

TX-3535R10FC120-NGVENA72-02

PRODUCT SPECIFICATION

Features:

- ◆ Excellent transiting heat from LED chip operating under 2000 mA.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ GaN

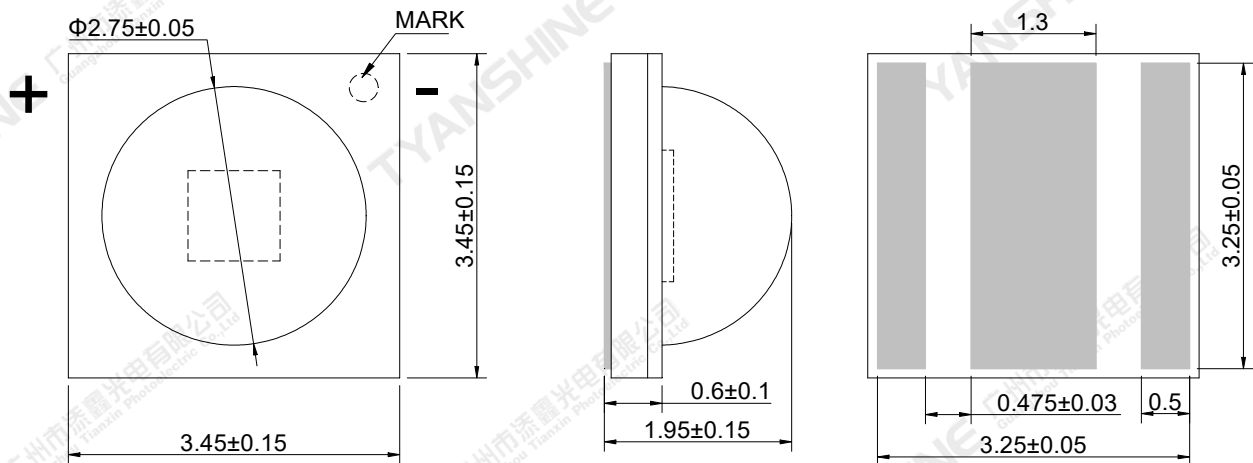
Emitting Color:

- ◆ Red

Applications:

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

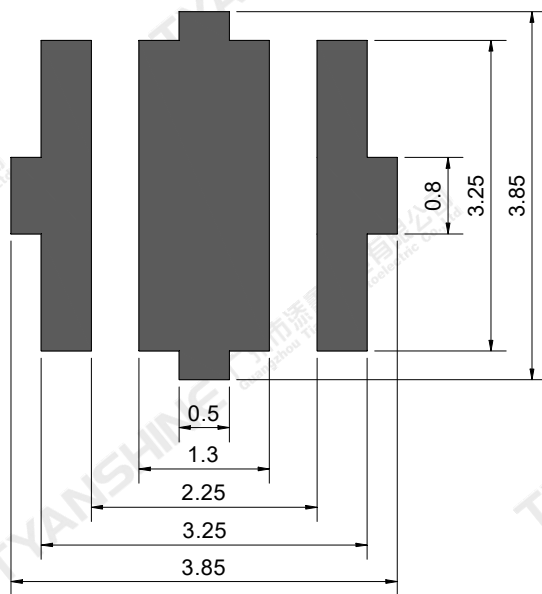
Package Dimensions:



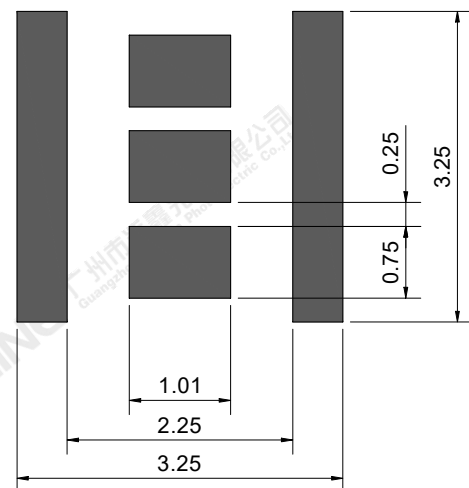
Top view

Side view

Bottom view



Recommended solder pad



Recommended stencil pattern

Notes:

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

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Ratings	Unit
Forward Current	IF	2000	mA
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	7.0	W
Junction Temperature	Tj	150	℃
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	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)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	If=1000mA	150	190	210	lm
Forward Voltage	V_f		2.3	2.5	2.8	V
Viewing Angle at 50 % IV	$2\theta_{1/2}$		—	120	—	Deg
Peak Emission Wavelength	λ_p		620	625	630	nm
Dominant Wavelength	λ_d		615	619	625	nm
Viewing Angle at 50 % IV	$2\theta_{1/2}$		12	16	20	nm
Reverse Current	I_R	—	—	—	—	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=1000mA	—	4.9	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$		—	-2	—	mV/°C

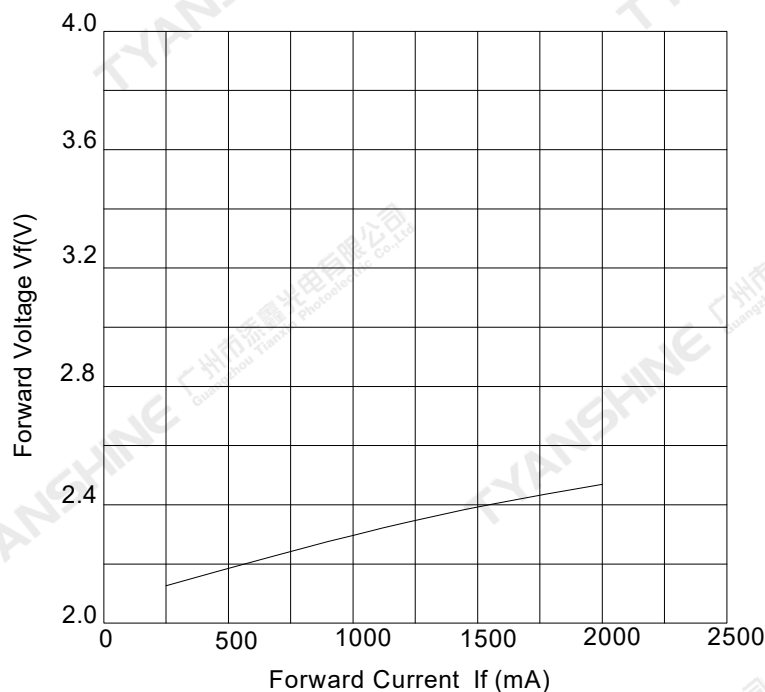
Notes:

- 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:±15%.
- 4.Forward voltage measurement tolerance:±0.15V.

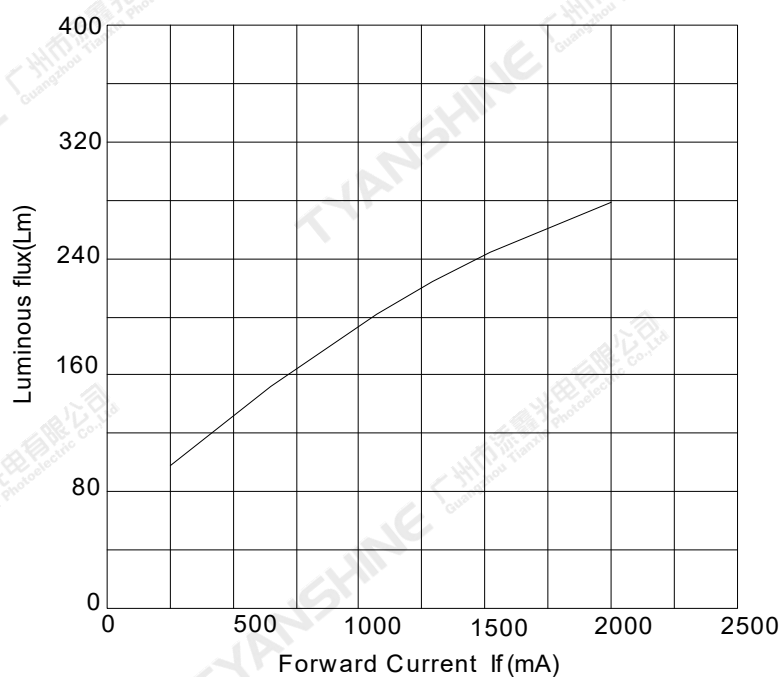
Typical Electrical/Optical Characteristics Curves

