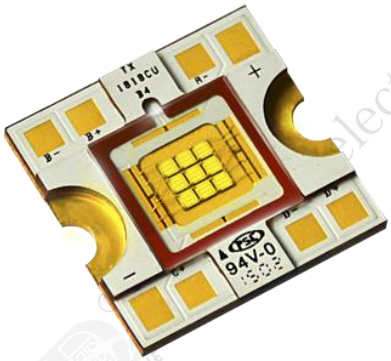
Preliminary

TX-1818W45FC120-CUHCNG-A01

DATA SHEET

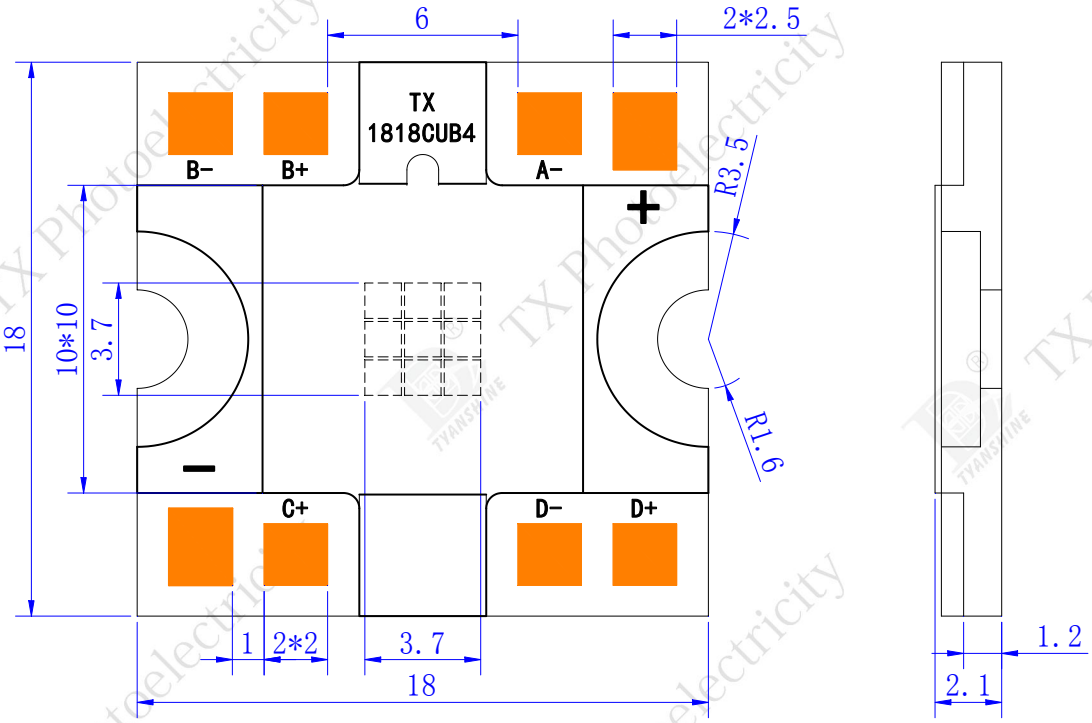


Approved by: Checked by: Prepared by:

Features:

- Excellent Transiting Heat from LED Chip Operating under 1.5 A
- High Luminous Output
- No UV
- Light emitting area is small, power per unit area of up to 5W/mm ²
- Three color and four color melange effect is superior to similar products on the light

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-1818W45FC120-CUHCNG-A01	Water Clear	White

Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	MAX.	Unit
LED Junction Temperature	Tj	135	℃
Power Dissipation	P_D	45	W
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	I_{FP}	—	mA
Continuous Forward Current	IF	1.5	A
Reverse Voltage	V_R	—	V
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Operating Temperature Range	T_{opr}	-40 to +70	℃
Storage Temperature Range	T_{spr}	-40 to +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= 1.5 A (Ta=25°C):

