



# Preliminary

## TX-3535Y3FC120-OGHCND34-03F DATA SHEET

Approved by:

Checked by:

Prepared by:

|                 |                             |                 |            |             |        |
|-----------------|-----------------------------|-----------------|------------|-------------|--------|
| <b>Part No.</b> | TX-3535Y3FC120-OGHCND34-03F | <b>Spec No.</b> | WKF-BE0172 | <b>Page</b> | 1 of 7 |
|-----------------|-----------------------------|-----------------|------------|-------------|--------|

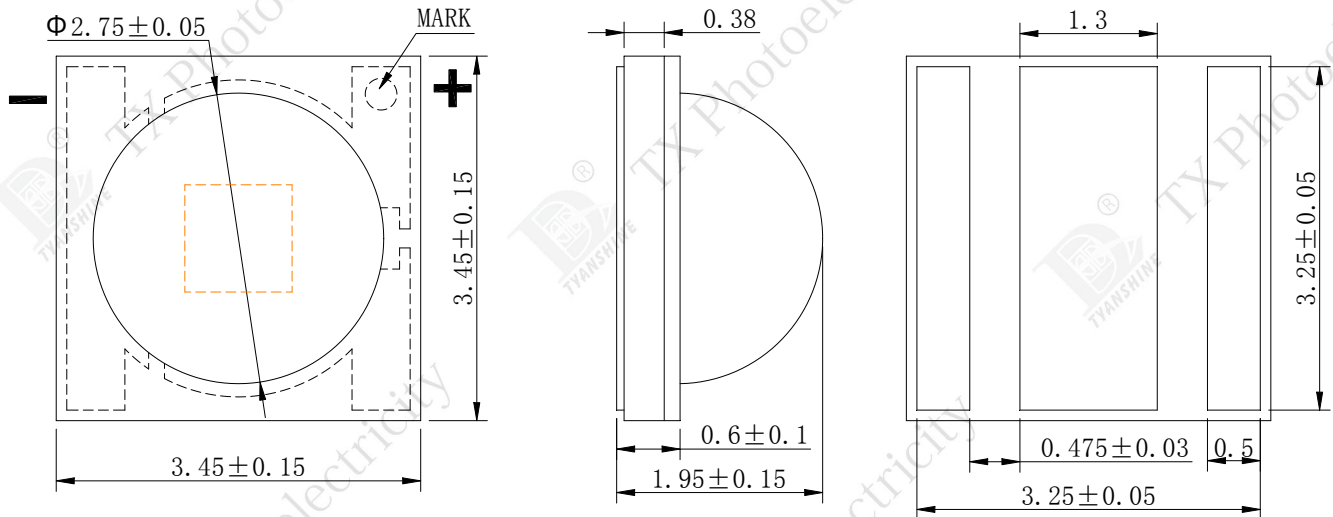
**Features:**

- ◆ Excellent Transiting Heat from LED Chip Operating under 700mA
- ◆ High Luminous Output
- ◆ No UV

**Typical purpose:**

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

**Package Dimensions:**



**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  mm (0.01") unless otherwise noted.

| Part NO.                    | Lens Color  | Emitting Color |
|-----------------------------|-------------|----------------|
| TX-3535Y3FC120-OGHCND34-03F | Water Clear | Yellow         |

**Absolute Maximum Ratings at Ta=25°C**

| Parameter   | Symbol           | Min | Typ                  | Max  | Unit |
|---|------------------|-----|----------------------|------|------|
| LED Junction Temperature                                  | T <sub>j</sub>   | —   | —                    | 150  | °C   |
| Power Dissipation   | P <sub>D</sub>   | —   | 910                  | 1820 | mW   |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | I <sub>FP</sub>  | —   | —                    | 1000 | mA   |
| Continuous Forward Current                                | I <sub>F</sub>   | —   | 350                  | 700  | mA   |
| Reverse Voltage   | V <sub>R</sub>   | —   | 5                    | —    | V    |
| Electrostatic Discharge Threshold (ESD)                   | ESD              | —   | ESD sensitive device | —    | V    |
| Operating Temperature Range                               | T <sub>opr</sub> | -40 | —                    | 70   | °C   |
| Storage Temperature Range                                 | T <sub>spr</sub> | -40 | —                    | 100  |      |

**Notes:**

1. Specifications are subject to change without notice.
2. Under the stipulated Characteristics parameters above, the life span of the LED is more than 50,000hours.
3. The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
4. 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.

