TX-R3A140-010G

PRODUCT SPECIFICATION

Approved by: Checked by: Prepared by:

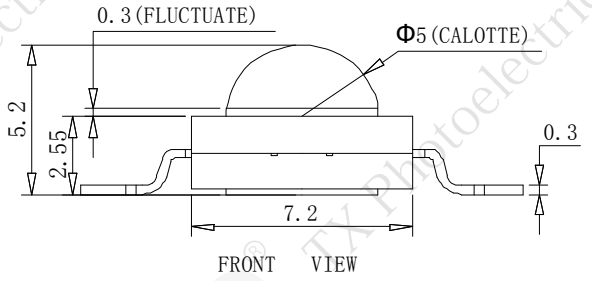
Features:

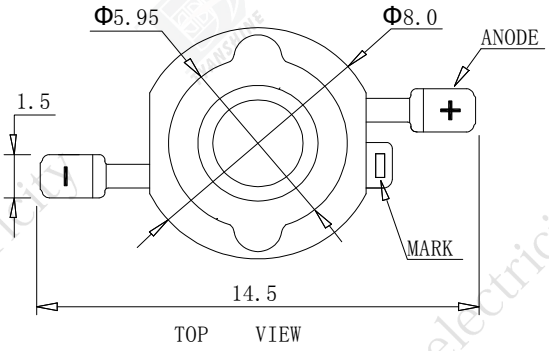
- Excellent Transiting Heat from LED Chip Operating under 700mA
- High Luminous Output
- No UV

Typical purpose:

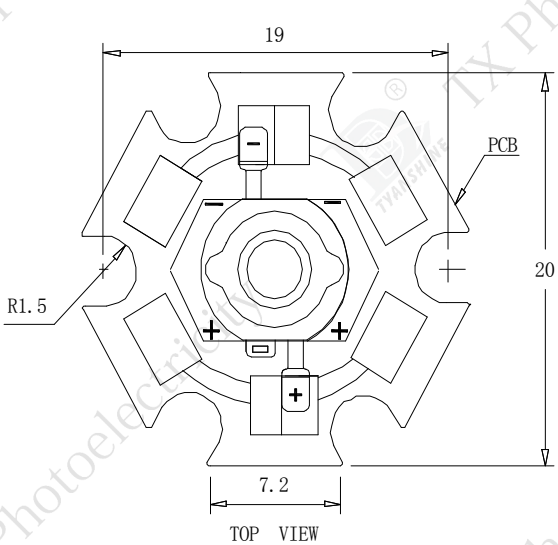
- Portable Flashlight
- Garden lighting
- General Lighting

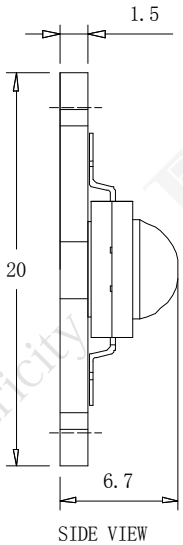
Package Dimensions:





Installs on the aluminum sheet:





Notes:

1.Thermoelectric integrated Red chip packaged in this product.

2.All dimensions are in millimeters (inches).

3. Tolerance is ±0.25 mm (0.01”) unless otherwise noted.

Part NO.	Lens Color	Source Color
TX-R3A140-010G	Water Clear	Red

Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	MAX.	Unit
LED Junction Temperature	Tj	125	℃
Power Dissipation	P_D	2170	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	I_{FP}	1000	mA
Continuous Forward Current	IF	700	mA
Reverse Voltage	V_R	5	V
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Operating Temperature Range	T_{opr}	-40 to +70	℃
Storage Temperature Range	T_{spr}	-40 to +100	
Lead Soldering Temperature	Tsol	Hand Soldering: 350℃ for 8 sec.	