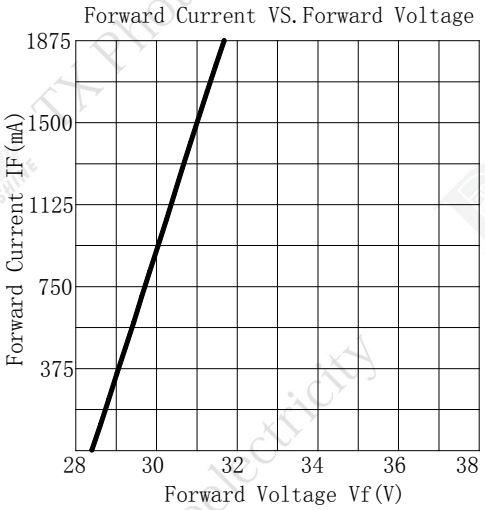
Parameter	Symbol	Values			Units
		Min.	Typ.	Max.	
Luminous Flux	Φ_V	2500	2800	—	lm
Viewing Angle at 50％IV	$2\theta_{1/2}$	—	120	—	Deg
Forward Voltage	V_f	28	31	34	V
Correlated Colour Temperature	CCT	6500	7500	8500	K
Reverse Current	I_R	—	—	—	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	0.95	—	K/W
Temperature Coefficient of Forward Voltage	V△F/T	—	-2	—	mV/℃
Color Rendering Index	Ra	—	—	—	—
Thermistor (NTC)	Rt25	—	—	—	KΩ

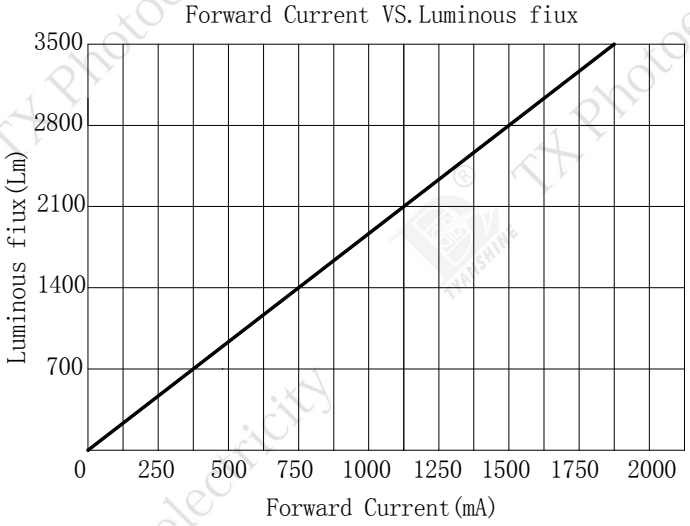
Notes:

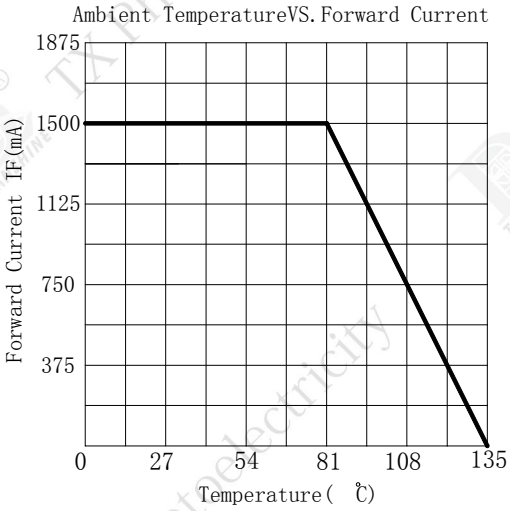
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity
3. The dominant wavelength (λd) is derived from the CIE chromaticity 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.
6. CCT selection acc. to CCT groups and an accuracy of ±300K.

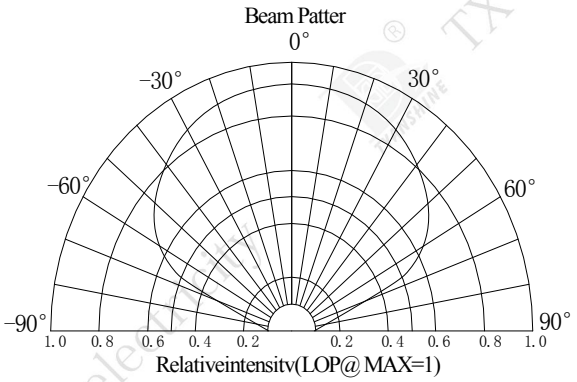
Typical Electrical / Optical Characteristics Curves

