

# TX-3535W5FC120-OGVCND34-B03H80

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 1200mA.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ GaN

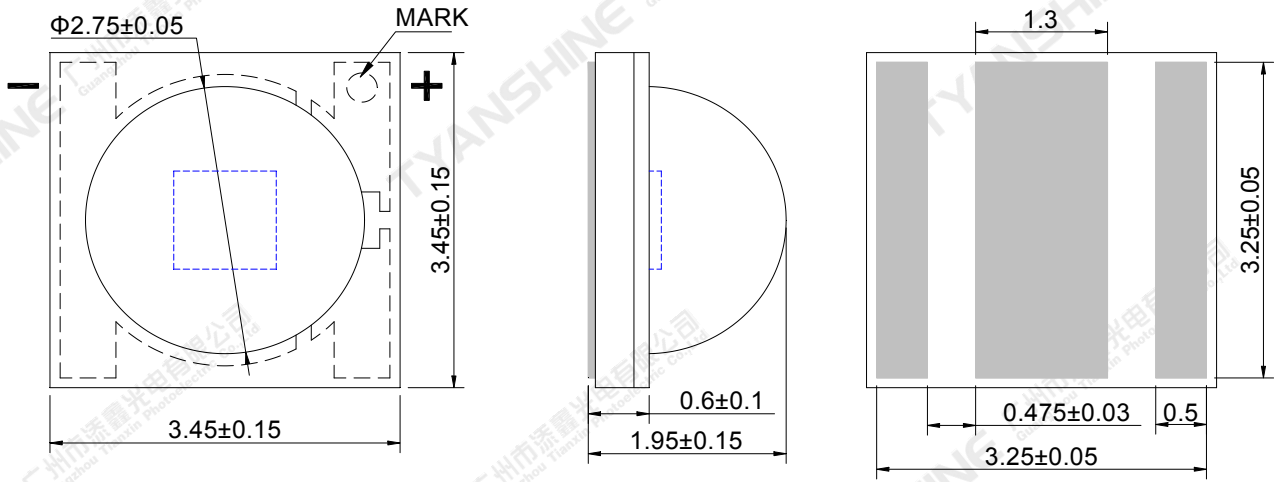
### Emitting Color:

- ◆ white

### Applications:

- ◆ Auxiliary lighting
- ◆ Architectural lighting
- ◆ General Lighting

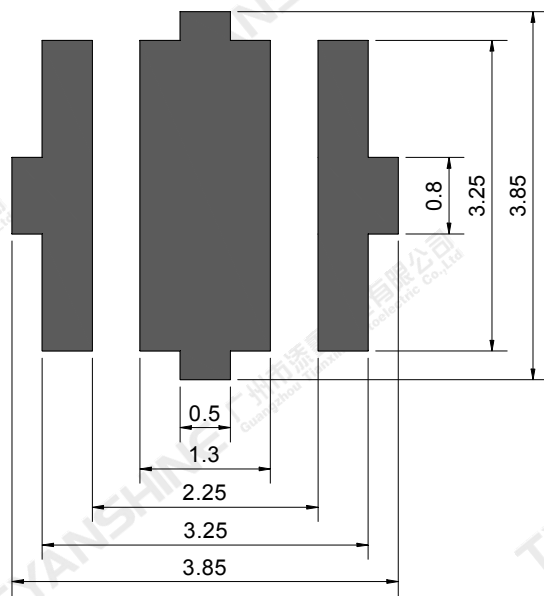
**Package Dimensions:**



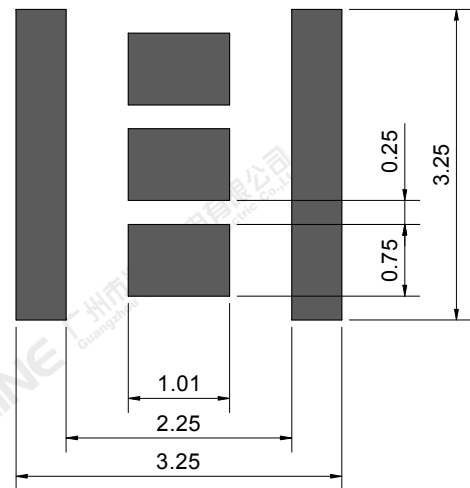
Top view

Side view

Bottom view



Recommended solder pad



Recommended stencil pattern

**Notes:**

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are  $\pm 0.1$ mm .

