Preliminary

TX-3535B3FC120-OGVCND34-03F

DATA SHEET

Approved by: Checked by: Prepared by:

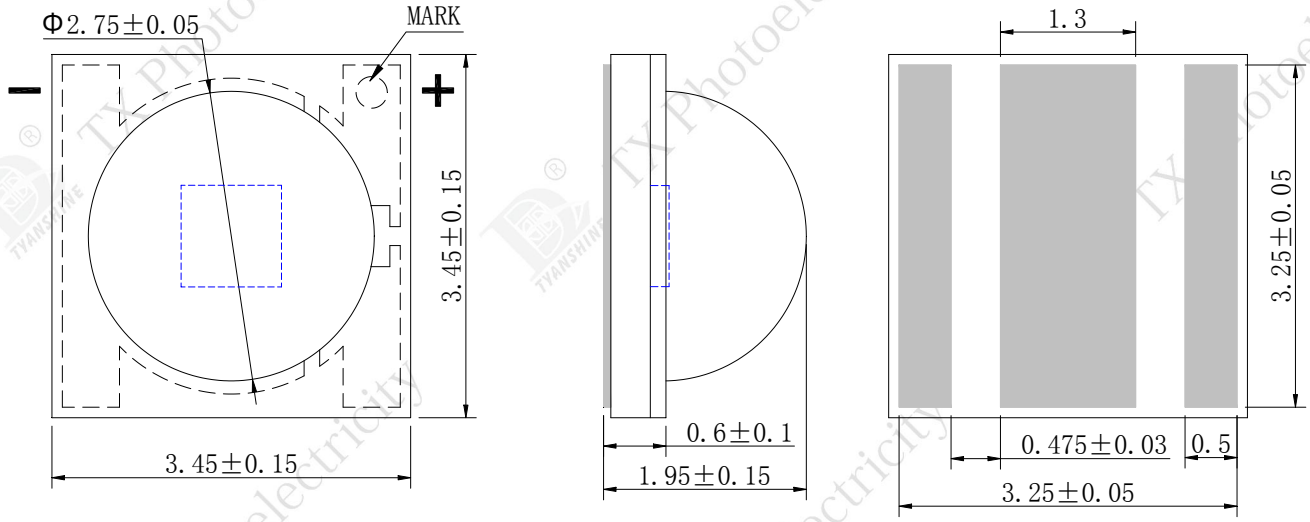
Features:

- Excellent Transiting Heat from LED Chip Operating under 1000mA
- 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 ±0.25 mm (0.01") unless otherwise noted.

Part NO.	Lens Color	Emitting Color
TX-3535B3FC120-OGVCND34-03F	Water Clear	Blue

Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	Min	Typ	Max	Unit
LED Junction Temperature	Tj	—	—	150	℃
Power Dissipation	P_D	—	1260	3600	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	I_{FP}	—	—	1000	mA
Continuous Forward Current	IF	—	350	1000	mA
Reverse Voltage	V_R	—	5	—	V
Electrostatic Discharge Threshold (ESD)	ESD	—	ESD sensitive device	—	V
Operating Temperature Range	T_{opr}	-40	—	70	℃
Storage Temperature Range	T_{spr}	-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 If=350mA ,Vr=5V (Ta=25°C):

Parameter	Symbol	Values			Units
		Min.	Typ.	Max.	
Luminous Flux	Φ_v	15	22	—	lm
Viewing Angle at 50％IV	$2\theta_{1/2}$	—	120	—	Deg
Forward Voltage	V_f	2.8	3.2	3.6	V
Peak Emission Wavelength	λp	450	452.5	455	nm
Dominant Wavelength	λd	450	455	460	nm
Spectral Line Half-Width	△λ	15	20	25	nm
Reverse Current	I_R	—	—	10	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	6.4	—	K/W
Temperature Coefficient of Forward Voltage	V△F/T	—	-2	—	mV/℃

