

# TX-6065W60FC120-NUVEZG-A01

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 5.0 A.
- ◆ Provide uniform cross distribution of positive white and warm white dual color scheme, mixed pure.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ GaN

### Emitting Color:

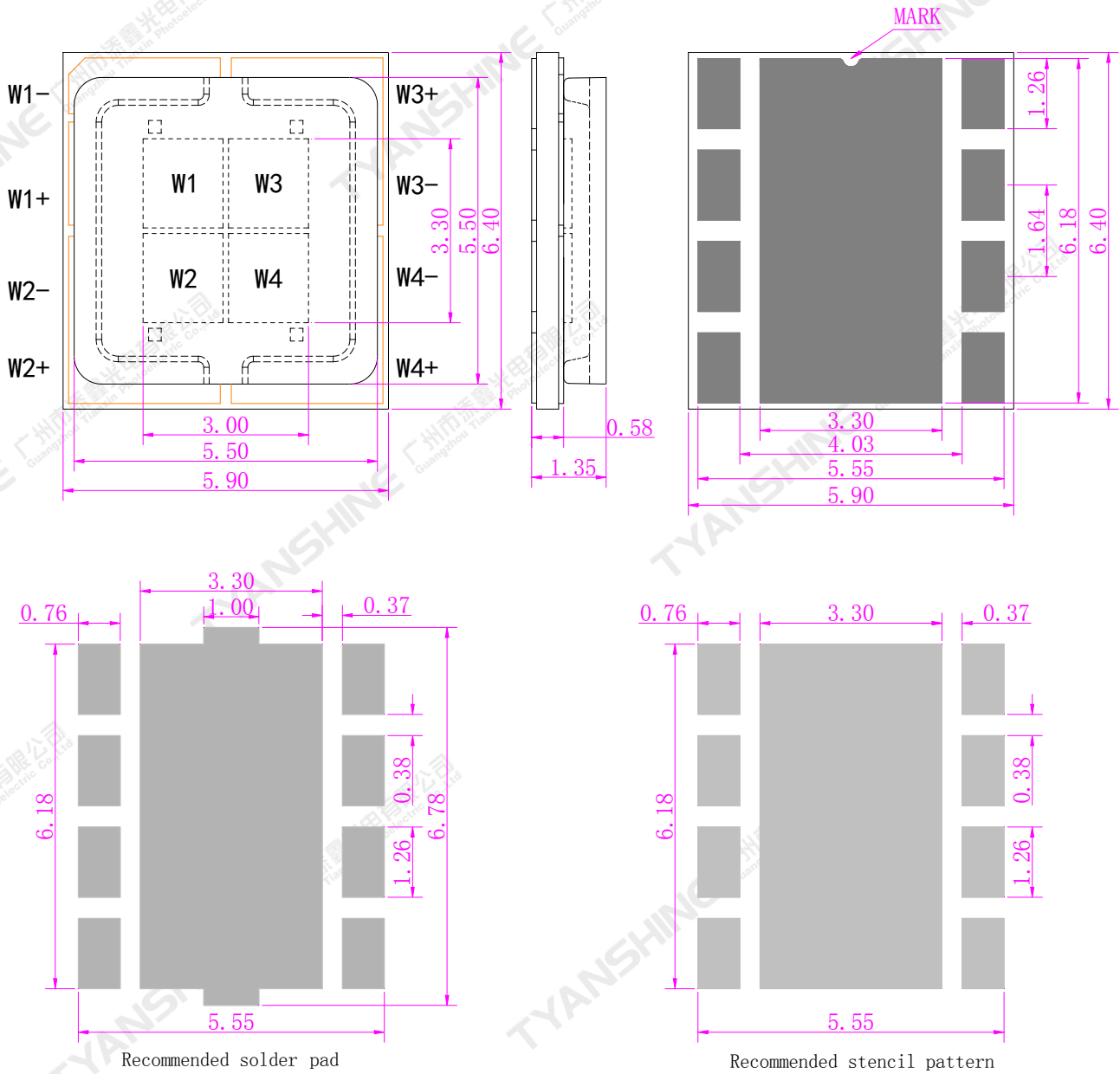
- ◆ White

### Applications:

- ◆ Auxiliary lighting
- ◆ Ambient lighting
- ◆ Architectural lighting

|          |                            |          |            |      |        |
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**Package Dimensions:**