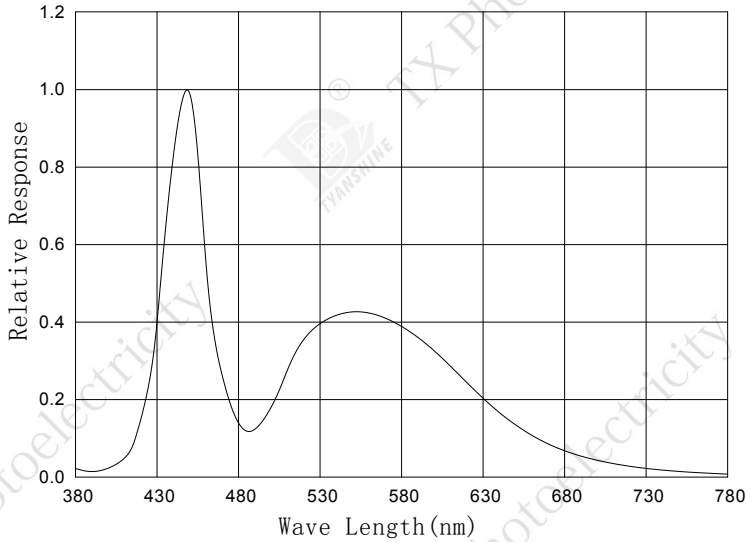
(25℃ Ambient Temperature Unless Otherwise Noted)





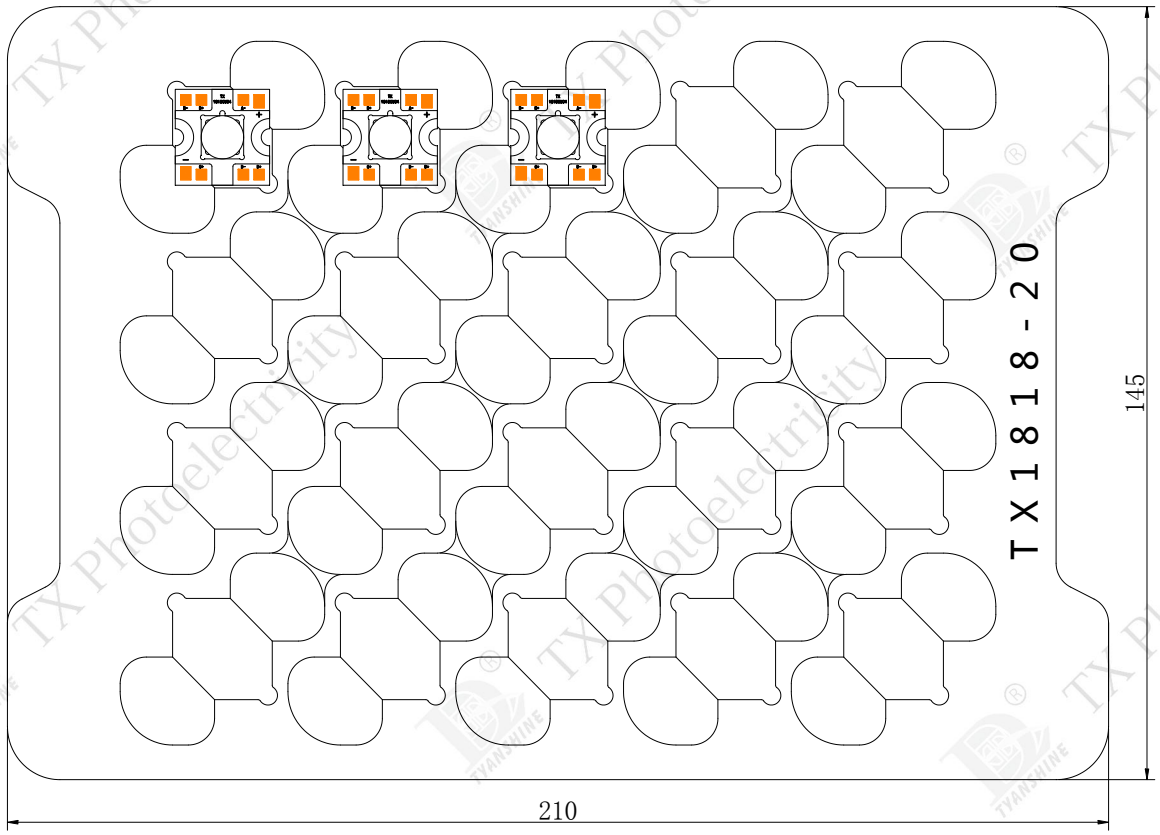






Dimensions for Cannulation and Packaging

Quantity: 20 PCS



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±2.0 mm (0.08”) unless otherwise noted.
3. Product is packaged with glass cover 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.