# Winger Electronics WEPIR1-E1 1W 850nm infrared Power LED





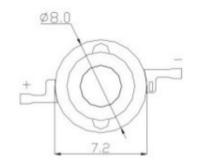


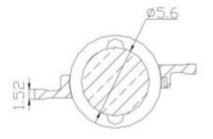
Caution! High Intensity Infrared Energy

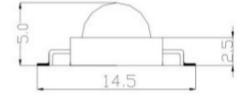
### **Dimension figure**

### Description

- 1W Power LED
- Emitting Color: infrared









#### Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I <sub>F</sub>	350	mA
Peak Forward Current *	I <sub>FP</sub>	400	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	Po	1	W
Operating Temperature	T <sub>OPR</sub>	-20 ~ +60	°C
Storage Temperature	T <sub>stg</sub>	-30 ~ +60	°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

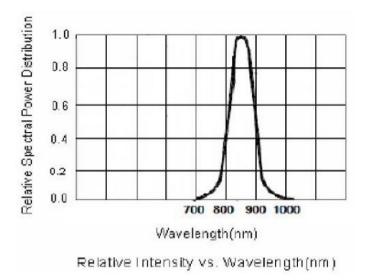
## **Typical Optical/Electrical Characteristics**

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
Forward Voltage	V <sub>F</sub>	l⊧=700mA	1,4	1,6	1,8	V
50% Power Angle			-	140	-	deg
Radiation Power			160	-	550	mW
Peak Wavelength	$\lambda_{D}$		-	850	-	nm
Color Temperature	Тс		-	-	-	K
Recommended Forward Current	I <sub>F(rec)</sub>		-	-	350	mA
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	10	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  $\pm 15\%$

#### Spectrum



#### 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.