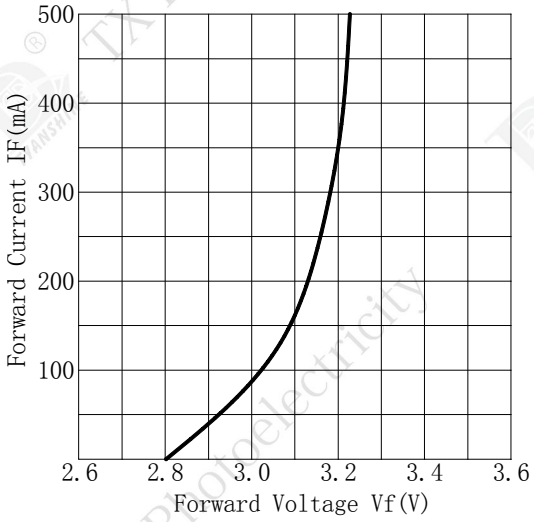
Notes:

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 (λd) 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 ±15%.
5. Forward voltage is measured with an accuracy of ±0.15V.

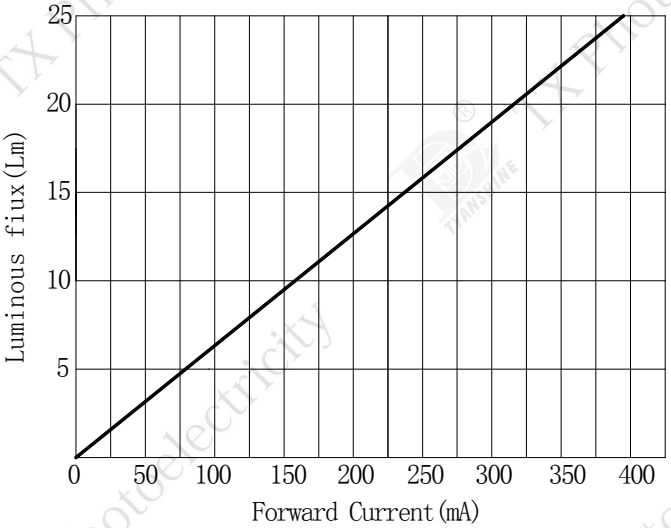
Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

