# Winger Electronics WEBRW02-GS 3mm Bicolor LED



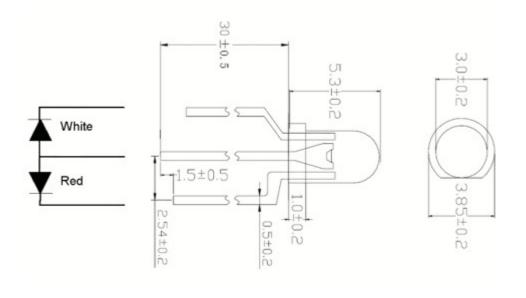




## **Description**

- 3mm Bicolor LED
- Emitting Color: Red, Warm-white

## **Dimension figure**



Unit: mm

Tolerances: ±0.25mm

### **Absolute Maximum Ratings**

ltem	Symbol Absolute Maximum Rating		Unit
Forward Current	I <sub>F</sub>	2x 30	mA
Peak Forward Current *	<b>I</b> <sub>FP</sub>	2x 70	mA
Reverse Voltage	V <sub>R</sub> 5		V
Power Dissipation	Po	100 (white)	m1/1/
		70 (red)	mW
Operating Temperature	T <sub>OPR</sub>	-20 ~ +50	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +80	°C
Lead Soldering Temperature	T <sub>SOL</sub>	Max. 5 sec @ 260	°C

\*I<sub>FP</sub> Conditions: 1/10 Duty Cycle, 0.1ms Puls Width 3mm space from epoxy base

\*T<sub>SOL</sub> Conditions: 3mm space from epoxy base

### **Typical Optical/Electrical Characteristics**

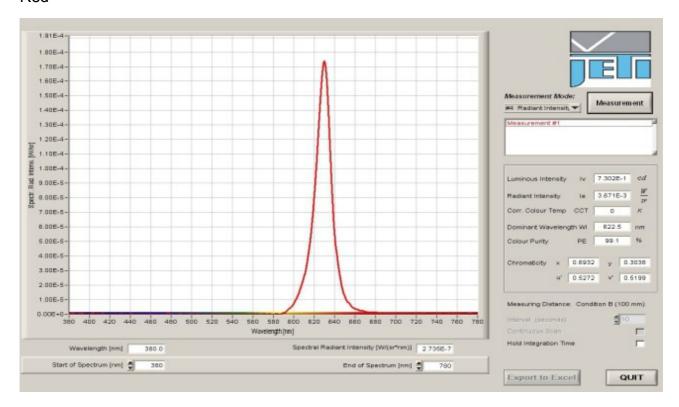
Item	Symbol	Condition		Min.	Тур.	Max.	Unit
Forward Voltage			Red	1,8	2	2,5	
	$V_{F}$		White	3	3,1	3,6	V
50% Power Angle		I <sub>F</sub> =20mA		-	30	-	deg
Luminous Intensity	I <sub>V</sub>		Red	-	-	700	
			White	-	-	1400	mcd
			Red	615	-	630	nm
Dominant Wavelength Color temperature	$\lambda_{D}$		White	2500	-	3000	K
Recommended Forward Current	F(rec)			-	-	20	mA
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V		-	-	5	μA

#### Notes:

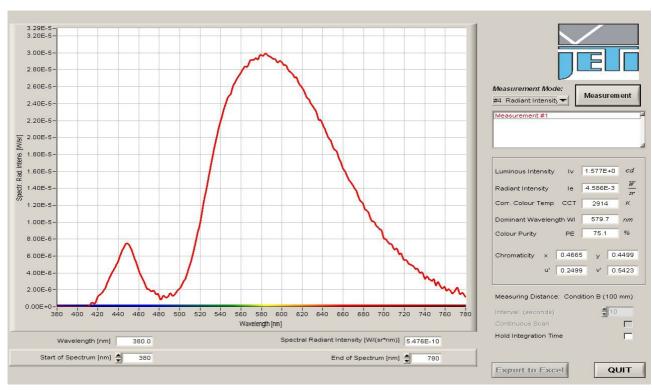
- 1. It's strongly recommended to limit die temperature to 60°C
- 2. Absolute maximum ratings Ta=25°C
- 3. Measurement Tolerances of Forward Voltage ±0.1V
- 4. Measurement Tolerances of peak wavelength ±2.0nm
- 5. Measurement Tolerances of luminous intensity ±15%
- 6. Measurement Tolerances of angle intensity ±15%

## **Typical Spectrum**

#### Red



#### White



#### 9. Warranty

- (1) Perform an acceptance inspection on arrival of the goods. Return the defectives if any stipulating the disqualification and quantity.
- (2) Embedding the LEDs into the application and the verification of life and other qualities in practical use shall be executed by user.
- (3) Do not use the LEDs for the applications that require the higher reliability and security and that may endanger life and health by the breakdown and the malfunction. Seller shall not bear any responsibility or liability with respect to any claims and damages caused by user's usage of the LEDs without following our intended purpose or any written consent.
- (4) Seller shall not bear responsibility for any damages or defects caused by improper operation at the current in excess of the absolute maximum ratings that are not covered by warranty.