

TX-3535A10FC120-NGVENA72-03

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 2.2 A.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆GaN

Emitting Color:

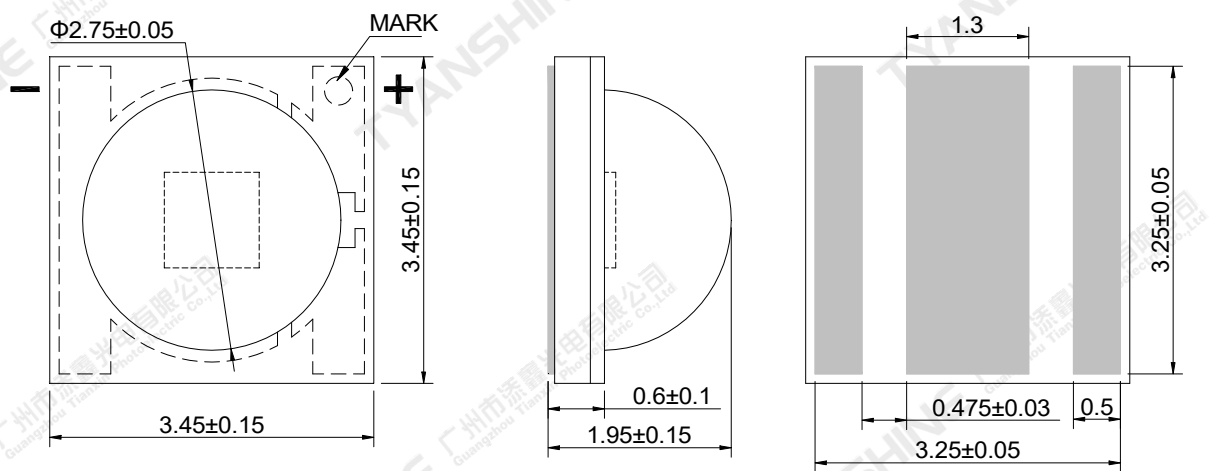
- ◆ PC Amber (A)

Applications:

- ◆ Portable Flashlight
- ◆ Garden lighting
- ◆ General Lighting

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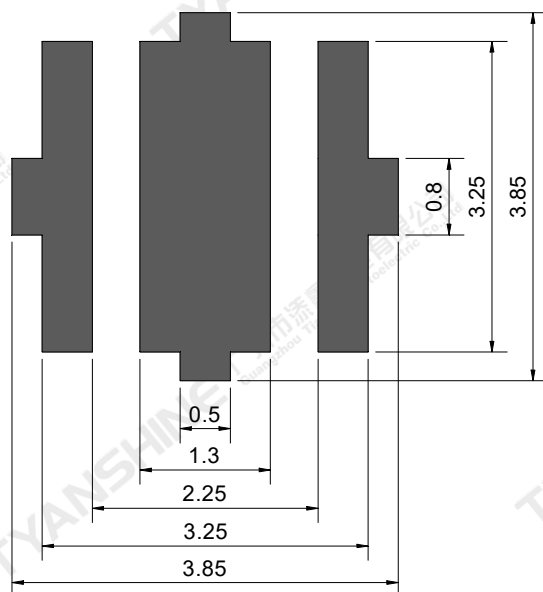
Package Dimensions:



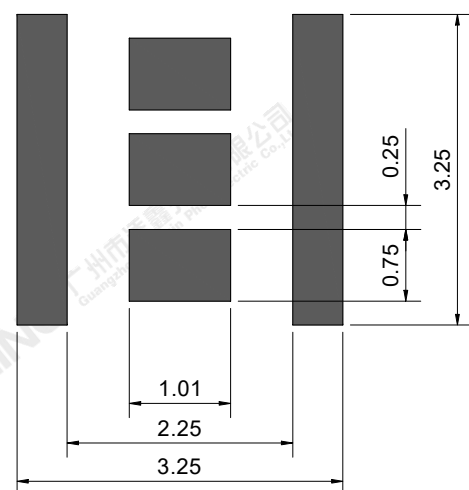
Top view

Side view

Bottom view



Recommended solder pad



Recommended stencil pattern

Notes:

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

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Ratings	Unit
Forward Current	IF	2200	mA
Reverse Voltage	VR	5	V
Reverse Current	IR	2	μA
Power Dissipation	PD	8	W
Junction Temperature	Tj	150	℃
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature	Tstg	-40~+70	℃
Operation Temperature	Topr	-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, IF=1.0A)