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=700mA ,Vr=5V (Ta=25°C)：

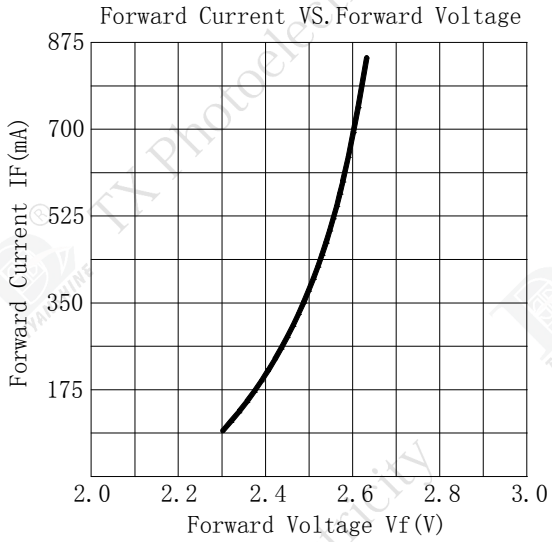
Parameter	Symbol	Values			Units
		Min.	Typ.	Max.	
Luminous Flux	ϕ_V	100	140	—	lm
Viewing Angle at 50％IV	$2\theta_{1/2}$	—	140	—	Deg
Peak Emission Wavelength	λp	625	630	635	nm
Dominant Wavelength	λd	618	620	628	nm
Spectral Line Half-Width	△λ	15	20	25	nm
Forward Voltage	V_f	2.0	2.3	2.7	V
Reverse Current	I_R	—	—	10	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	5.9	—	K/W
Temperature Coefficient of Forward Voltage	V△F/T	—	-2	—	mV/℃

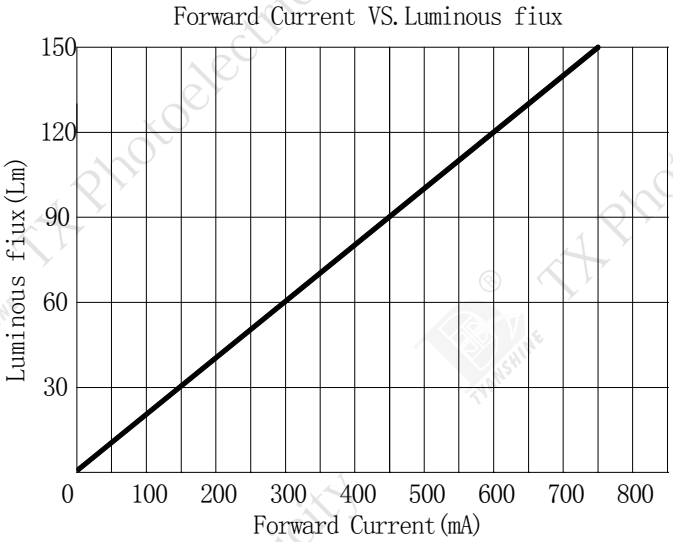
Notes:

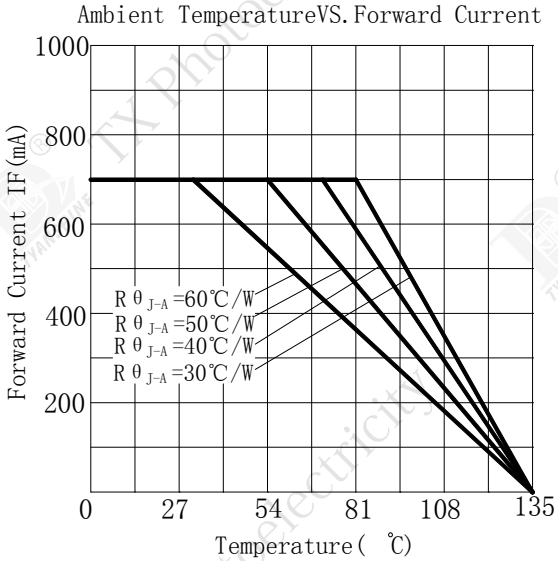
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity
3. The dominant wavelength (λd) is derived from the CIE chromaticity 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.

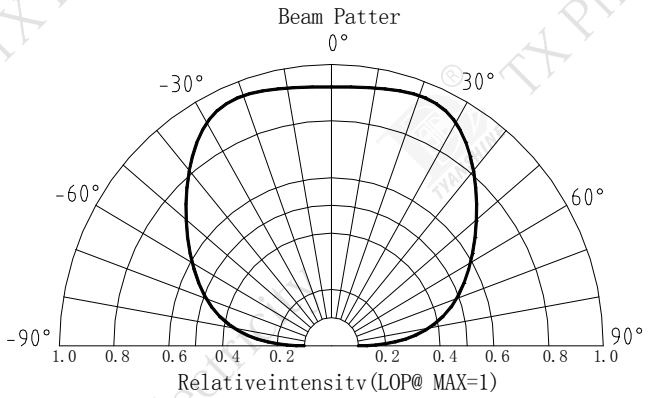
Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