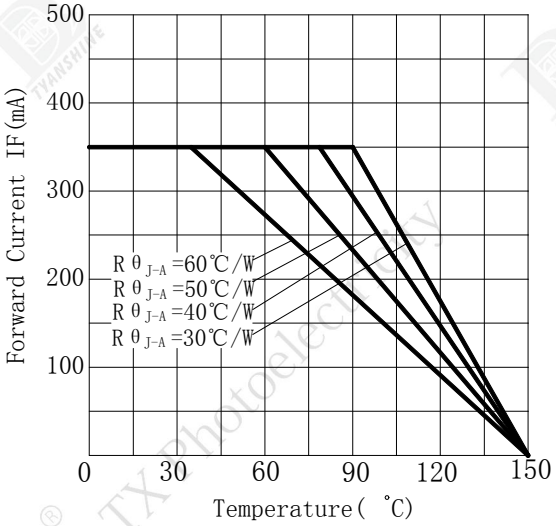
Forward Current VS. Forward Voltage



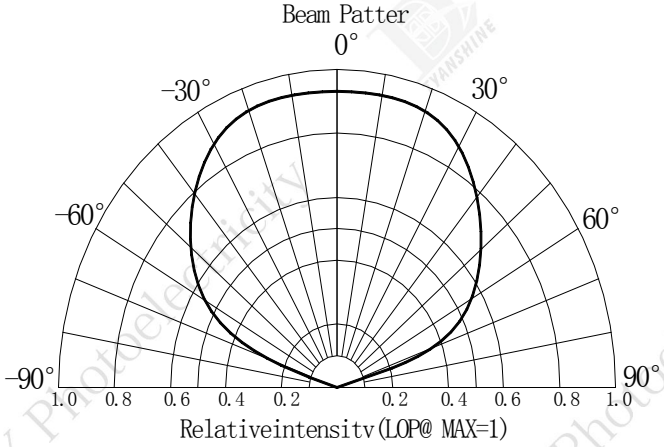
Forward Current VS. Luminous fiux



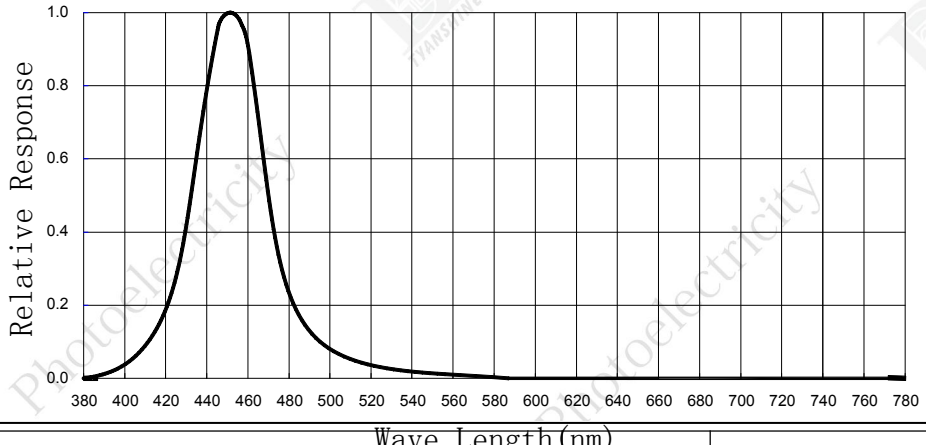
Ambient TemperatureVS. Forward Current



Beam Patter



Spectral Radiance (Peak457.5@nm)



PRECAUTION IN USE

Storage

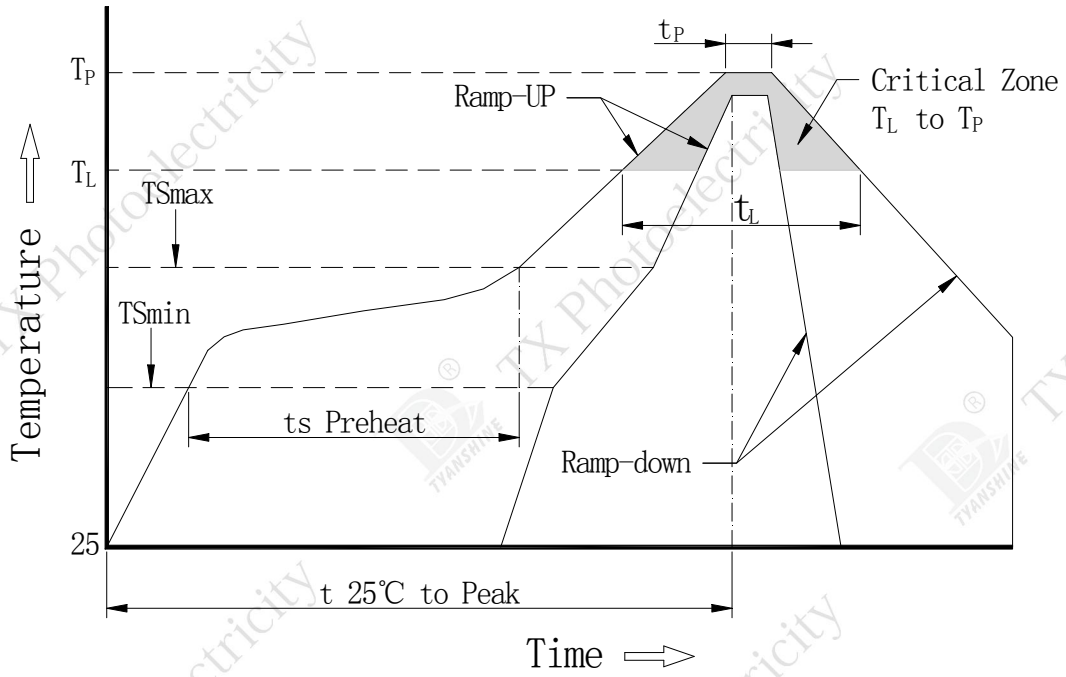
Recommended storage environment

Temperature: 5℃ ~ 30℃ (41oF ~ 86oF)

Humidity: 60% RH Max.

Soldering

Use the conditions shown to the under figure.