Parameter	Symbol	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	A	225	250	275	lm
Correlated Colour Temperature	CCT		1840	1930	2050	K
Forward Voltage	V_f		2.7	3.0	3.4	V
Peak Emission Wavelength	λ_p		599	602	605	nm
Dominant Wavelength	λ_d		585	588	591	nm
Spectral Line Half-Width	$\Delta\lambda$		85	90	95	nm
Viewing Angle at 50 % IV	$2\theta_{1/2}$		—	120	—	Deg
Reverse Current	I_R	VR=5V	—	—	2	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	A	—	2.7	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$		—	-1.3	—	mV/°C

White light Color coordinate filing (IF=1.0A)

Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
W	1840K	1965K	0.5598	0.4258	0.5508	0.4340	0.5581	0.4376	0.5690	0.4284
W2	1965K	2050K	0.5508	0.4340	0.5443	0.4402	0.5512	0.4447	0.5581	0.4376

Notes:

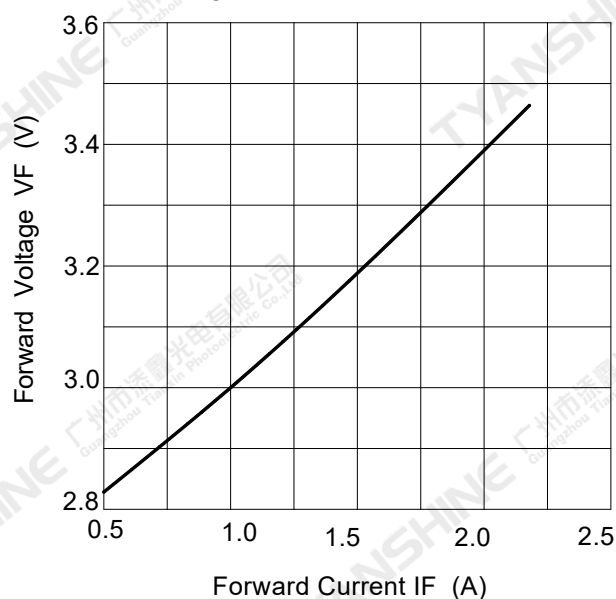
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance: $\pm 10\%$.
- 4.Forward voltage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

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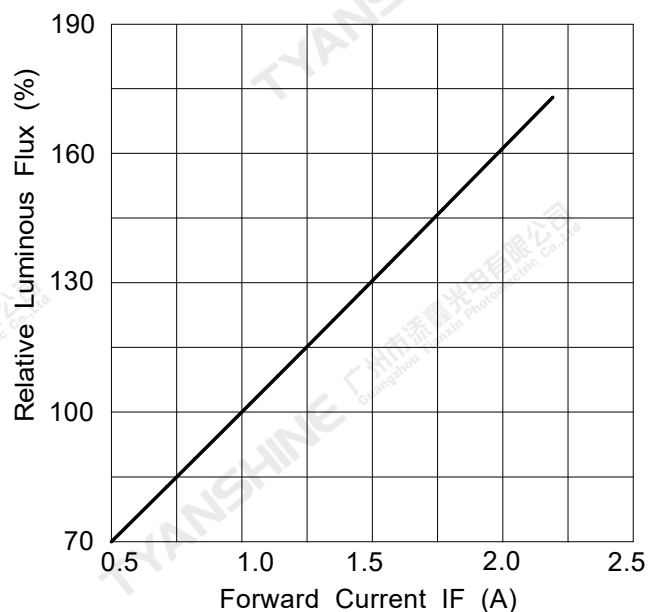
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

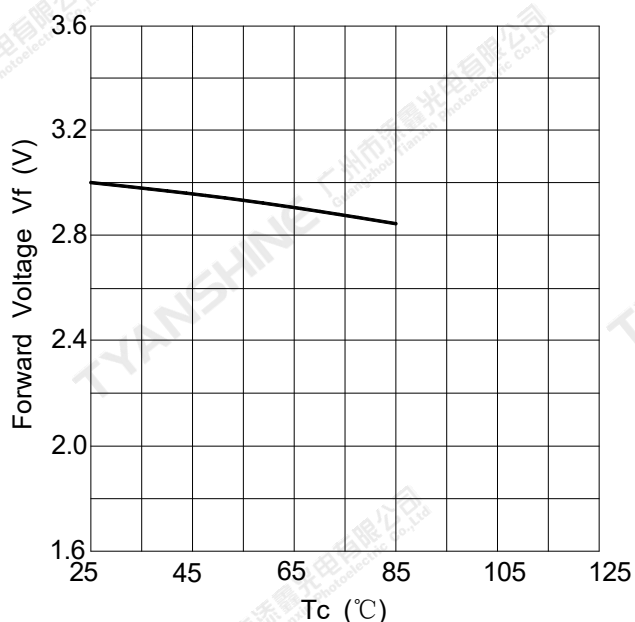
Forward Current VS. Relative Forward Voltage