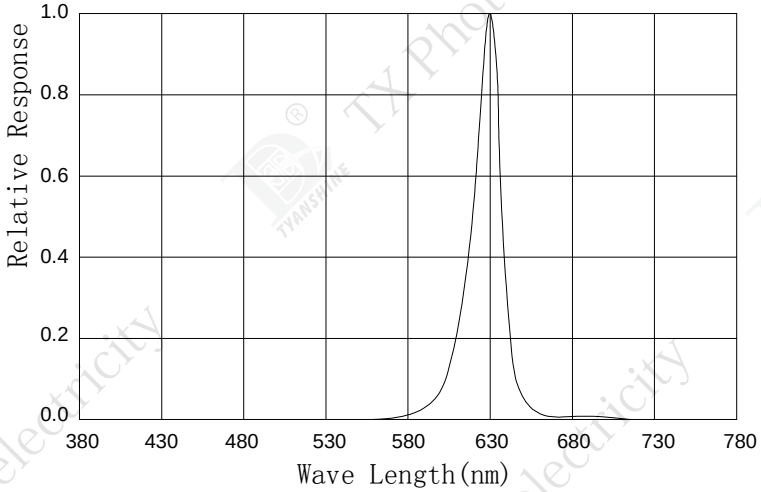








Spectral Radiance: Red Peak@630nm



PRECAUTION IN USE

Storage

Recommended storage environment

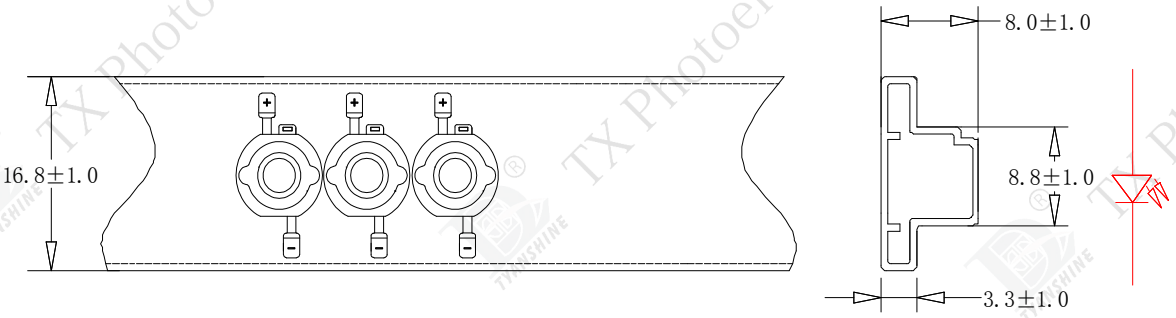
Temperature: 5℃ ~ 30℃ (41oF ~ 86oF)

Humidity: 60% RH Max.

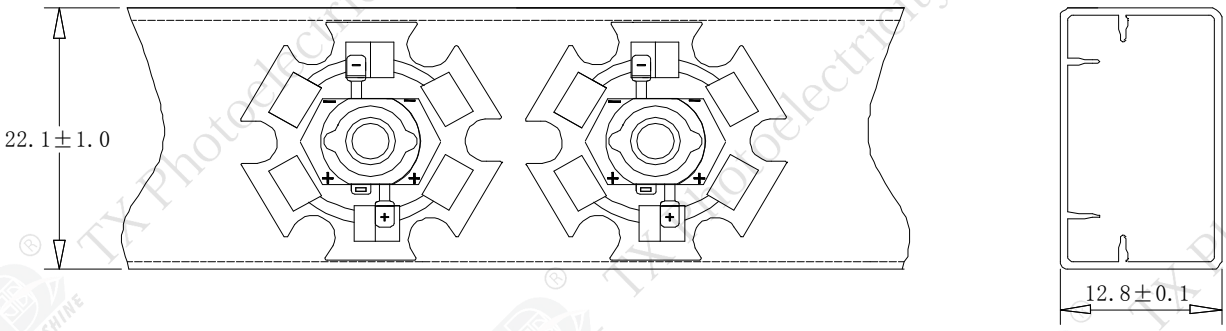
Soldering

Hand Soldering	
Temperature	350℃ Max.
Soldering time	8sec. Max.

Dimensions for Cannulation and Packaging



Quantity: 50PCS



Quantity: 24PCS

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±2.0 mm (0.08”) unless otherwise noted.
3. Product is packaged with silica gel to protect the light-emitting zone. Please avoid the light-emitting area from being pressed, stressed, rubbed, come into contact with sharp metal part which would damage the product.