

TX-3535RGB3FC120-OGVCND34-01

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 350mA
- ◆High luminous output
- ◆No UV

Chip Material:

- ◆Red: AlGaInP
- ◆Green: GaN
- ◆Blue: GaN

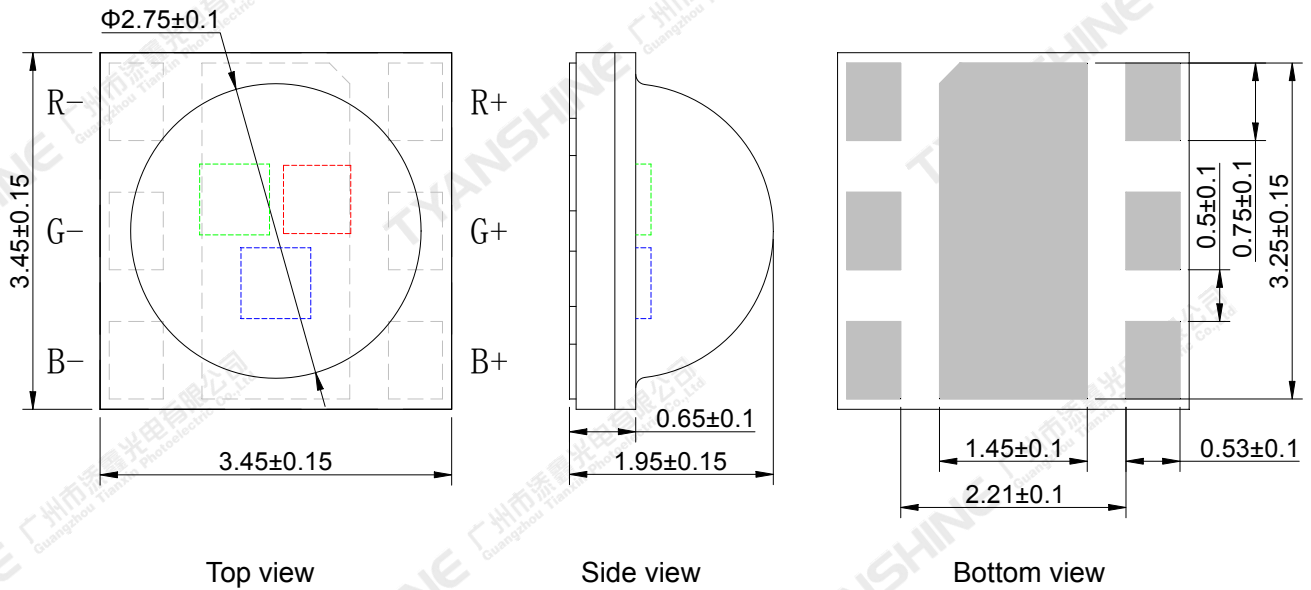
Emitting Color:

- ◆Red (R)
- ◆Green (G)
- ◆Blue (B)

Applications:

- ◆Stage lighting
- ◆Garden lighting
- ◆Landscape Lighting

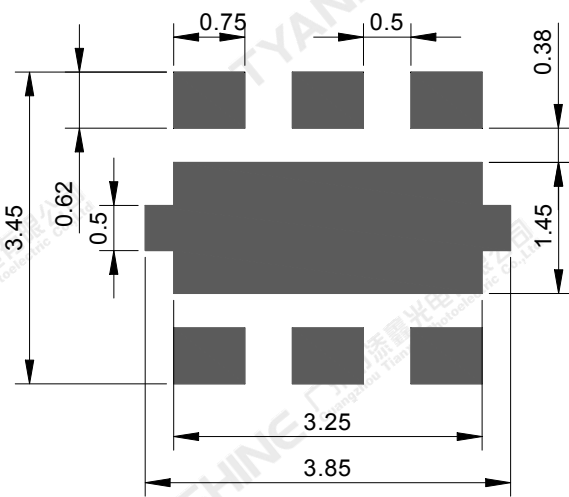
Package Dimensions:



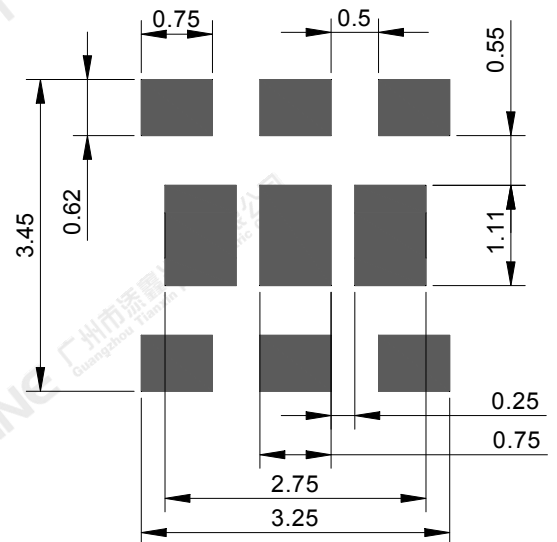
Top view

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 .

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Absolute Maximum Ratings (Tc=25°C)

| Parameter | Symbol | Max Ratings | Unit |
|---|--------|-------------|------|
| Forward Current | IF | 350 | mA |
| Reverse Voltage | VR | 7 | V |
| Power Dissipation | PD | R | 780 |
| | | G | 1100 |
| | | B | 1100 |
| Junction Temperature | Tj | R | 115 |
| | | G | 150 |
| | | B | 150 |
| Electrostatic Discharge Threshold (ESD) | ESD | 2000 | V |
| Storage Temperature | Tstg | -40~70 | °C |
| 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=300mA)

