

TX-3850RGBW200C20M8-01A

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under R/G/B/W:2000mA.
- ◆Provide uniform cross distribution of positive white and warm white dual color scheme, mixed pure.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆Red:AlGaInP
- ◆Green:GaInN
- ◆Blue:GaN
- ◆White:GaN

Emitting Color:

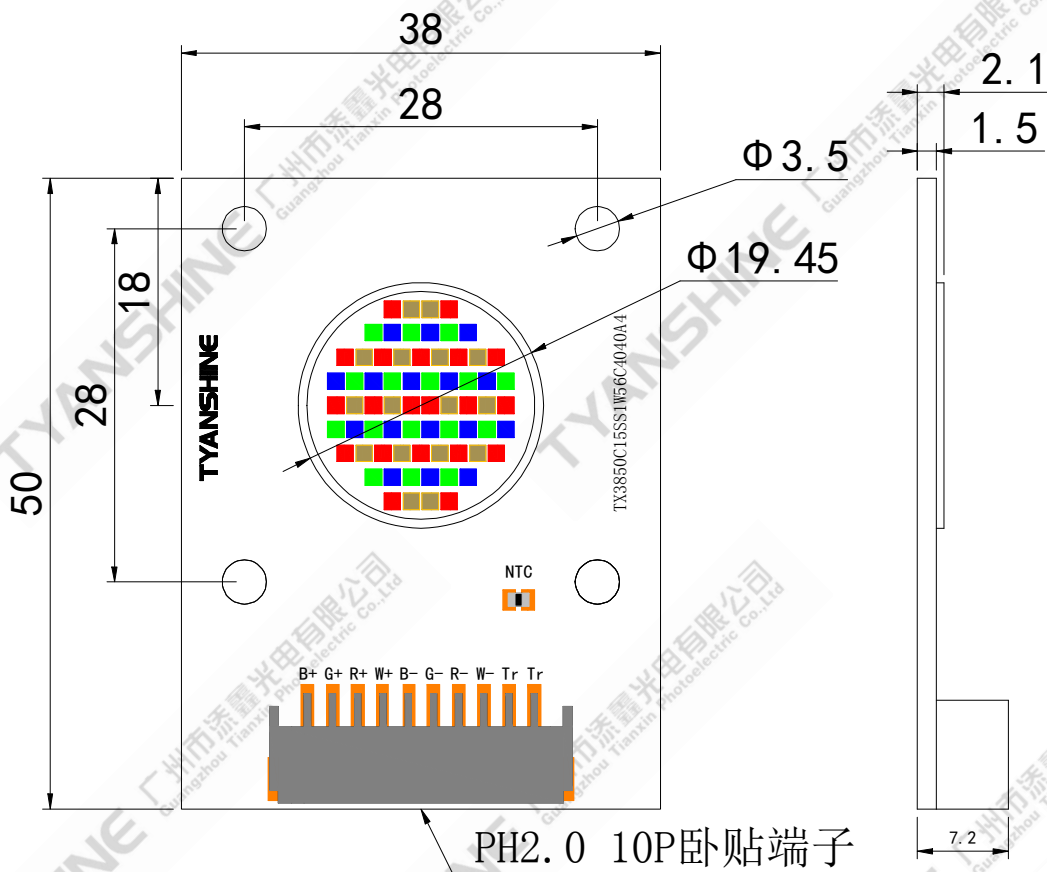
- ◆Red
- ◆Green
- ◆Blue
- ◆White

Applications:

- ◆Indoor lighting
- ◆Outdoor lighting
- ◆Industrial lighting
- ◆General Lighting

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Package Dimensions:



R:Red;G:Green;B:Blue;W:White

Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are $\pm 0.25\text{mm}$.

Absolute Maximum Ratings

Parameter	Symbol	MAX.	Unit
LED Junction Temperature	T_j	$R \leq 125$ $G/B/W \leq 150$	$^{\circ}\text{C}$
Power Dissipation	P_D	R	50
		G	50
		B	50
		W	50
		R+B+G+W	200
Continuous Forward Current	I_F	R	2000
		G	2000
		B	2000
		W	2000
Reverse Voltage	V_R	—	V
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Operating Temperature Range	T_{opr}	-30 to +85	$^{\circ}\text{C}$
Storage Temperature Range	T_{spr}	-30 to +80	

Notes:

1.Specifications are subject to change without notice.

2.The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.

3.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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Electrical Optical Characteristics ($T_c=25^{\circ}\text{C}$, R/G/B/W: IF=2000mA)

Parameter	Symbol	Emitting Color	Values			Units
			Min.	Typ.	Max.	
Luminous Flux	Φ_v	R	2350	2600	2900	lm
		G	4300	4800	5300	
		B	1100	1300	1500	
		W	5200	5700	6200	
Viewing Angle at 50 % IV	$2\theta_{1/2}$	R	—	115	—	Deg
		G	—	115	—	
		B	—	115	—	
		W	—	115	—	
Peak Emission Wavelength	λ_p	R	630	636	640	nm
		G	515	520	525	
		B	445	448	455	
Dominant Wavelength	λ_d	R	620	625	630	nm
		G	520	526	530	
		B	450	454	460	
Spectral Line Half-Width	$\Delta\lambda$	R	15	20	25	nm
		G	25	30	35	
		B	15	20	25	
Forward Voltage	V_f	R	21	24	26	V
		G	21	23	26	
		B	22	25	27	
		W	22	25	27	
Correlated Colour Temperature	CCT	W	6500	—	7000	K

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 (λ_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 $\pm 3\%$.

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