

# TX-BGRWY10B140-001

## PRODUCT SPECIFICATION

Approved by:

Checked by:

Prepared by:

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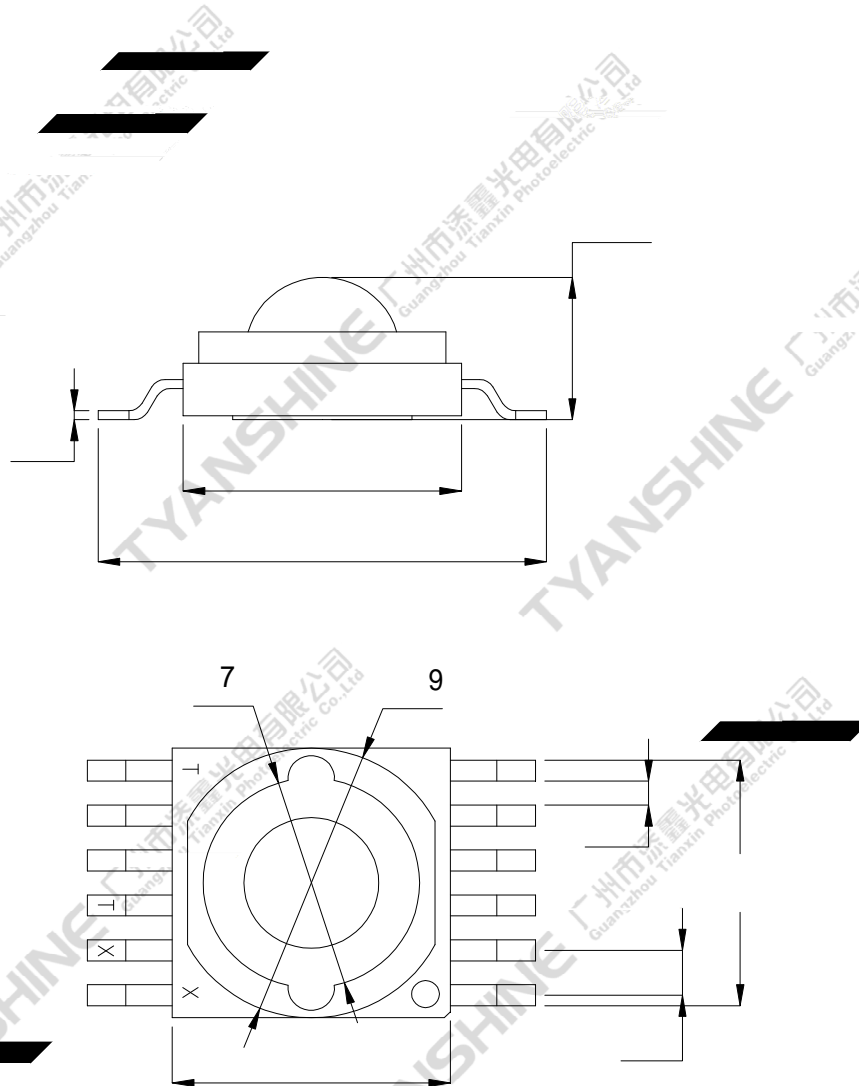
**Features:**

- ✧ Excellent Transiting Heat from LED Chip Operating under 500mA
- ✧ High Luminous Output
- ✧ No UV

**Typical purpose:**

- ✧ Portable Flashlight
- ✧ Garden lighting
- ✧ General Lighting

**Package Dimensions:**



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**Notes:**

- 1.This product is in the red light for thermoelectric integrated chip.
- 2.All dimensions are in millimeters (inches).
3. Tolerance is  $\pm 0.25$  mm (0.01") unless otherwise noted.

Part NO.	Chip Material					Lens Color	Source Color
	Blue	Green	Red	White	Yellow		
TX-BGRWY10B140-001	GaN	GaN	AlGaN	GaN	AlGaN	Water Clear	Blue & Green & Red & White & Yellow

**Absolute Maximum Ratings at Ta=25 "**

Parameter	Symbol	MAX.	Unit
LED Junction Temperature	T <sub>j</sub>	150	"
Power Dissipation	P <sub>D</sub>	B	1800
		G	1800
		R	1300
		W	1800
		Y	1300
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	I <sub>FP</sub>	1000	mA
Continuous Forward Current	I <sub>F</sub>	500	mA
Reverse Voltage	V <sub>R</sub>	5	V
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Operating Temperature Range	T <sub>opr</sub>	-40 to +70	"
Storage Temperature Range	T <sub>spr</sub>	-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.