**Characteristics at  $I_f=350\text{mA}$ ,  $V_r=5\text{V}$  ( $T_a=25^\circ\text{C}$ ):**

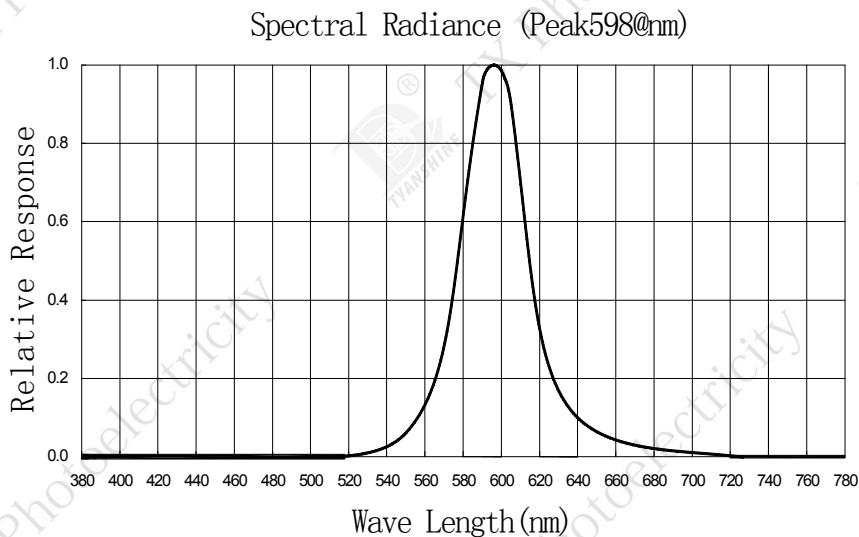
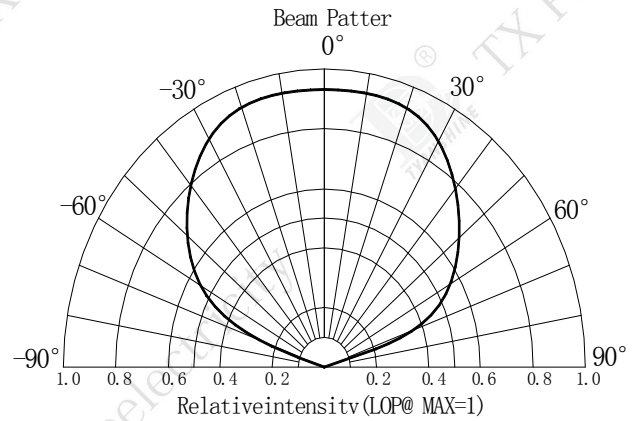
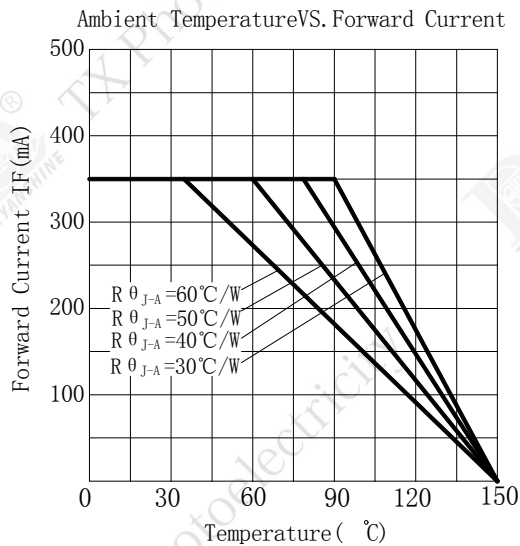
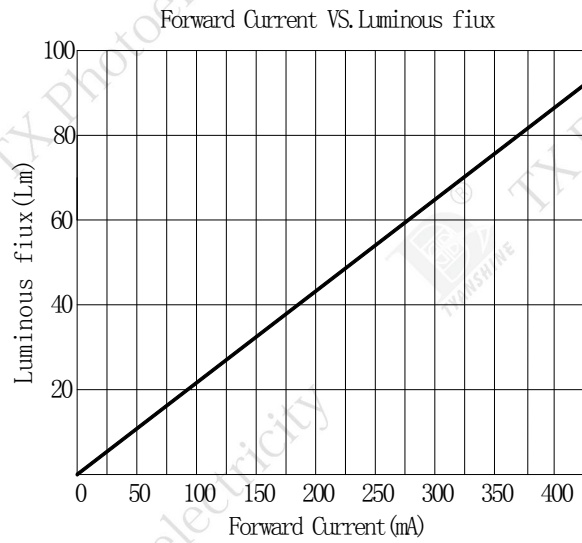
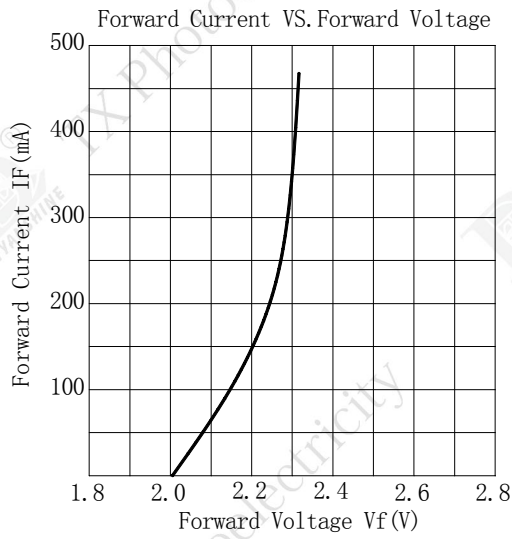
| Parameter                                  | Symbol          | Values |      |      | Units                      |
|--|-----------------|--------|------|------|----------------------------|
|  |                 | Min.   | Typ. | Max. |                            |
| Luminous Flux                              | $\phi_v$        | 55     | 75   | —    | lm                         |
| Viewing Angle at 50% IV                    | $2\theta_{1/2}$ | —      | 120  | —    | Deg                        |
| Forward Voltage                            | $V_f$           | 2.1    | 2.3  | 2.6  | V                          |
| Peak Emission Wavelength                   | $\lambda_p$     | 593    | 598  | 602  | nm                         |
| Dominant Wavelength                        | $\lambda_d$     | 587    | 592  | 596  | nm                         |
| Spectral Line Half-Width                   | $\Delta\lambda$ | 15     | 20   | 25   | nm                         |
| Reverse Current                            | $I_R$           | —      | —    | 10   | $\mu\text{A}$              |
| Thermal Resistance Junction to Case        | $R\theta_{J-C}$ | —      | 8    | —    | K/W                        |
| Temperature Coefficient of Forward Voltage | $V\Delta F/T$   | —      | -2   | —    | $\text{mV}/^\circ\text{C}$ |