**Absolute Maximum Ratings (Tc=25°C)**

Parameter	Symbol	Ratings	Unit
Forward Current	IF	1200	mA
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	5	W
Junction Temperature	Tj	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	Tstg	-20~+70	°C
Operation Temperature	Topr	-40~+100	

**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	Min.	Typ.	Max.	Units
Luminous Flux	$\phi_v$	If=700mA	200	225	—	lm
Correlated Colour Temperature	CCT		3950	4100	4250	K
			4800	5142	5500	
Spectral Line Half-Width	$\Delta\lambda$		139	144	149	nm
Forward Voltage	$V_f$		2.8	3.0	3.4	V
Viewing Angle at 50% IV	$2\theta_{1/2}$	—	120	—	Deg	
Reverse Current	$I_R$	—	—	—	$\mu A$	
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=700mA	—	6.4	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$		—	1	—	mV/°C
Color Rendering Index	Ra		80	82.5	—	—

**White light Color coordinate filing (IF=700mA)**

Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
5B3	3950K	4100K	0.3782	0.3837	0.3802	0.3916	0.3869	0.3958	0.3847	0.3877
5B4			0.3763	0.3760	0.3782	0.3837	0.3847	0.3877	0.3825	0.3798
5A3			0.3744	0.3685	0.3763	0.3760	0.3825	0.3798	0.3804	0.3721
5B1	4100K	4250K	0.3702	0.3722	0.3719	0.3797	0.3782	0.3837	0.3763	0.3780
5B2			0.3719	0.3797	0.3736	0.3874	0.3802	0.3916	0.3782	0.3837
5A2			0.3686	0.3649	0.3702	0.3722	0.3763	0.3760	0.3744	0.3685
3D	4800K	5000K	0.3499	0.3510	0.3443	0.3466	0.3451	0.3554	0.3512	0.3603
3C			0.3512	0.3603	0.3451	0.3554	0.3463	0.3687	0.3530	0.3742
3A	5000K	5300K	0.3440	0.3427	0.3366	0.3369	0.3369	0.3440	0.3446	0.3500
3A3B			0.3446	0.3500	0.3369	0.3440	0.3373	0.3545	0.3456	0.3613
3B			0.3456	0.3613	0.3373	0.3545	0.3376	0.3616	0.3463	0.3687
2D1	5300K	5500K	0.3366	0.3369	0.3321	0.3328	0.3321	0.3445	0.3371	0.3490
2C1			0.3371	0.3490	0.3321	0.3445	0.3321	0.3531	0.3374	0.3574