**Notes:**

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

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

| Parameter                               | Symbol | Ratings                            | Unit |   |
|---|--------|------------------------------------|------|---|
| Forward Current                         | IF     | 5000                               | mA   |   |
| Reverse Voltage                         | VR     | Not designed for reverse operation | V    |   |
| Power Dissipation                       | PD     | W1                                 | 14.4 | W |
|   |        | W2                                 | 14.4 |   |
|   |        | W3                                 | 14.4 |   |
|   |        | W4                                 | 14.4 |   |
| Junction Temperature                    | Tj     | 150                                | °C   |   |
| Electrostatic Discharge Threshold (ESD) | ESD    | 2000                               | V    |   |
| Storage Temperature                     | Tstg   | -40~+70                            | °C   |   |
| Operation Temperature                   | Topr   | -30~+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 | Emitting Color  | Min. | Typ. | Max. | Units   |
|-------------------------------------|-----------------|-----------|-----------------|------|------|------|---------|
| Luminous Flux                       | $\phi_v$        | If=1.0A   | W1/W2/<br>W3/W4 | 330  | 365  | 400  | lm      |
|                                     |                 | If=4.0A   | W1/W2/<br>W3/W4 | 850  | 950  | 1050 |         |
| Forward Voltage                     | $V_f$           | If=1.0A   | W1/W2/<br>W3/W4 | 2.9  | 3.1  | 3.3  | V       |
|                                     |                 | If=4.0A   | W1/W2/<br>W3/W4 | 3.3  | 3.5  | 3.7  |         |
| Correlated Colour Temperature       | CCT             | If=1.0A   | —               | 6500 | 6900 | 7150 | K       |
|                                     |                 | If=4.0A   | —               | 7000 | 7500 | 7750 |         |
| Reverse Current                     | $I_R$           | —         | —               | —    | —    | —    | $\mu A$ |
| Viewing Angle at 50 % IV            | $2\theta_{1/2}$ | —         | —               | —    | 120  | —    | Deg     |
| Thermal Resistance Junction to Case | $R\theta_{J-C}$ | —         | —               | —    | 0.45 | —    | K/W     |
| Temperature Coefficient of Voltage  | $V\Delta F/T$   | If=4.0A   | —               | —    | -2.5 | —    | mV/°C   |

**White Color coordinate filing (IF=1.0A Tc=25°C)**

| Region | CCT Range |      | X1     | Y1     | X2     | Y2     | X3     | Y3     | X4     | Y4     |
|--------|-----------|------|--------|--------|--------|--------|--------|--------|--------|--------|
|        | Min       | Max  |        |        |        |        |        |        |        |        |
| D112   | 6500      | 6700 | 0.3144 | 0.3236 | 0.3114 | 0.3191 | 0.3100 | 0.3256 | 0.3127 | 0.3293 |
| CD11   | 6700      | 7150 | 0.3114 | 0.3191 | 0.3063 | 0.3111 | 0.3039 | 0.3173 | 0.3100 | 0.3256 |