**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. The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
4. Flux is measured with an accuracy of  $\pm 15\%$ .
5. Forward voltage is measured with an accuracy of  $\pm 0.15\text{V}$ .

## Typical Electrical / Optical Characteristics Curves

S(25°C Ambient Temperature Unless Otherwise Noted)





## PRECAUTION IN USE

### Storage

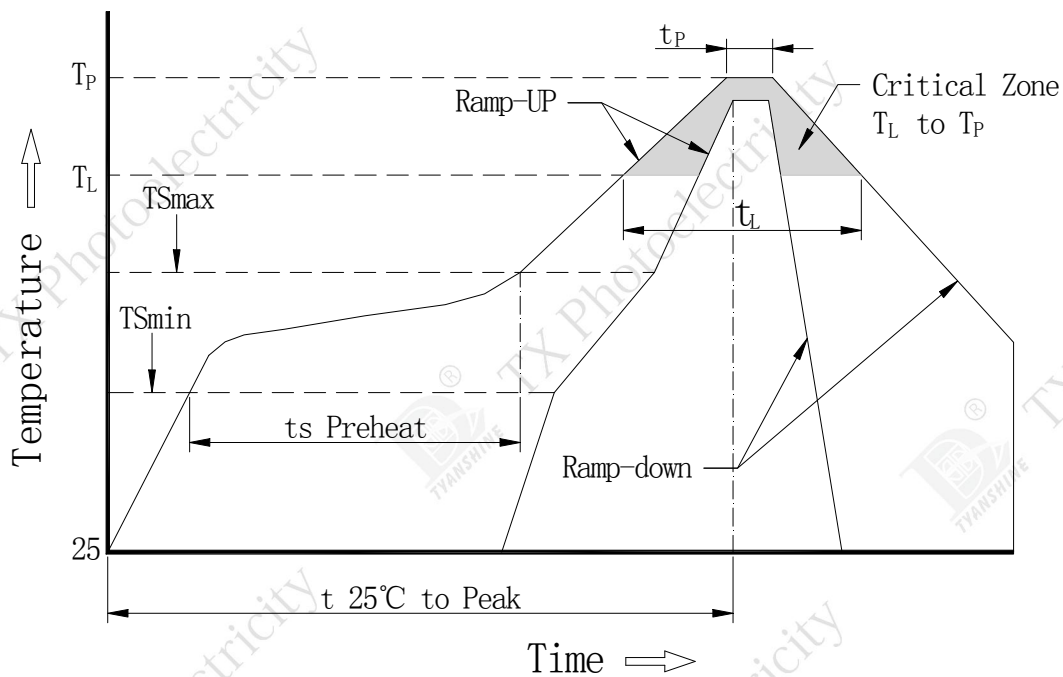
Recommended storage environment

Temperature: 5°C ~ 30°C (41oF ~ 86oF)

Humidity: 60% RH Max.