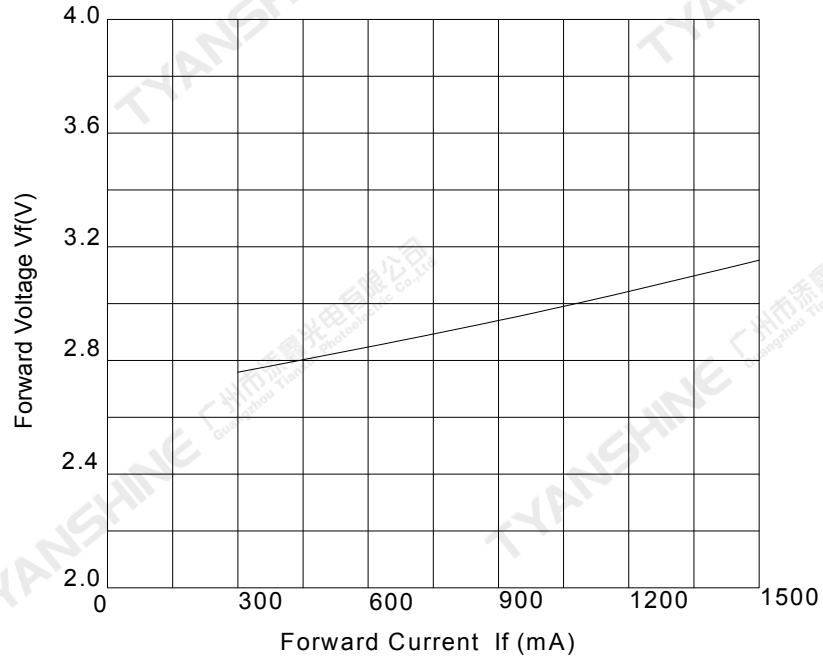
**Notes:**

- 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: $\pm 15\%$ .
- 4.Forward voltage measurement tolerance: $\pm 0.15V$ .

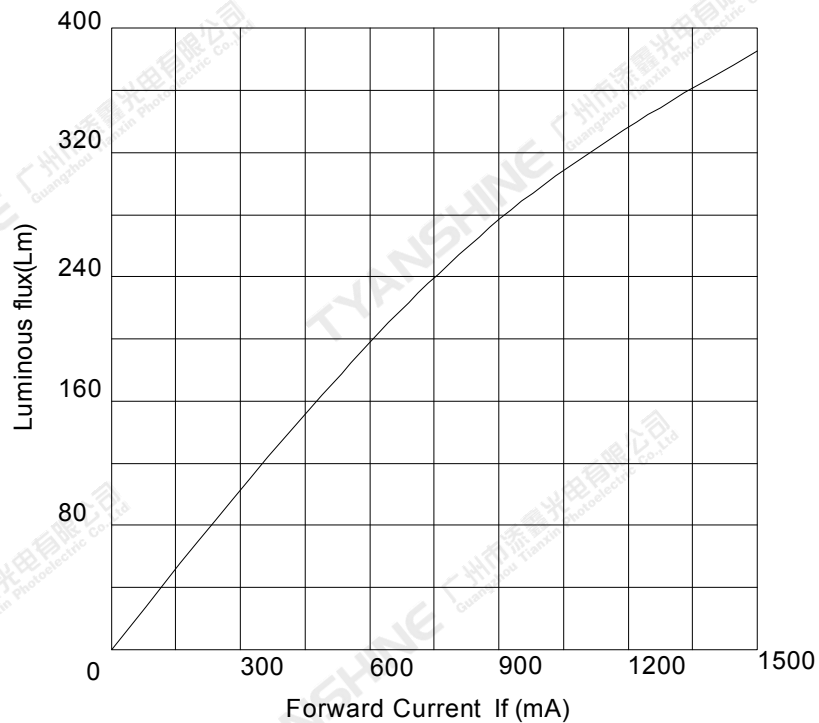
## Typical Electrical/Optical Characteristics Curves