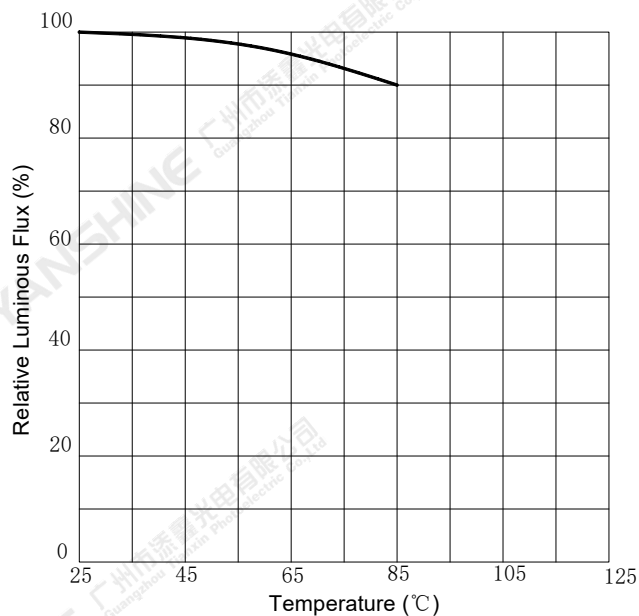
Forward Current VS. Relative Luminous Flux



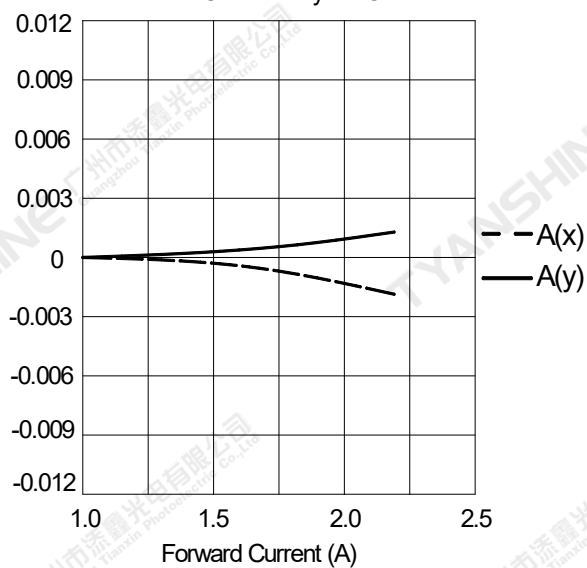
Temperature VS. Relative Luminous FLux (IF=1.0A)



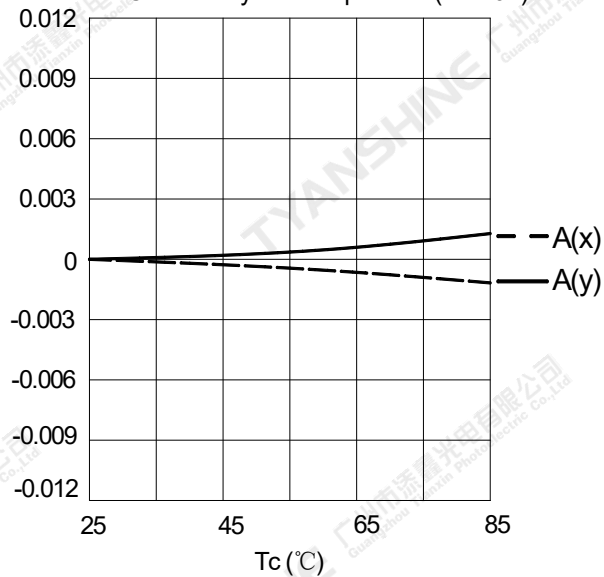
Temperature VS. Relative Luminous Flux (IF=1.0A)