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**Characteristics at If=500mA ,Vr=5V (Ta=25°C)**

Parameter	Symbol	Emitting Color	Values			Units
			Min.	Typ.	Max.	
Luminous Flux	v	B	25	35	—	lm
		G	115	135	—	
		R	70	85	—	
		W	120	145	—	
		Y	60	80	—	
Viewing Angle at 50°IV	2 1/2	B	—	140	—	Deg
		G	—	140	—	
		R	—	140	—	
		W	—	140	—	
		Y	—	140	—	
Peak Emission Wavelength	p	B	458	460	462	nm
		G	510	515	520	
		R	625	630	635	
		Y	590	594	598	
Dominant Wavelength	d	B	458	460	462	nm
		G	522	526	528	
		R	620	625	630	
		Y	588	592	595	
Correlated Colour Temperature	CCT	W	7000	7500	8000	K
Spectral Line Half-Width	Δ	B	15	20	25	nm
		G	25	30	35	
		R	15	20	25	
		W	15	20	25	
		Y	10	20	20	
Forward Voltage	Vf	B	3.0	3.3	3.6	V
		G	3.0	3.3	3.6	
		R	2.0	2.3	2.6	
		W	3.0	3.3	3.6	
		Y	2.0	2.3	2.6	
Reverse Current	IR	—	—	—	10	μA
Thermal Resistance Junction to Case	R J-C	—	—	4.5	—	K/W
Temperature Coefficient of Forward Voltage	VΔF/T	—	—	-2	—	mV/°C

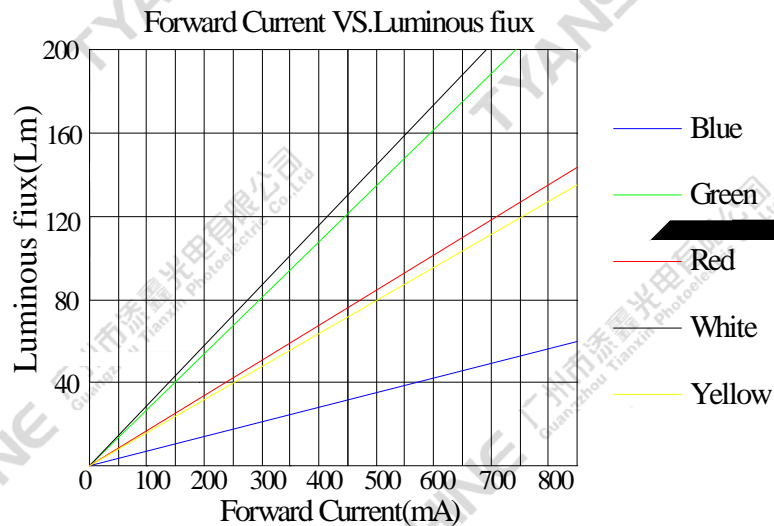
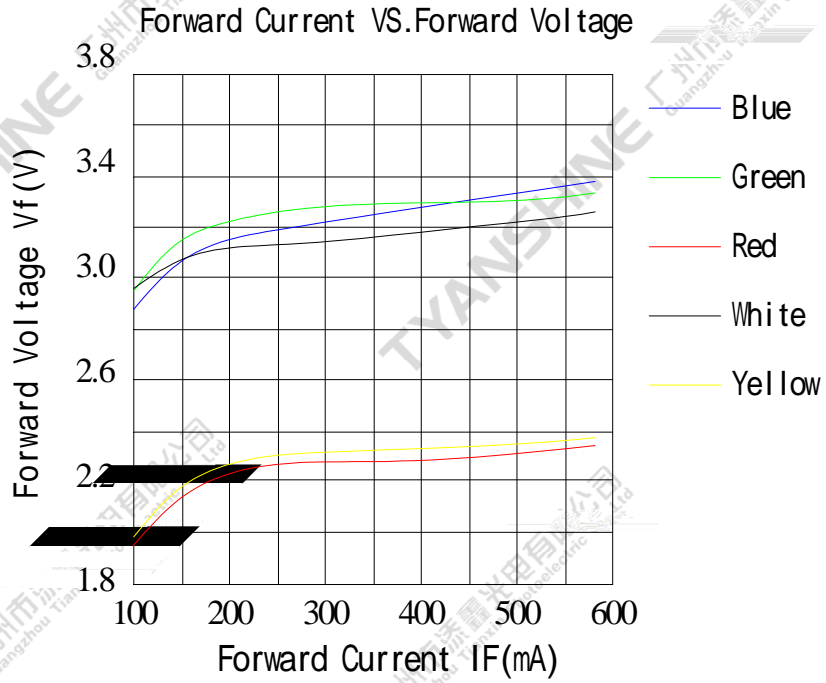
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# Typical Electrical / Optical Characteristics Curves