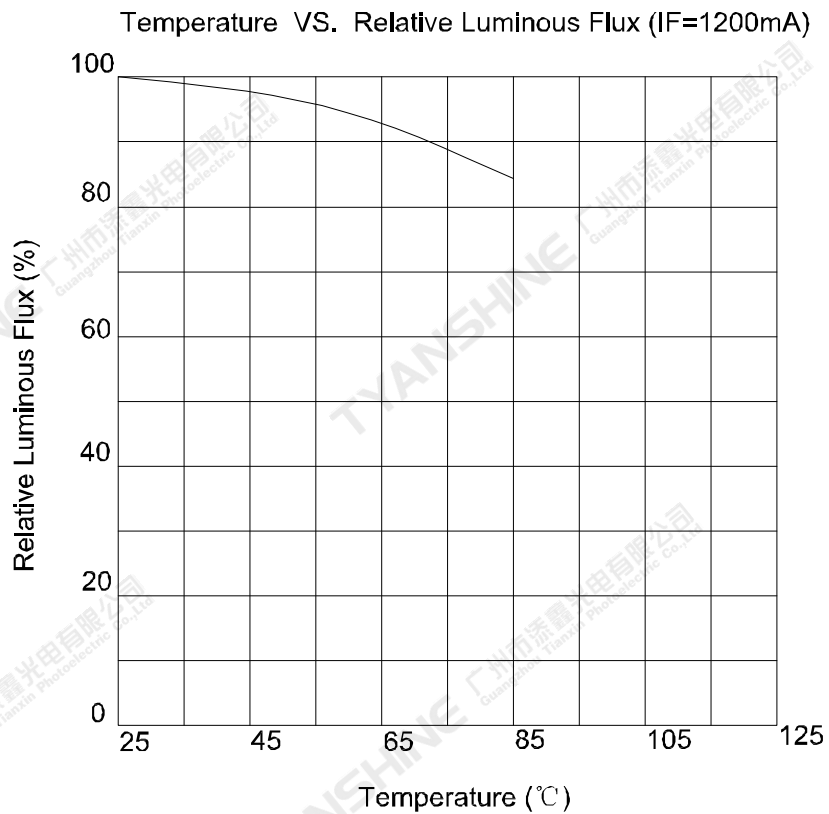
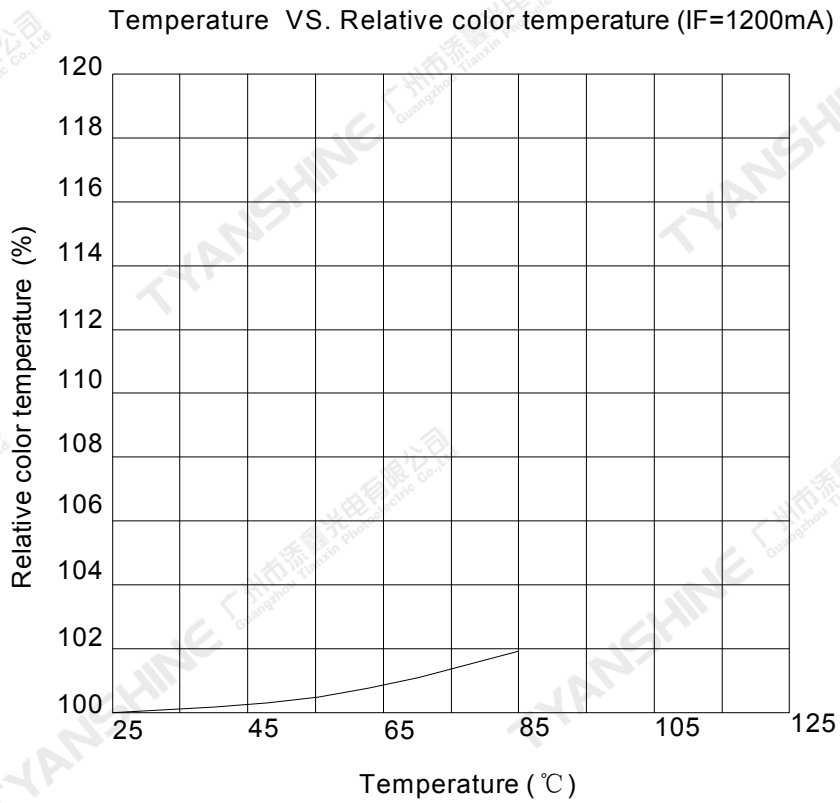
(25°C Ambient Temperature Unless Otherwise Noted)