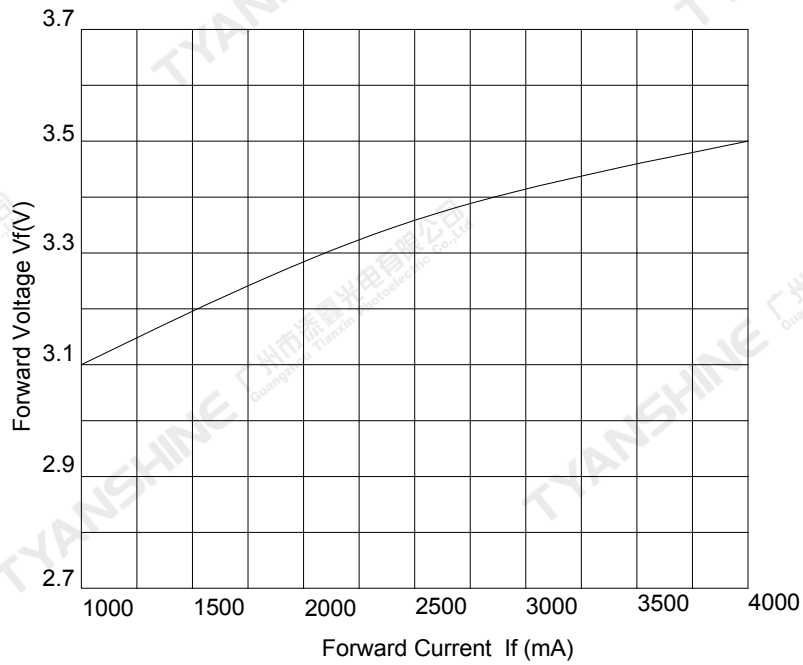
**Notes:**

- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- Luminous flux measurement tolerance:±15%.
- Forward voltage measurement tolerance:±0.15V.

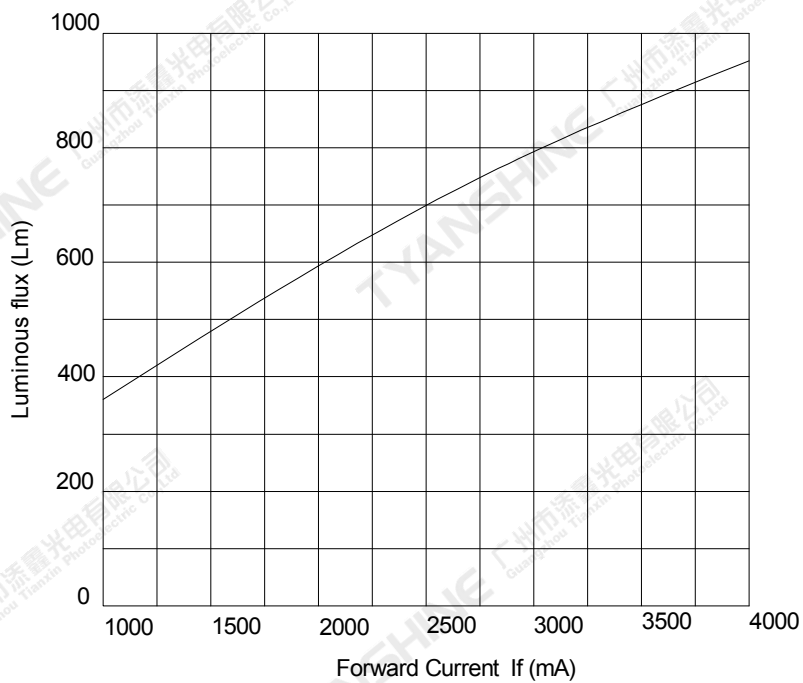
## Typical Electrical/Optical Characteristics Curves