**Notes:** — PC Amber (A) ;

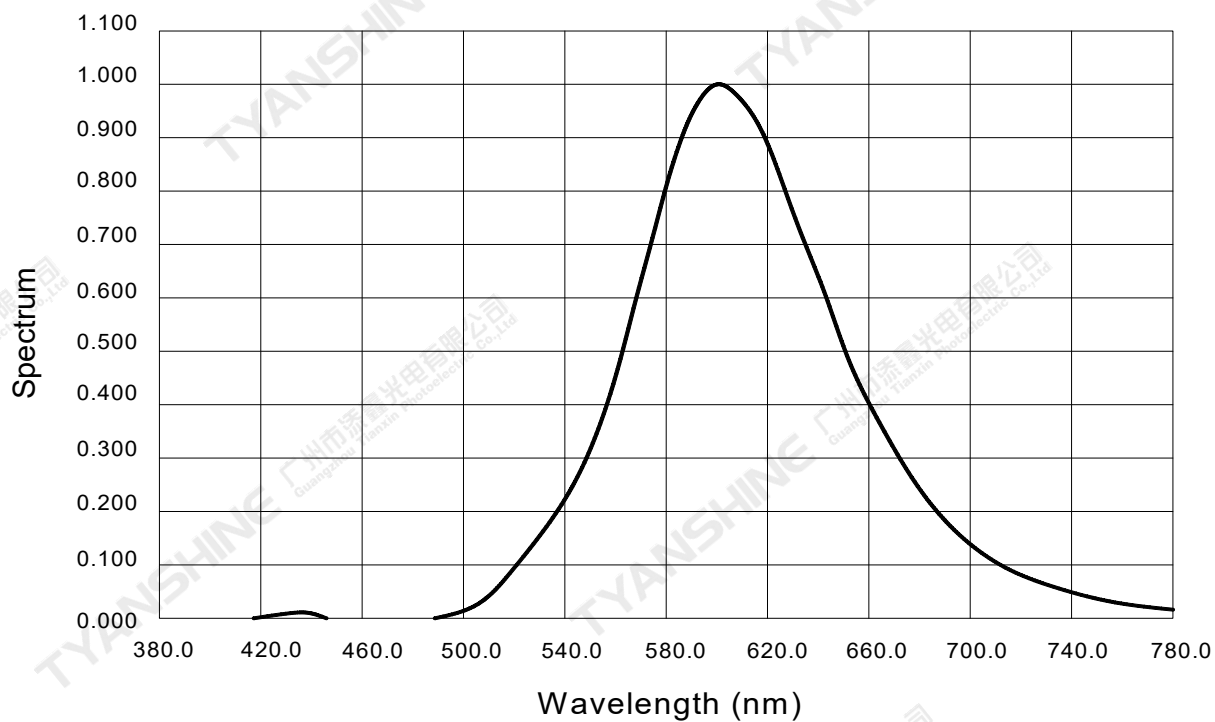
Relative Chromaticity VS. Current



Relative Chromaticity VS. Temperature (IF=1.0A)



Relative Spectral Distribution



Notes: — PC Amber (A) ;

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

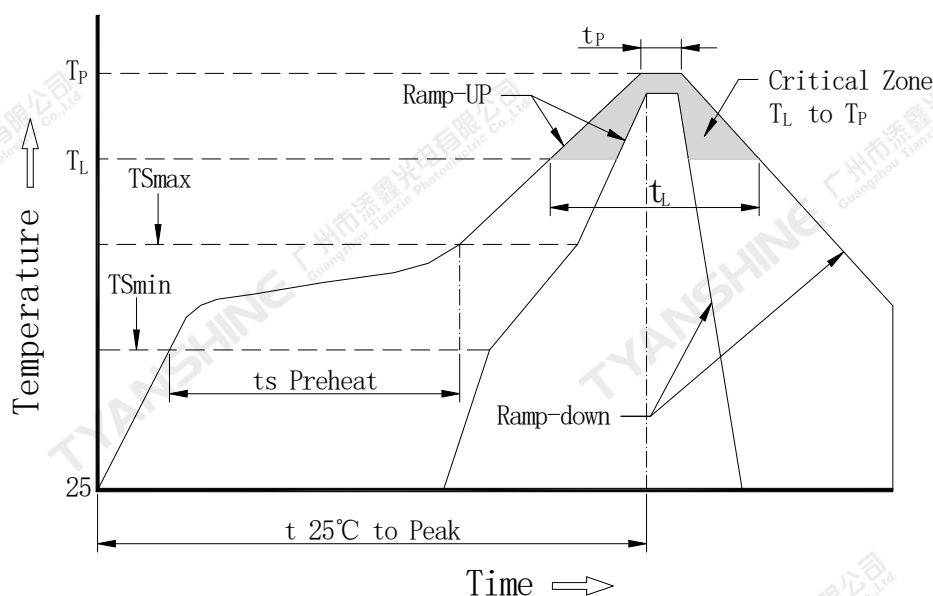
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