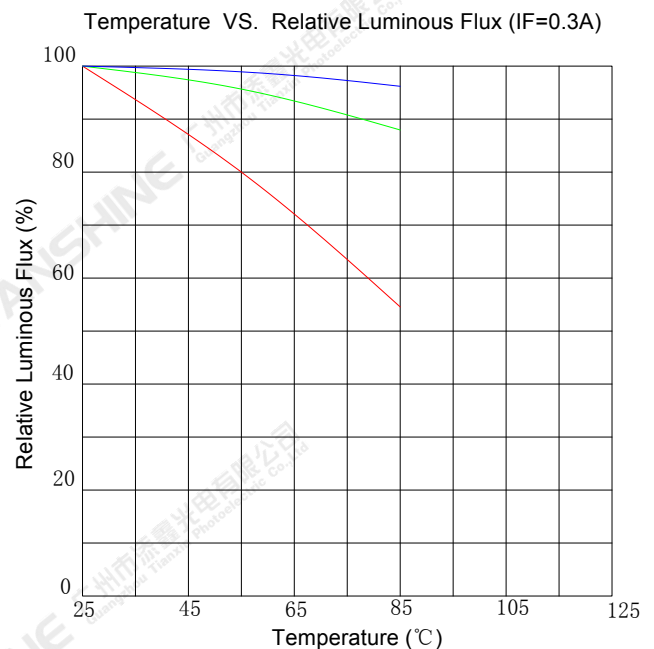
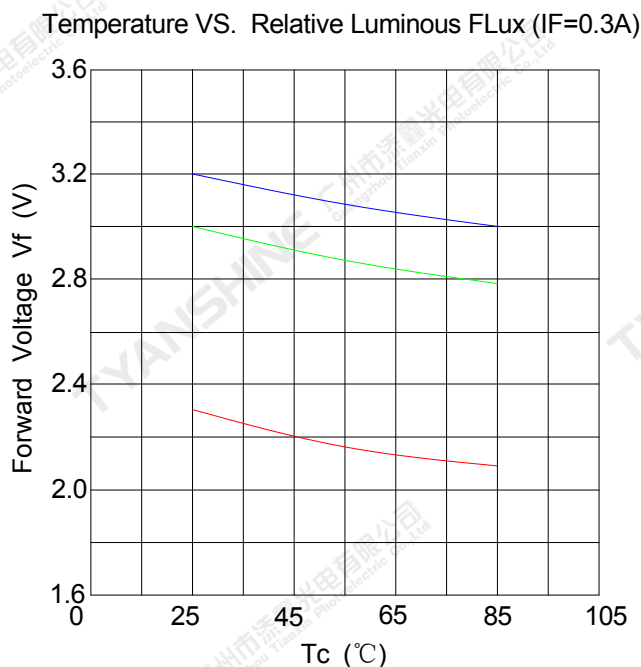
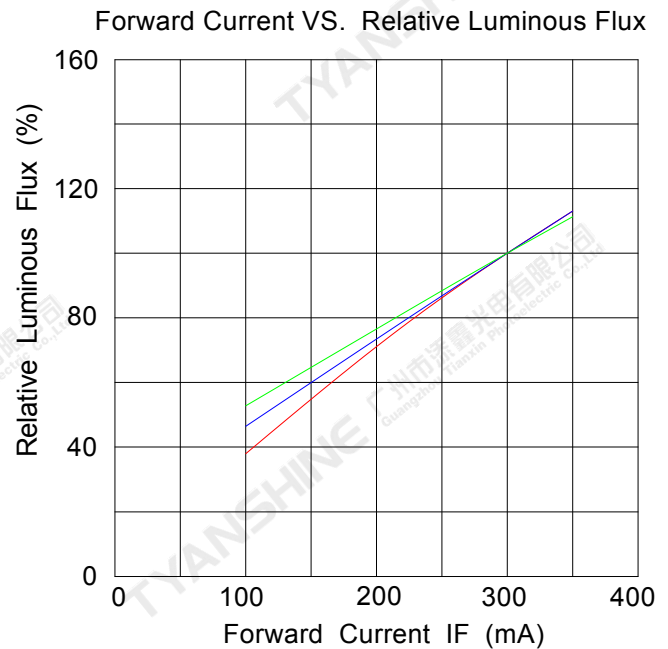
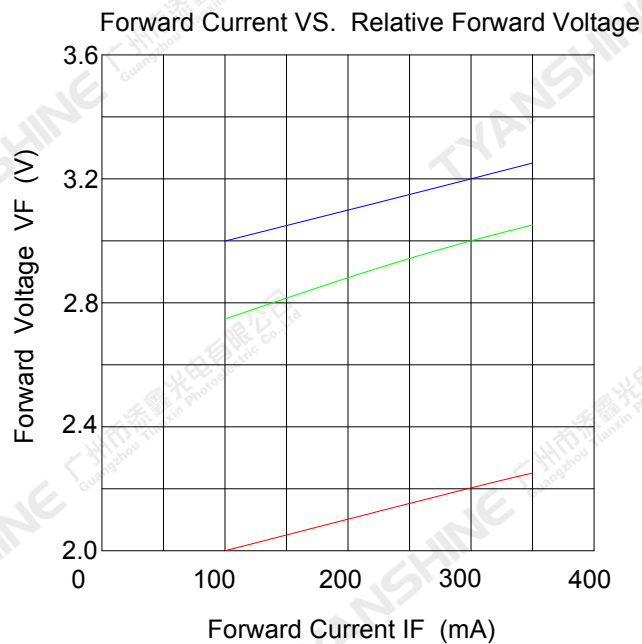
| Parameter | Symbol | Emitting Color | Min. | Typ. | Max. | Units |
|-------------------------------------|-----------------|--------------------------|------|------|------|---------|
| Luminous Flux | ϕ_v | R | 40 | 50 | 60 | lm |
| | | G | 60 | 75 | 85 | |
| | | B | 10 | 16 | 22 | |
| Dominant Wavelength | λ_d | R | 620 | 623 | 626 | nm |
| | | G | 525 | 531 | 535 | |
| | | B | 455 | 466 | 468 | |
| Peak-emission Wavelength | λ_p | R | 630 | 633 | 636 | nm |
| | | G | 519 | 525 | 529 | |
| | | B | 450 | 461 | 463 | |
| Spectral Line Half-Width | $\Delta\lambda$ | R | 14 | 16 | 18 | nm |
| | | G | 30 | 35 | 40 | |
| | | B | 18 | 21 | 24 | |
| Forward Voltage | V_f | R | 1.9 | 2.2 | 2.6 | V |
| | | G | 2.8 | 3.0 | 3.5 | |
| | | B | 2.9 | 3.2 | 3.6 | |
| Reverse Current | I_R | $V_R=7V$ | — | — | 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 | — | 22 | — | |
| | | B | — | 22 | — | |
| | | Total thermal resistance | — | 10.5 | — | |
| Temperature Coefficient of Voltage | $V\Delta F/T$ | R | — | -5.4 | — | mV/°C |
| | | G | — | -2.9 | — | |
| | | B | — | -1.5 | — | |