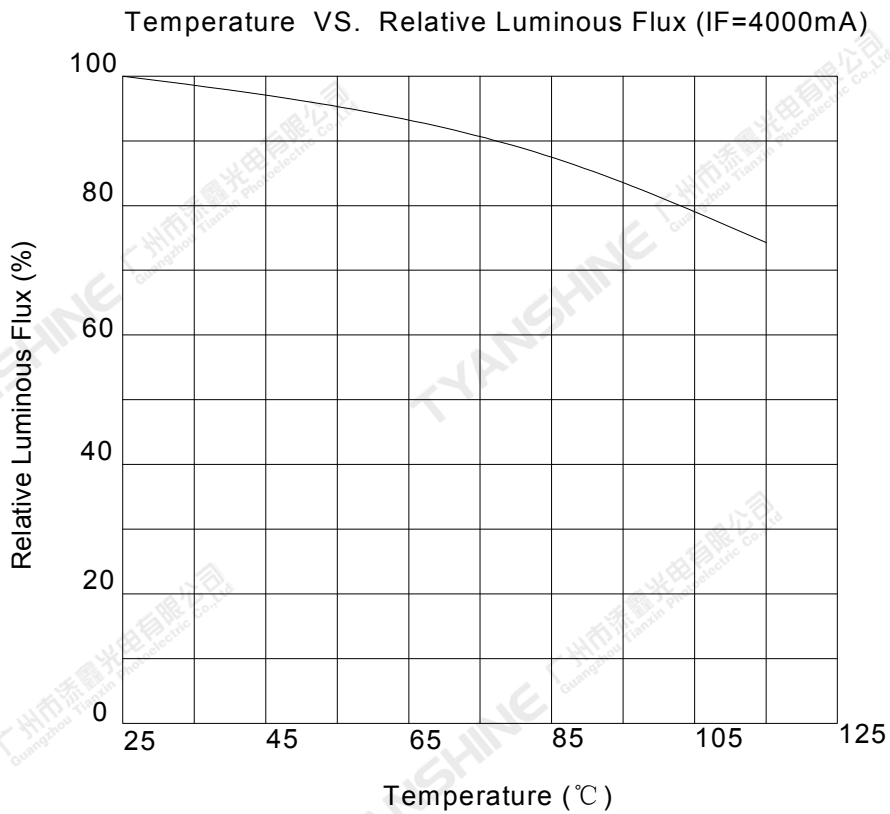
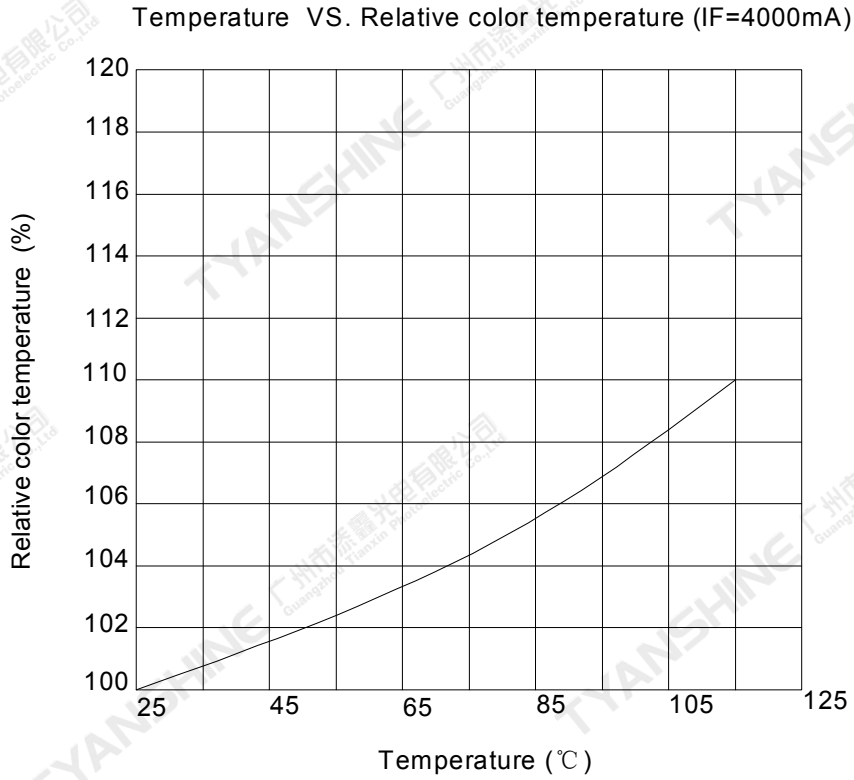
(25°C Ambient Temperature Unless Otherwise Noted)

