# Winger Electronics WEDRGB02-UM 4.8mm Straw-Hat Color Changing RGB LED



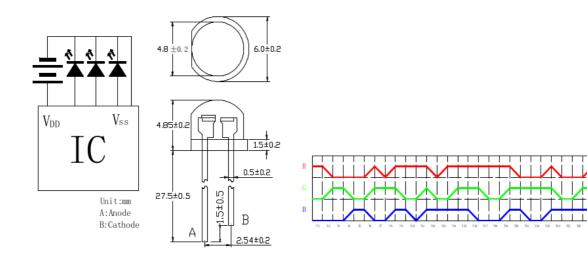




## **Description**

- 4.8mm DIP LED
- Emitting Color: Red, Green, Blue

### **Circuit, Dimensions and Pattern**



Unit: mm

Tolerances: ±0.25mm

### **Absolute Maximum Ratings**

Item	Symbol Absolute Maximum Rating		Unit
Forward Current	I <sub>F</sub>	40	mA
Peak Forward Current *	I <sub>FP</sub>	120	mA
Operating Voltage	Vo	4,5	V
Power Dissipation	Po	150	mW
Cycle time	T <sub>cyc</sub>	30	S
Operating Temperature	T <sub>OPR</sub>	-20 ~ +50	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ <b>+</b> 85	°C
Lead Soldering Temperature **	T <sub>SOL</sub>	Max. 5 sec @ 260	°C

<sup>\*</sup>I<sub>FP</sub> Conditions: 1/10 Duty Cycle, 0.1ms Puls Width
\*\* >3mms from base of epoxy bulb

## **Typical Optical/Electrical Characteristics**

Item	Symbol	Condition		Min.	Тур.	Max.	Unit
50% Power Angle				-	120	-	deg
Luminous Intensity	I <sub>V</sub>		Red	400	500	650	mcd
			Green	1000	1200	1500	
			Blue	600	750	900	
Dominant Wavelength	$\lambda_{D}$		Red	620	625	630	
			Green	515	520	525	nm
			Blue	460	465	470	
Recommended Forward Current	I <sub>F(rec)</sub>			-	-	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 55°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%

#### 7. 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.