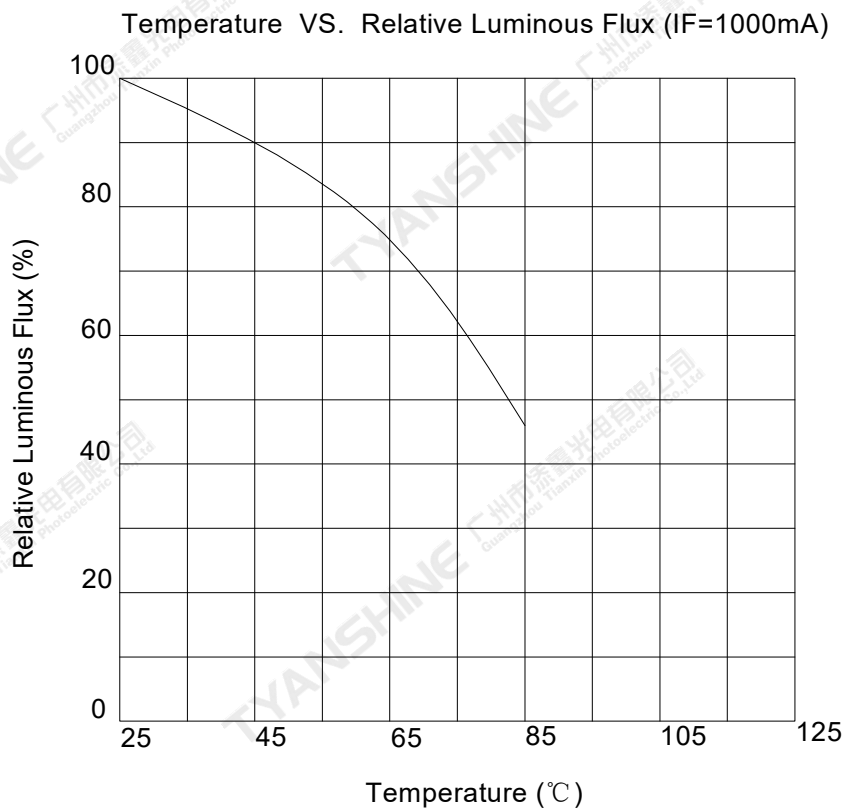
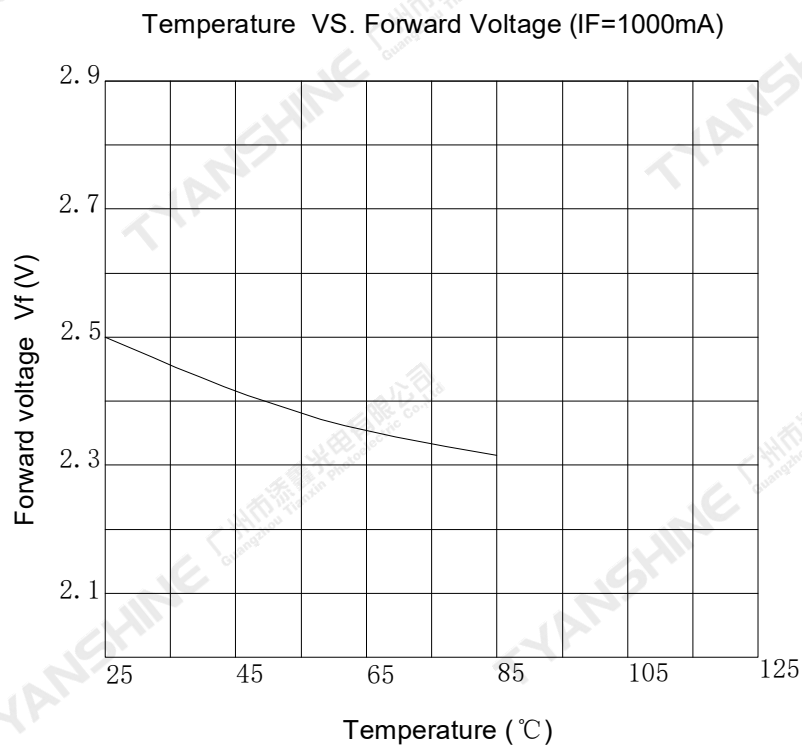
(25°C Ambient Temperature Unless Otherwise Noted)