Forward Current VS. Forward Voltage

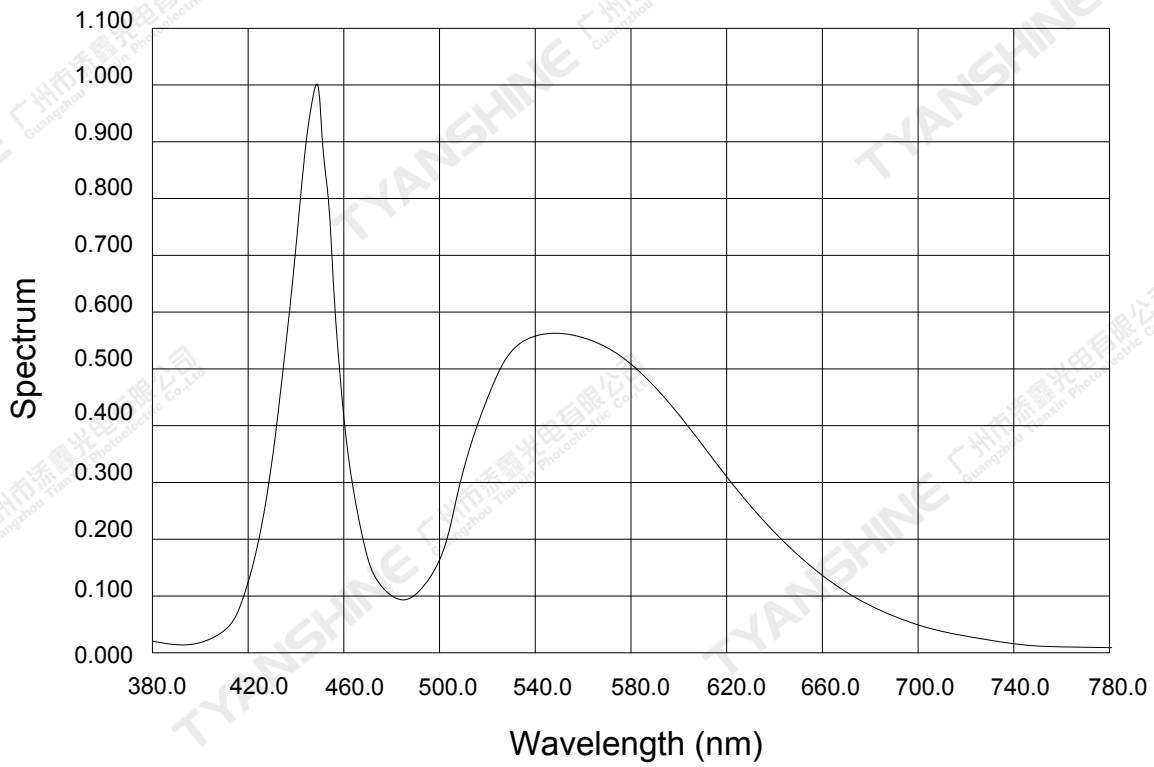


Forward Current VS. Luminous flux

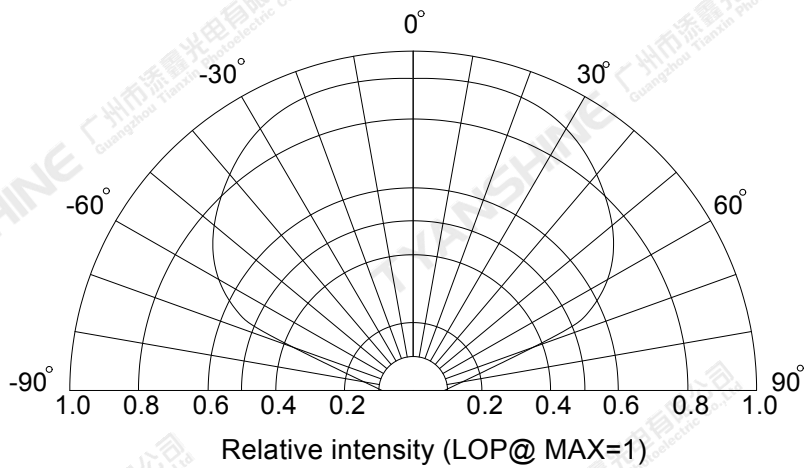




Relative Spectral Distribution



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  $\pm 5^\circ$ .

|          |                            |          |            |      |        |
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## Usage Precautions