Notes:

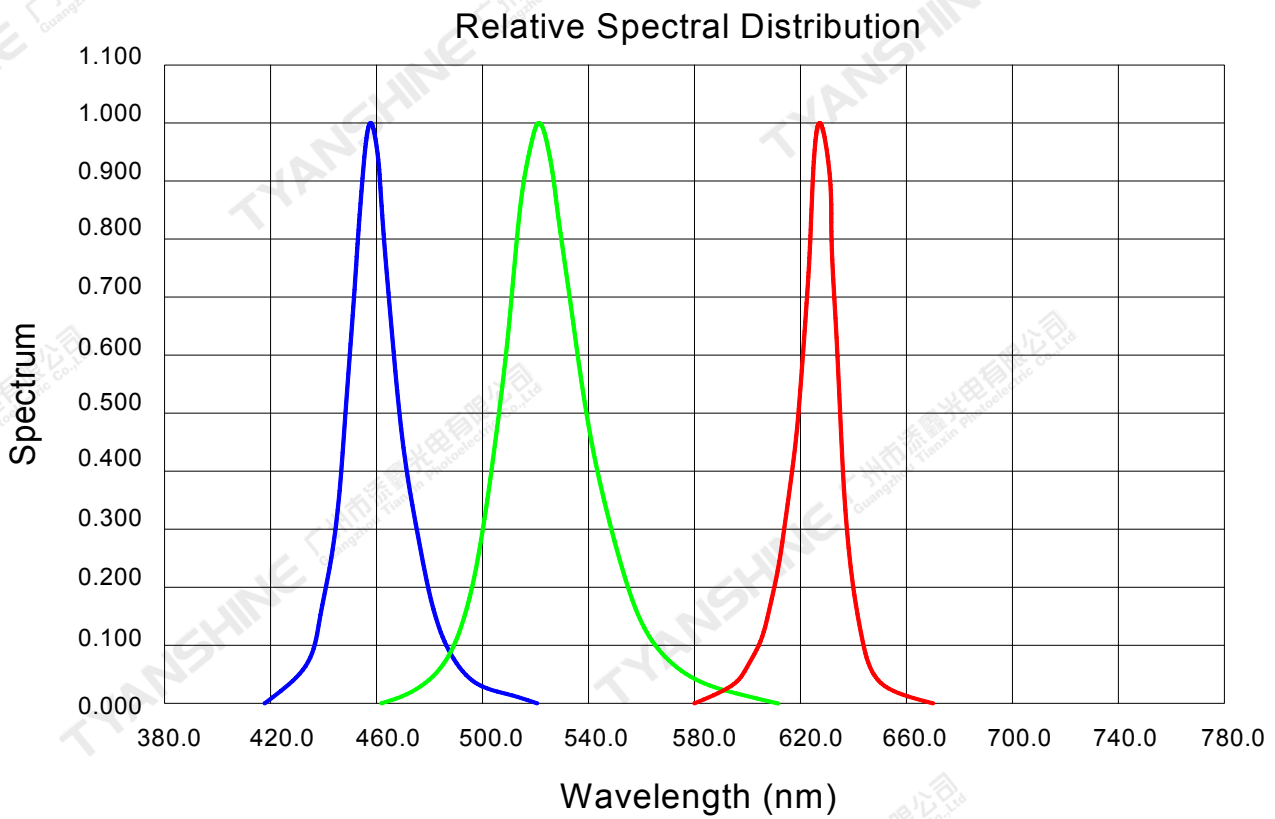
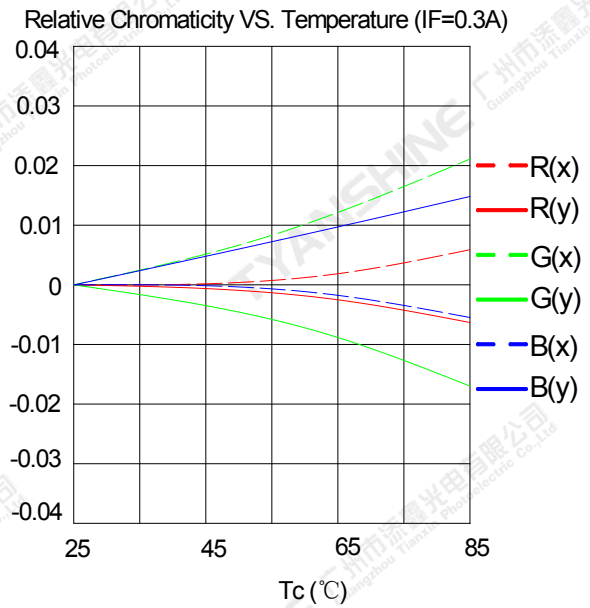
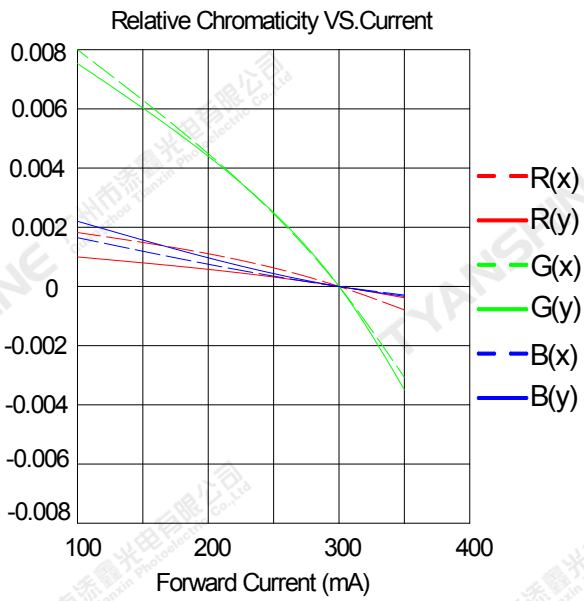
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance:±10%.
- 4.Forward voltage measurement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