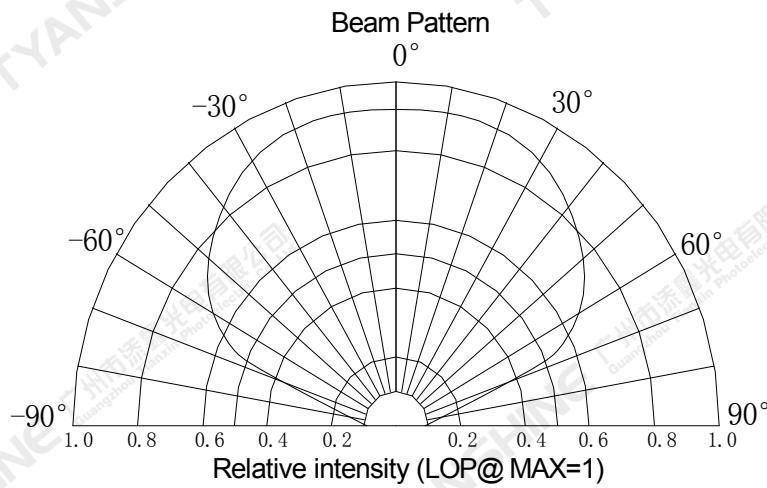
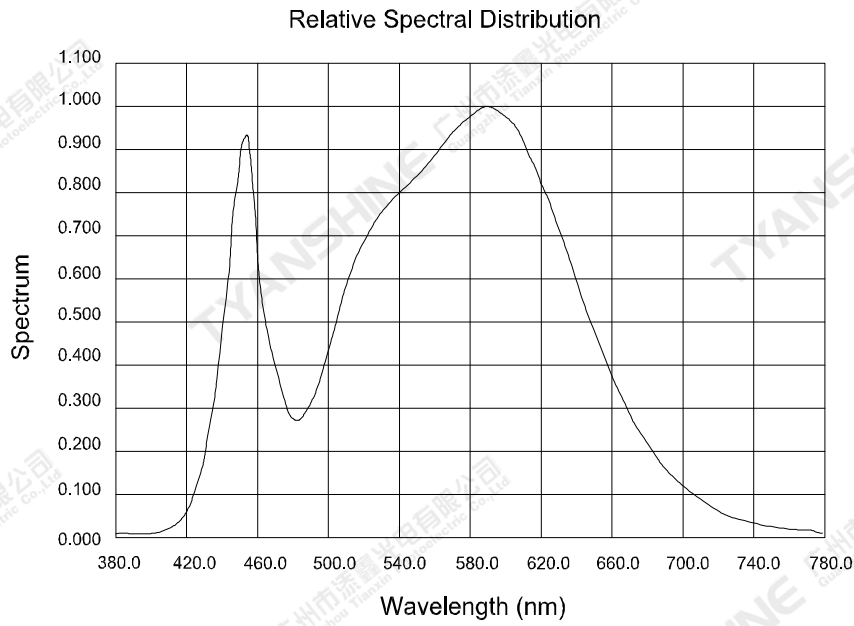
Forward Current VS. Forward Voltage



Forward Current VS. Luminous flux







**Notes:**

1.  $2\theta \frac{1}{2}$  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

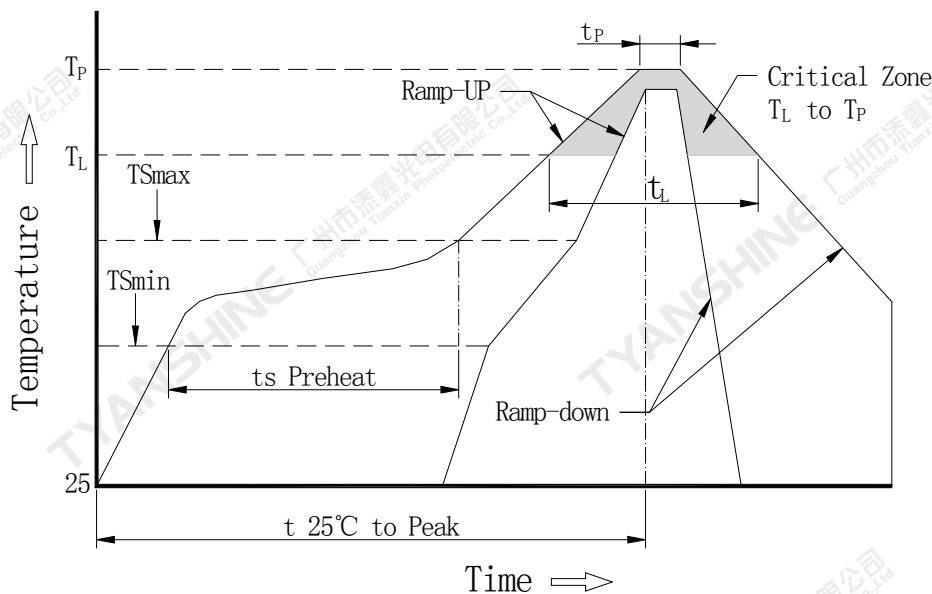
### Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

### Soldering Condition

Use the conditions shown to the under figure.



