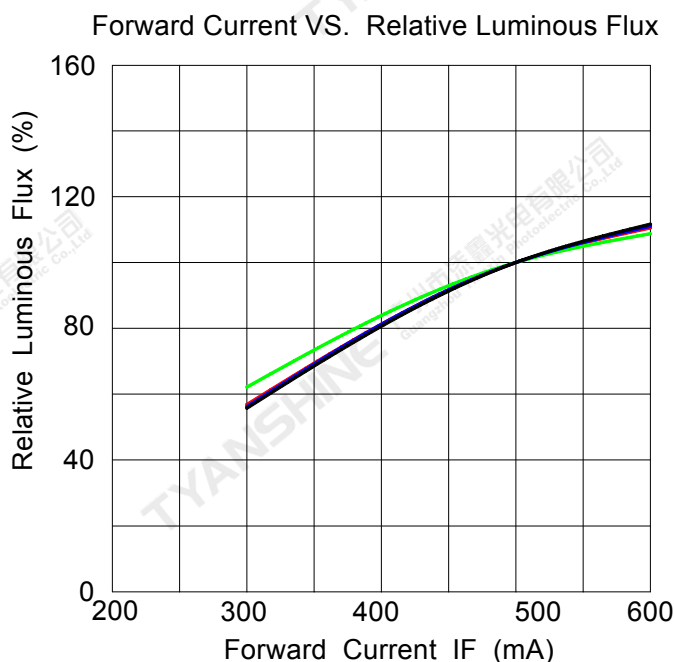
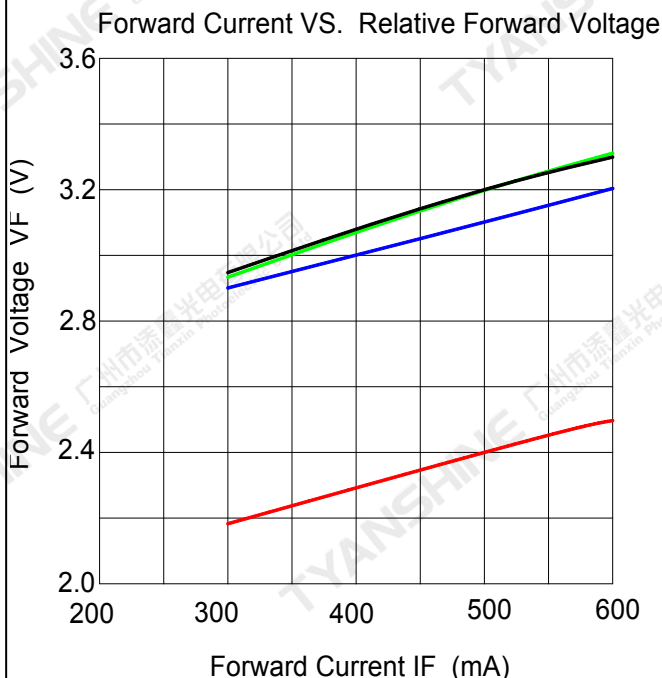
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance:±10%.