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



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



Notes: ■ Red (R) ; ■ Green (G) ; ■ Blue (B) ;

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

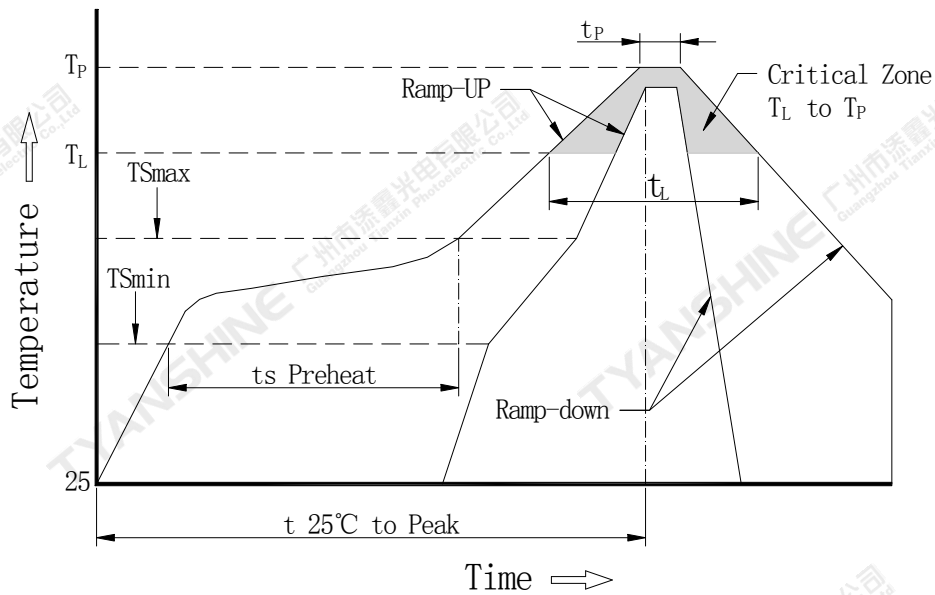
Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