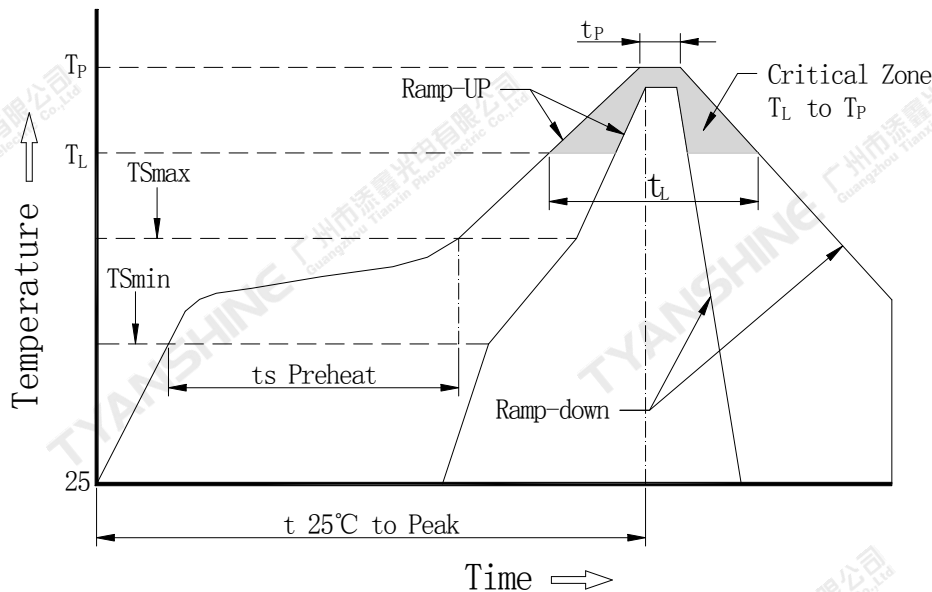
### Storage Environment Condition

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.    |

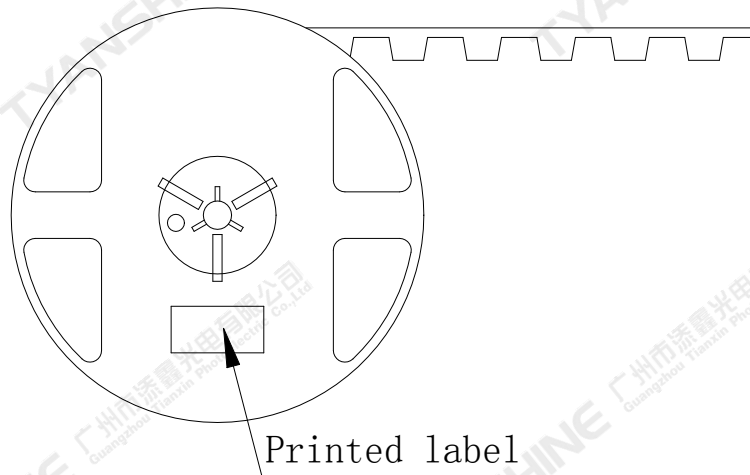
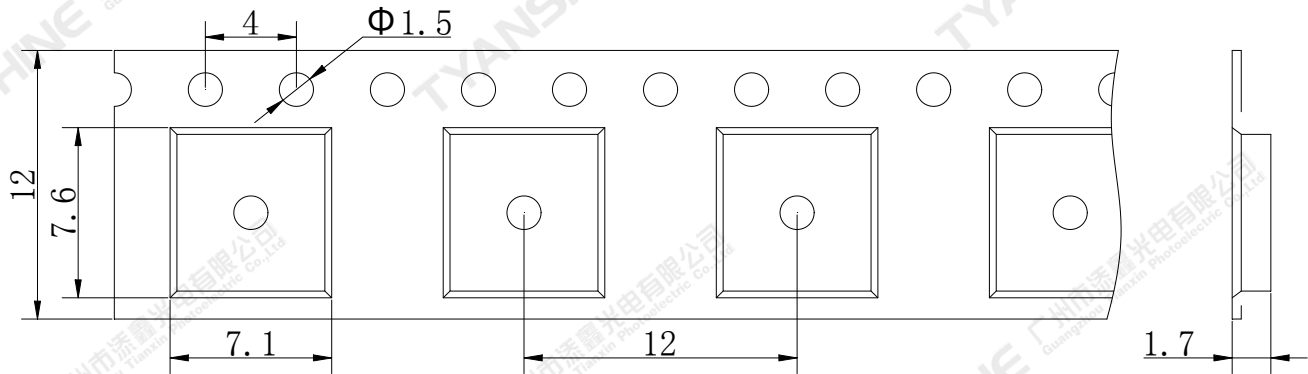
#### Note:

All temperatures refer to topside of the package, measured on the package body surface.



**Dimensions For Cannulation And Packaging**

**Quantity:1000PCS**



**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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