# Winger Electronics WERRGB02-CM 1206 SMD LED

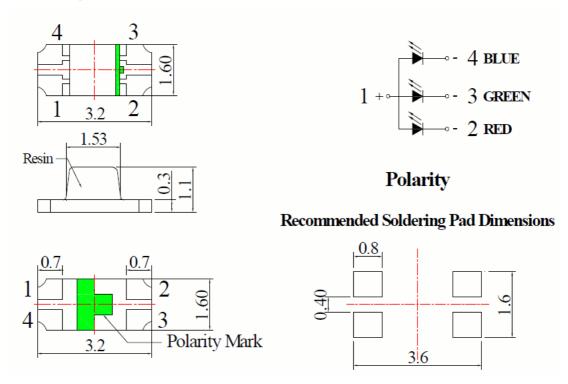




# **Description**

- 1206 SMD LED
- Emitting Color: Red, Green, Blue

# **Dimension figure**



Unit: mm

Tolerances: ±0.25mm

# **Absolute Maximum Ratings**

ltem	Symbol	mbol Absolute Maximum Rating		
Forward Current	I <sub>F</sub>	I <sub>F</sub> 3x 25		
Peak Forward Current *	I <sub>FP</sub> 3x 100		mA	
Reverse Voltage	$V_R$	5	V	
Power Dissipation	Po	Red: 60	mW	
		Green: 95		
		Blue: 95		
Operating Temperature	T <sub>OPR</sub>	-40 ~ +80	°C	
Storage Temperature	T <sub>stg</sub>	-40 ~ +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

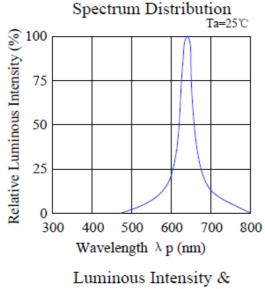
# **Typical Optical/Electrical Characteristics**

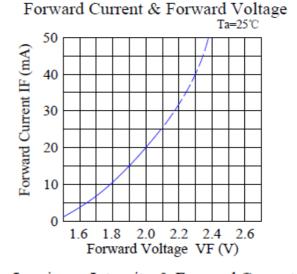
Item	Symbol	Condition		Min.	Тур.	Max.	Unit
Forward Voltage			Red	1,6	2	2,4	V
	$V_{F}$		Green	2,8	3,4	3,8	
			Blue	2,8	3,4	3,8	
50% Power Angle				-	120	-	deg
Luminous Intensity	-\ -	I <sub>F</sub> =20mA	Red	100	150	200	mcd
			Green	200	400	450	
			Blue	50	100	150	
Dominant Wavelength	$\lambda_{ extsf{D}}$		Red	-	624	-	
			Green	-	525	-	nm
			Blue	-	468	-	
Continuous Forward Current	I <sub>F(rec)</sub>			-	-	25	mA
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	Red	-	-	10	μA
			Green	-	-	50	
			Blue	-	-	50	

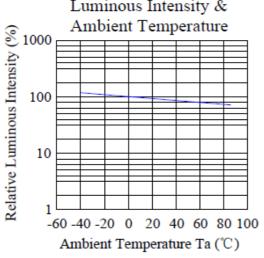
### Notes:

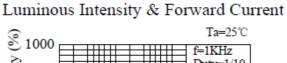
- 1. Absolute maximum ratings Ta=25°C
- 2. Measurement Tolerances of Forward Voltage ±0.1V
- 3. Measurement Tolerances of peak wavelength ±2.0nm

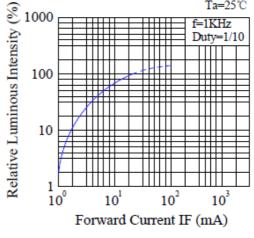
# Typical electrical and optical characteristics Red:

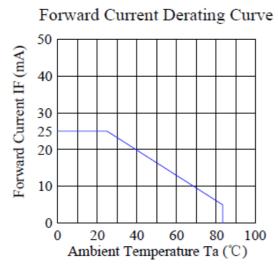


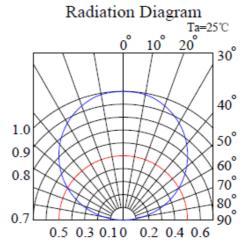




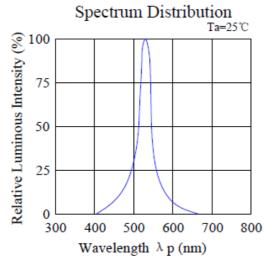


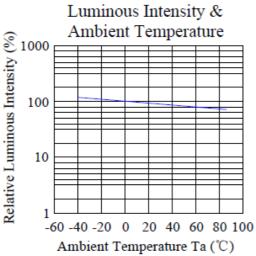


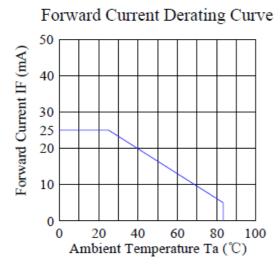


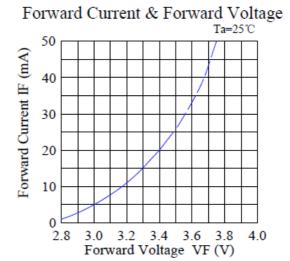


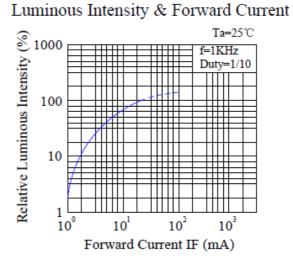
### Green:

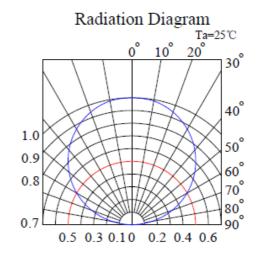




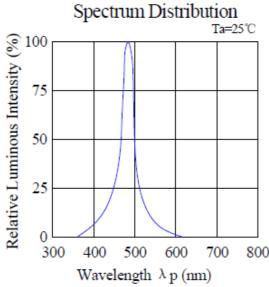




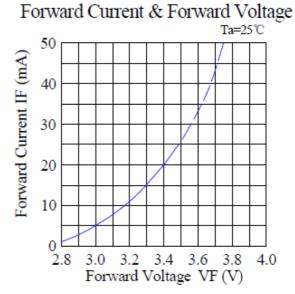


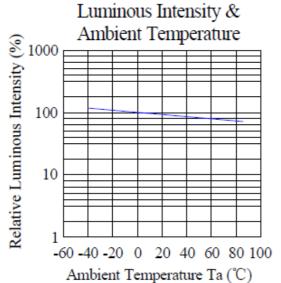


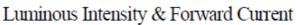
### Blue:

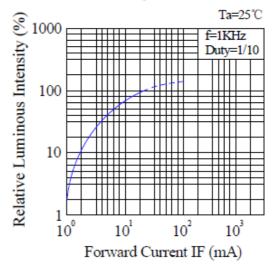


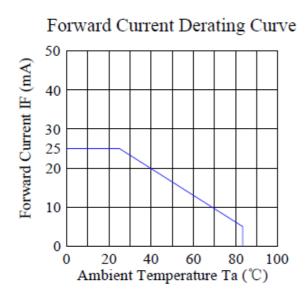
# 800

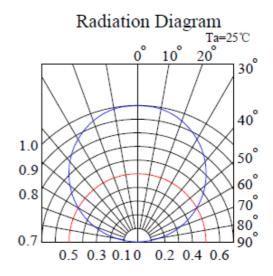




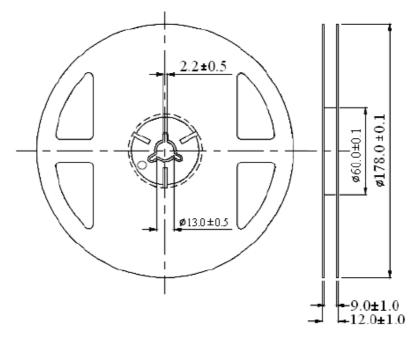








# Reel Dimensions

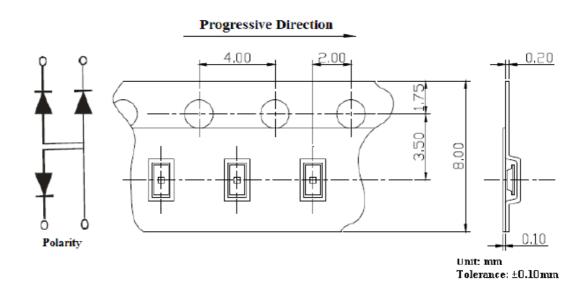


Unit: mm

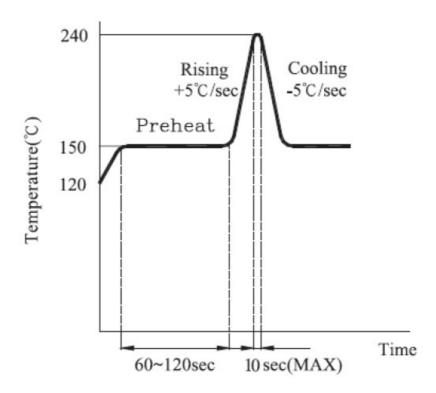
Tolerance:  $\pm 0.25$ mm

# Carrier Tape Dimensions

Loaded quantity 3000PCS Per reel.



### Reflow soldering profile



### Storage

- 1. Do not open moisture proof bag before ready to use
- 2. Before opening the package, LEDs should be kept at 30°C or less and 80% RH or less
- 3. After opening the package, LEDs should be kept at 30°C or less and 60% RH or less.
- 4. The LEDs should be used within one year.
- 5. The LEDs should be used within 168 hours (7 days) after opening the package.
- 6. If the silica gel bag has fabled away or storage time has exceeded, baking treatment should be performed. Conditions: 60±5°C for 24 hours.

### 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.