4. Forward voltage measurement tolerance: $\pm 10\%V$.

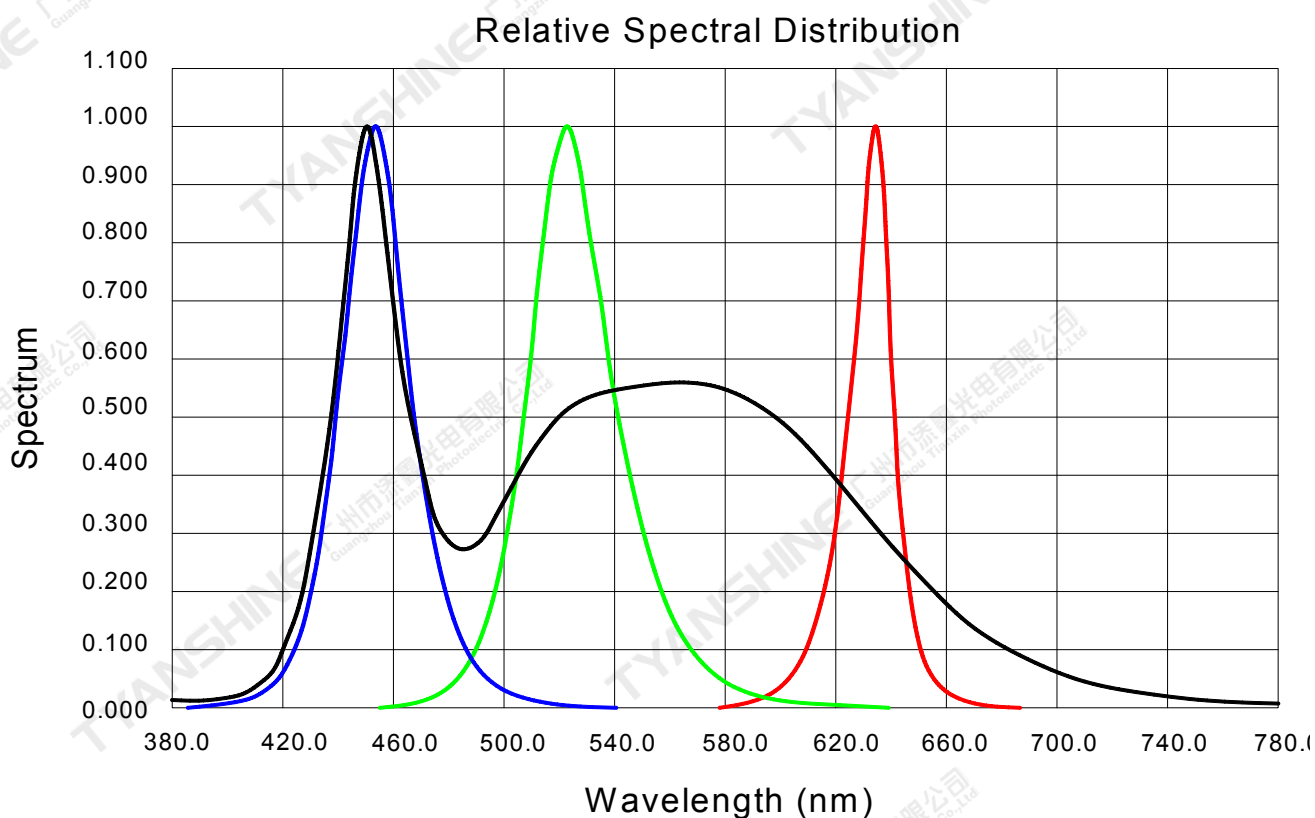
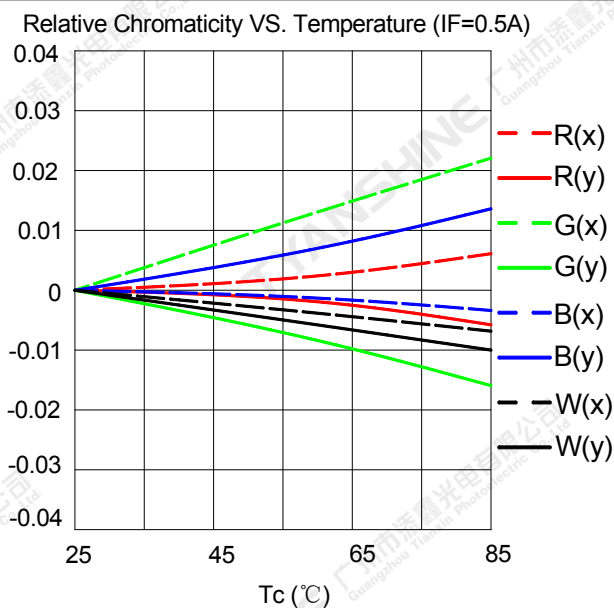
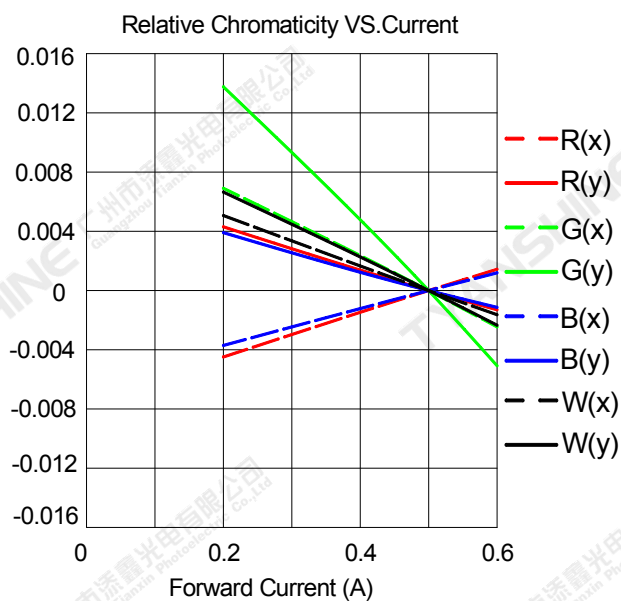
5. Ra measurement tolerance: ± 2 .