(25 ° Ambient Temperature Unless Otherwise Noted)



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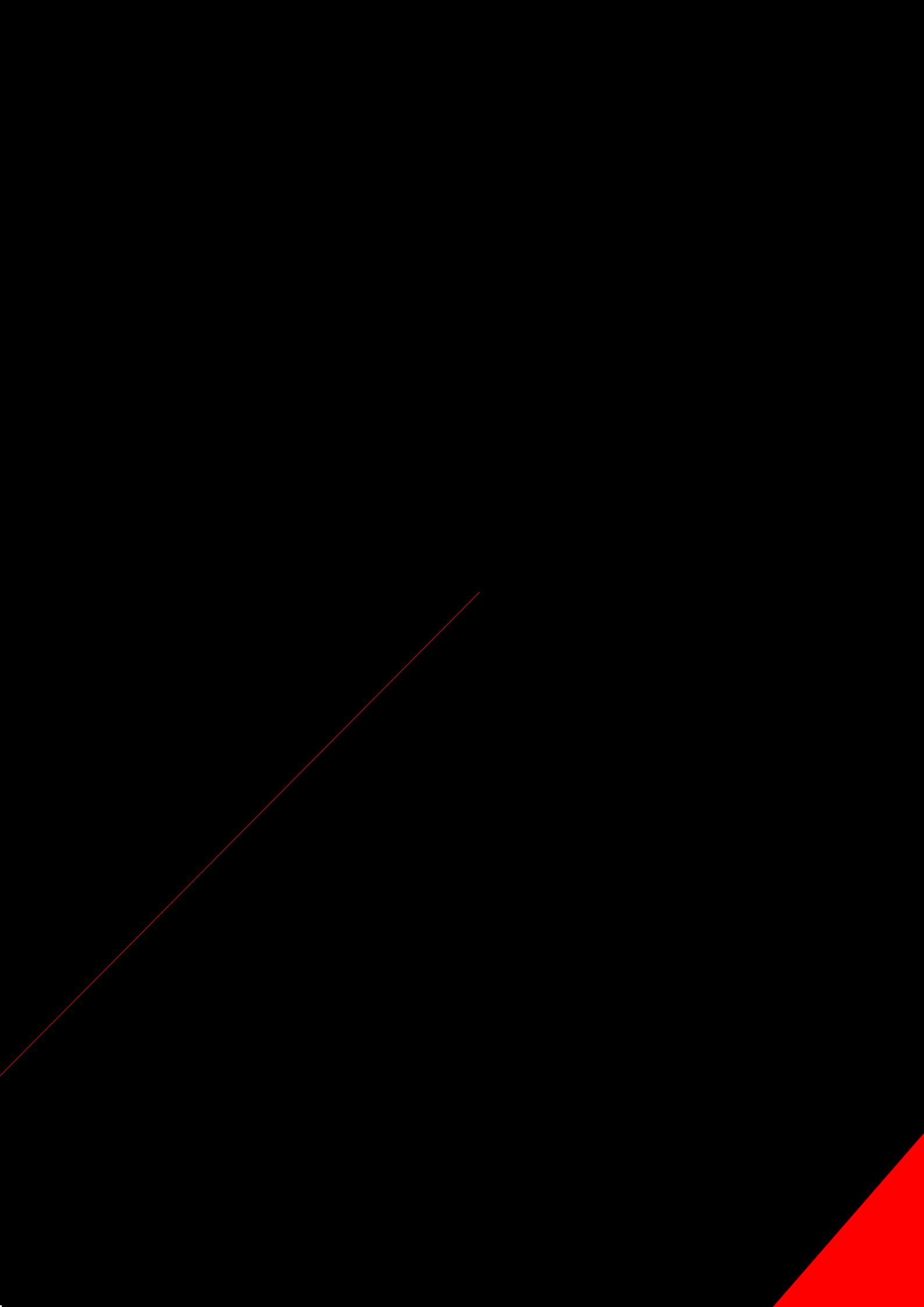
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