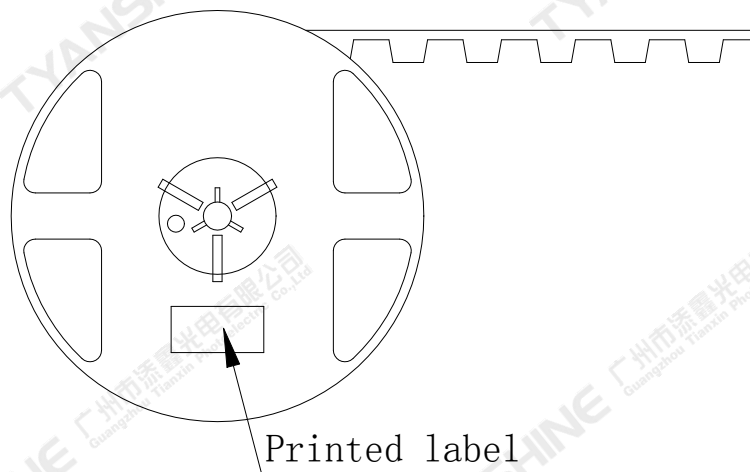
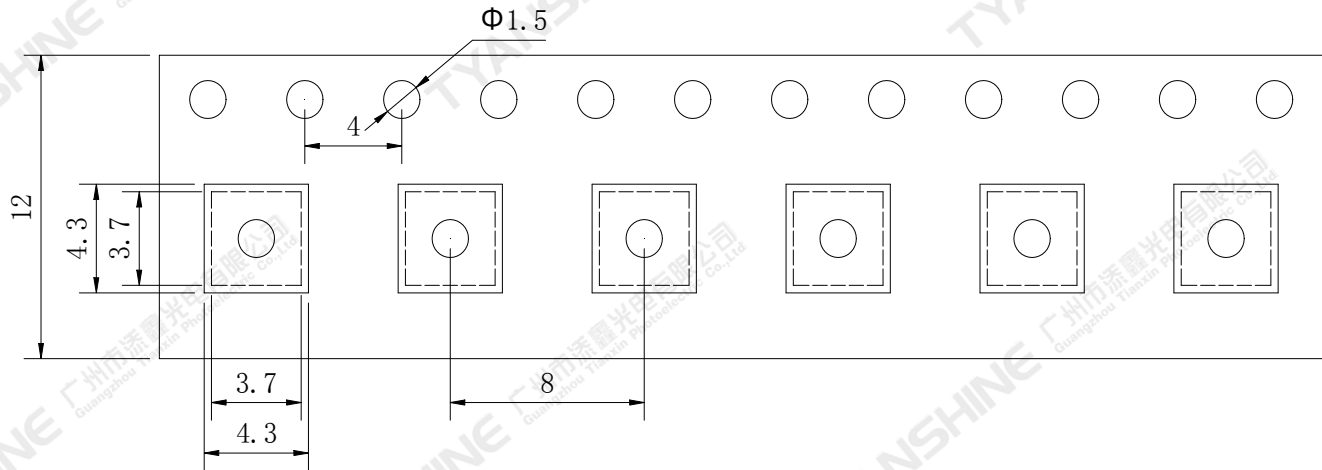
Profile Feature	Lead-Based Solder
Average Ramp-Up Rate ( $T_{Smax}$ to $T_P$ )	3°C/second max.
Preheat: Temperature Min ( $T_{Smin}$ )	100°C
Preheat: Temperature Max ( $T_{Smax}$ )	150°C
Preheat: Time ( $T_{Smin}$ to $T_{Smax}$ )	60-120 seconds
Time Maintained Above: Temperature ( $T_L$ )	183°C
Time 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:1000 PCS**



**Notes:**

1. All dimensions are in millimeters.
2. Tolerances are  $\pm 2.0$  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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