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



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



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

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

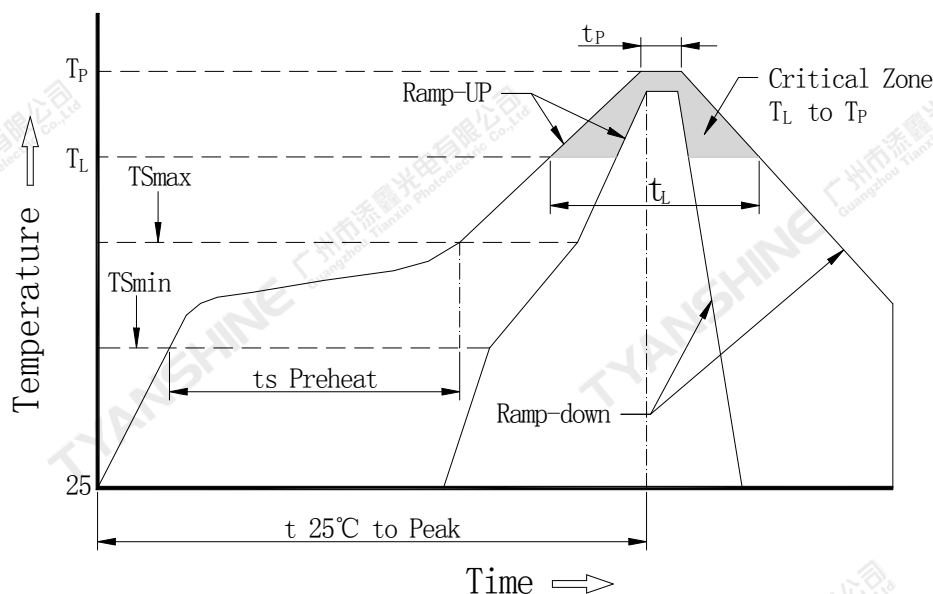
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



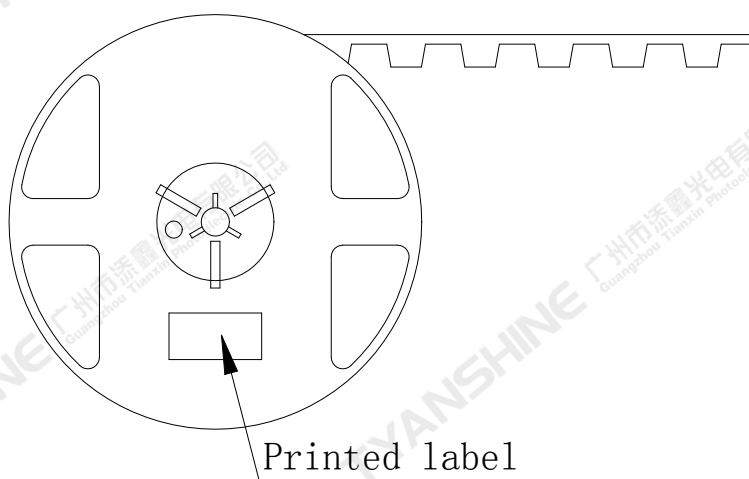
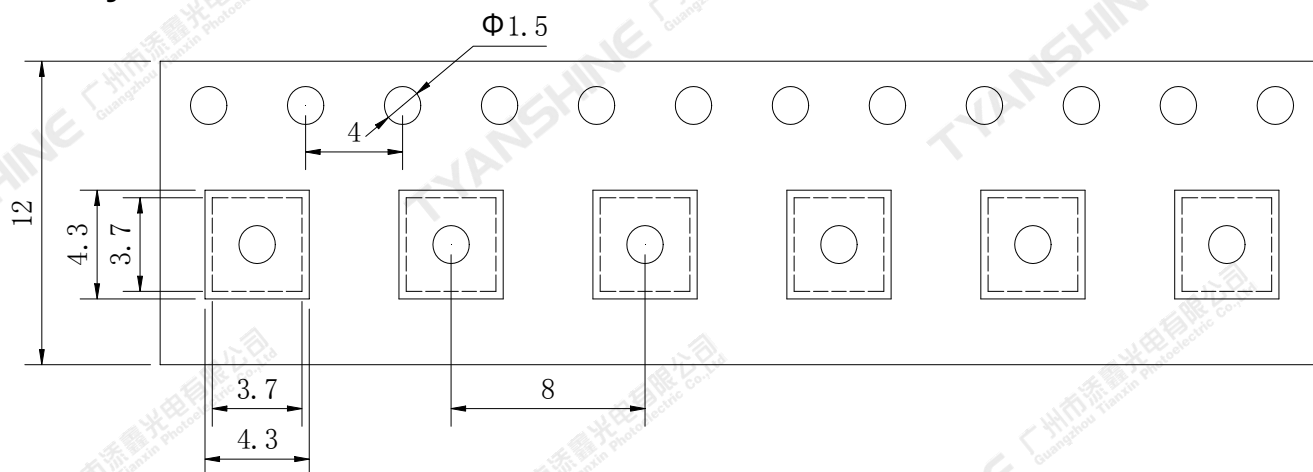
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (T_{Smax} to T_P)	3°C/second max.
Preheat: Temperature Min (T_{Smin})	100°C
Preheat: Temperature Max (T_{Smax})	150°C
Preheat: Time (T_{Smin} to T_{Smax})	60-120 seconds
Time Maintained Above: Temperature (T_L)	183°C
Time Maintained Above: 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.

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