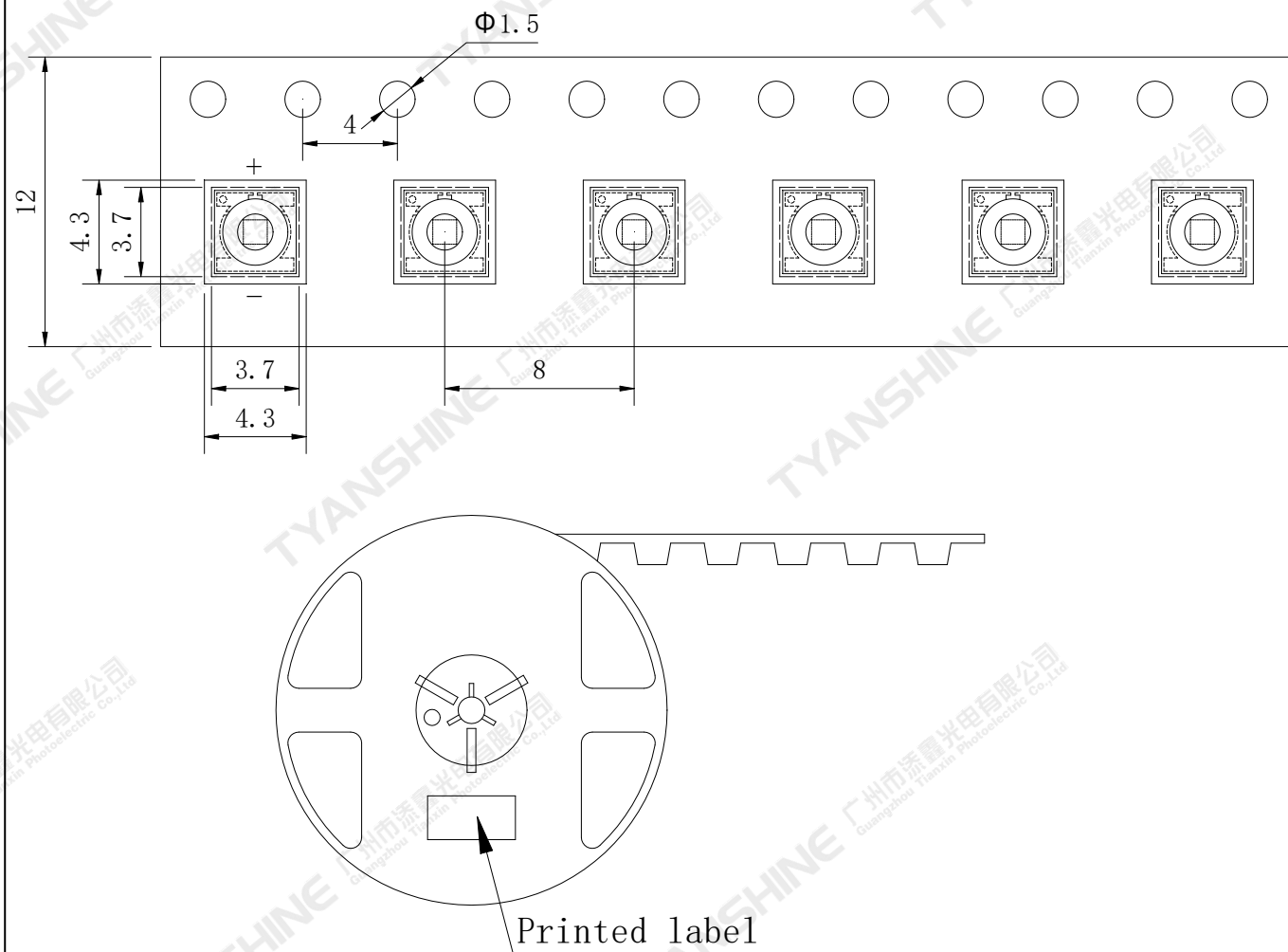
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (T_{Smax} to T_P)	3°C/second max.
Preheat: Temperature Min (T_{Smin})	130°C
Preheat: Temperature Max (T_{Smax})	190°C
Preheat: Time (T_{Smin} to T_{Smax})	120-180 seconds
Time Maintained Above: Temperature (T_L)	230°C
Time Maintained Above: Time (T_L)	60-150 seconds
Peak/Classification Temperature (T_P)	255°C
Time Within 5°C of Actual Peak Temperature (T_P)	10-35 seconds
Ramp-Down Rate	5°C/second max.
Time 25°C to Peak Temperature	7 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 ± 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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