Forward Current VS. Forward Voltage

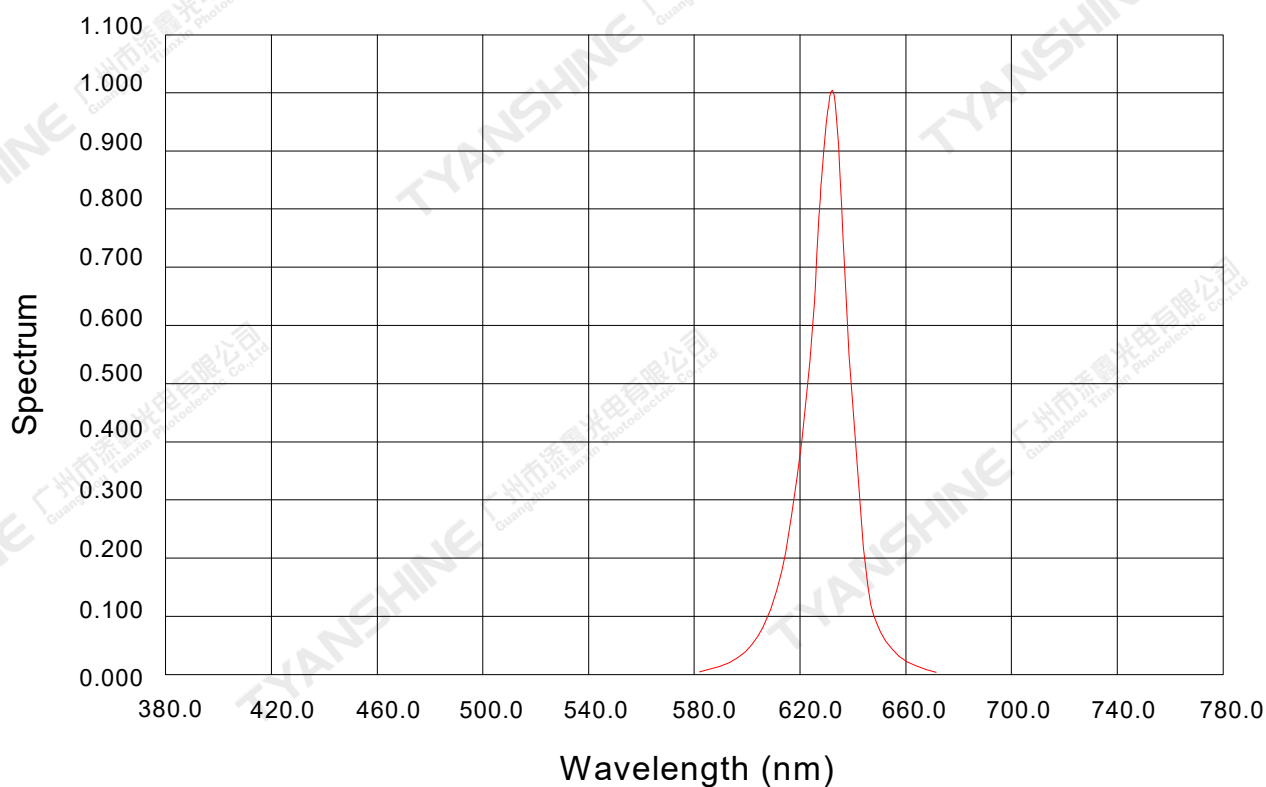


Forward Current VS. Luminous flux

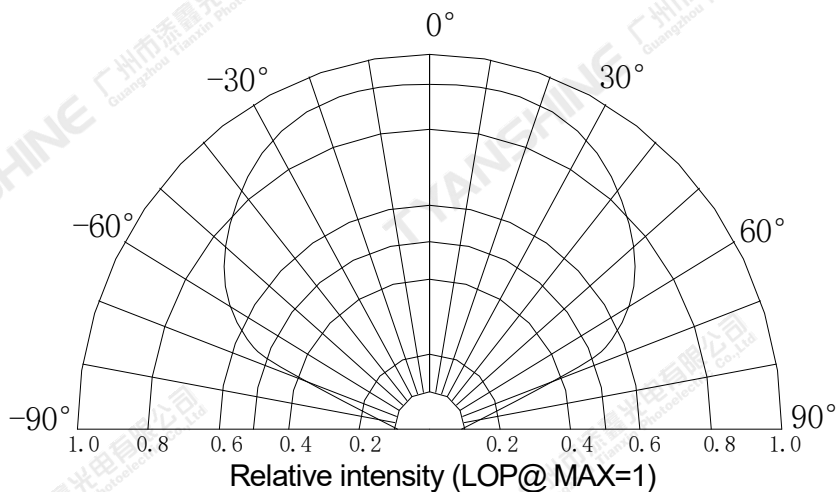




Relative Spectral Distribution



Beam Pattern

**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

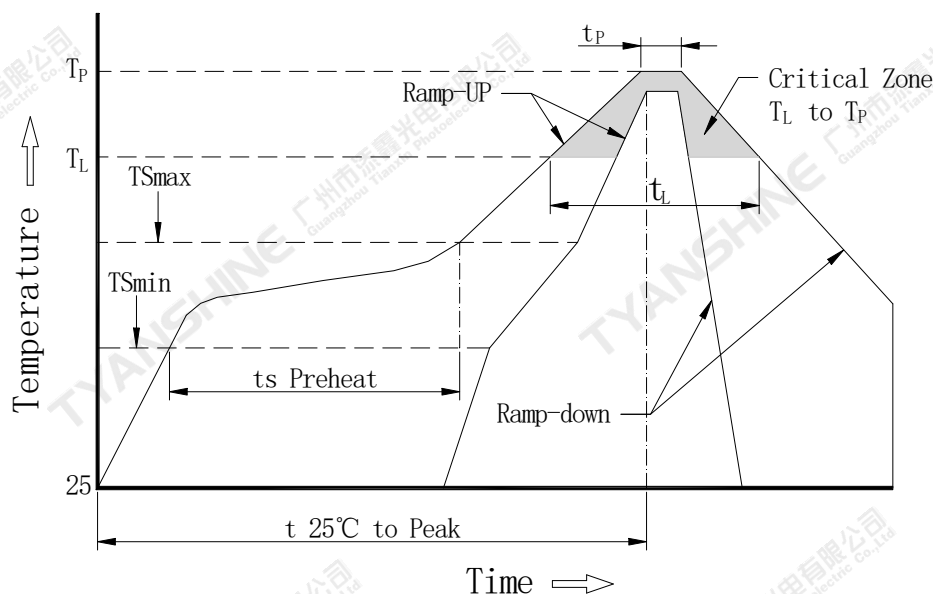
Storage Environment Condition

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)	10-35seconds
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.

Quantity:1000 PCS



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.