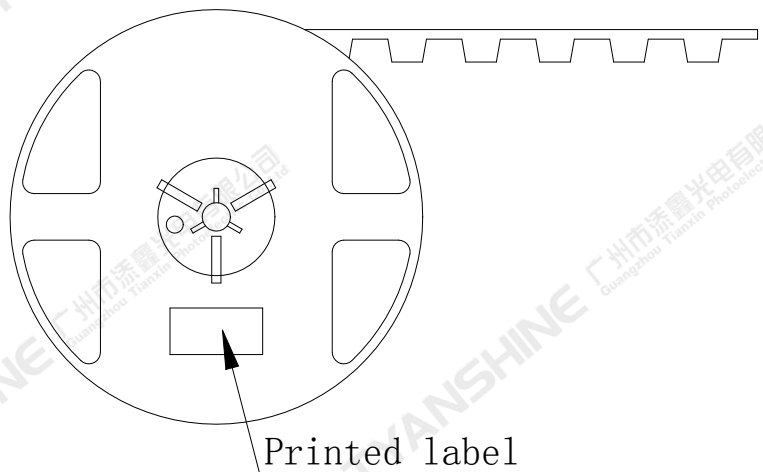
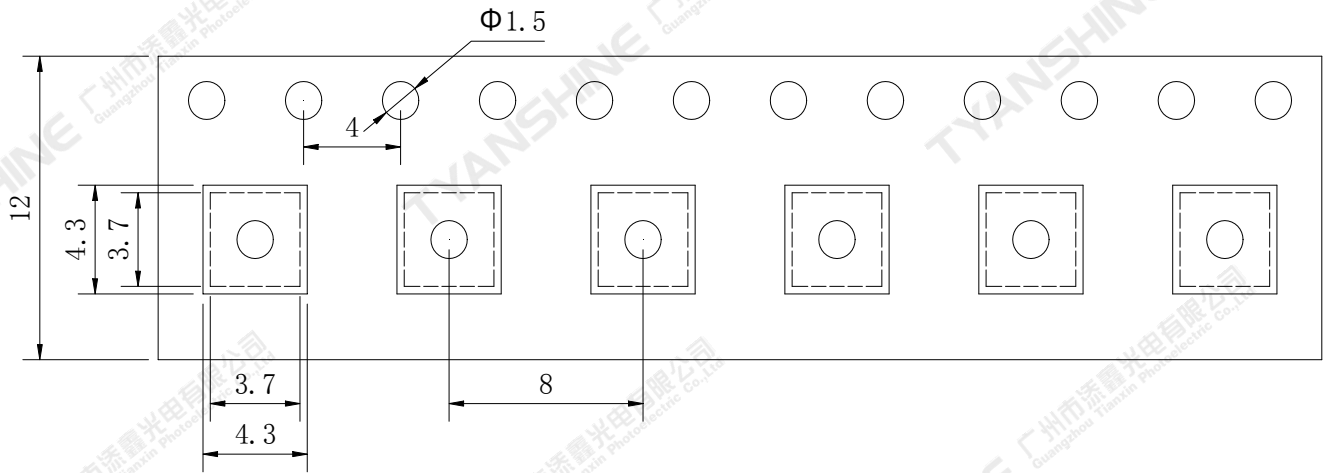
| Profile Feature | Lead-Based Solder |
|---|-------------------|
| Average Ramp-Up Rate (TSmax to TP) | 3°C/second max. |
| Preheat: Temperature Min (TSmin) | 100°C |
| Preheat: Temperature Max (TSmax) | 150°C |
| Preheat: Time (TSmin to TSmax) | 60-120 seconds |
| Time Maintained Above: Temperature (TL) | 183°C |
| Time Maintained Above: Time (TL) | 60-150 seconds |
| Peak/Classification Temperature (TP) | 225°C |
| Time Within 5°C of Actual Peak Temperature (TP) | 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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