### Soldering

Use the conditions shown to the under figure.

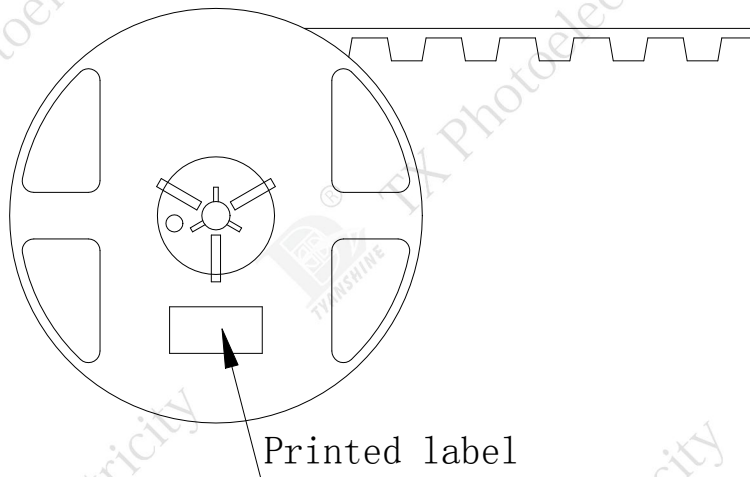
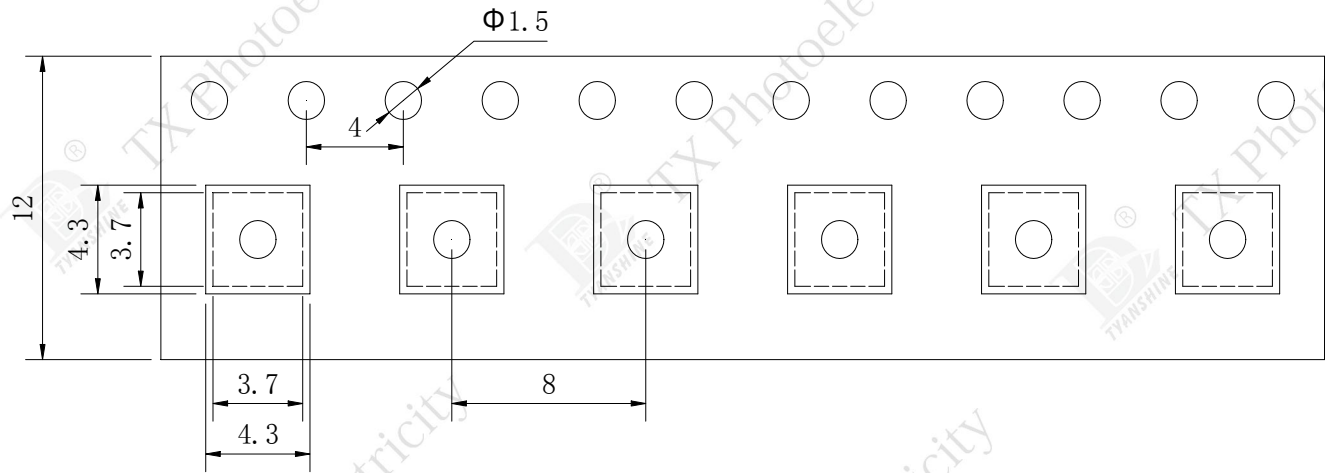


| Profile Feature                                      | Lead-Based Solder | Lead-Free Solder |
|--|-------------------|------------------|
| Average Ramp-Up Rate ( $T_{Smax}$ to $T_P$ )         | 3°C/second max.   | 3°C/second max.  |
| Preheat: Temperature Min ( $T_{Smin}$ )              | 100°C             | 150°C            |
| Preheat: Temperature Max ( $T_{Smax}$ )              | 150°C             | 200°C            |
| Preheat: Time ( $T_{Smin}$ to $T_{Smax}$ )           | 60-120 seconds    | 60-180 seconds   |
| Time Maintained Above: Temperature ( $T_L$ )         | 183°C             | 217°C            |
| Time Maintained Above: Time ( $T_L$ )                | 60-150 seconds    | 60-150 seconds   |
| Peak/Classification Temperature ( $T_P$ )            | 215°C             | 260°C            |
| Time Within 5°C of Actual Peak Temperature ( $T_P$ ) | 10-30 seconds     | 20-40 seconds    |
| Ramp-Down Rate                                       | 6°C/second max.   | 6°C/second max.  |
| Time 25°C to Peak Temperature                        | 6 minutes max.    | 8 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 (inches).
2. Tolerance is  $\pm 2.0$  mm (0.08") 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.