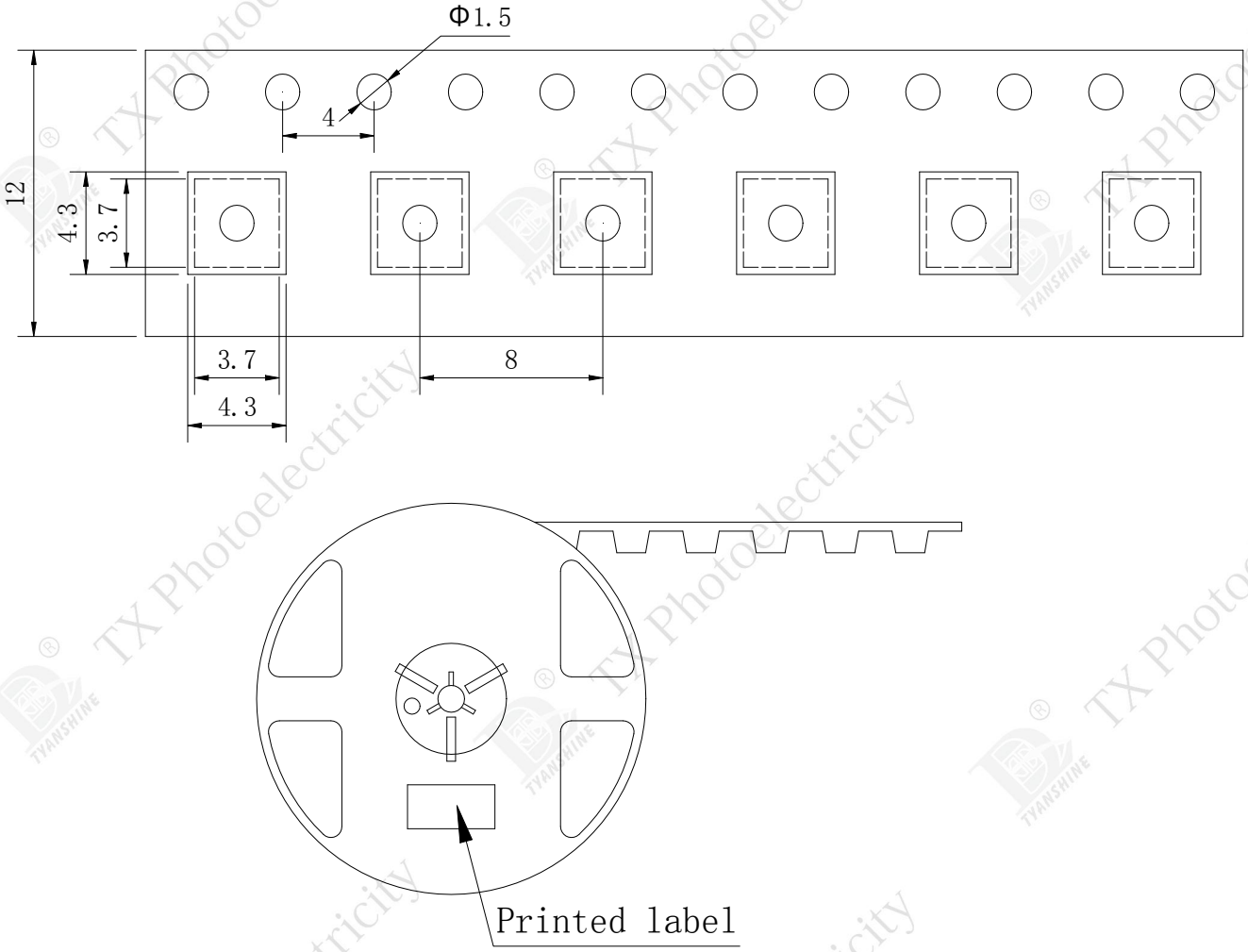


Profile Feature	Lead-Based Solder	Lead-Free Solder
Average Ramp-Up Rate (Ts_{max} to T_p)	3℃/second max.	3℃/second max.
Preheat: Temperature Min (Ts_{min})	100℃	150℃
Preheat: Temperature Max (Ts_{max})	150℃	200℃
Preheat: Time (Ts_{min} to Ts_{max})	60-120 seconds	60-180 seconds
Time Maintained Above: Temperature (T_L)	183℃	217℃
Time Maintained Above: Time (T_L)	60-150 seconds	60-150 seconds
Peak/Classification Temperature (T_P)	215℃	260℃
Time Within 5℃ of Actual Peak Temperature (T_P)	10-30 seconds	20-40 seconds
Ramp-Down Rate	6℃/second max.	6℃/second max.
Time 25℃ 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 ±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.