

## CHANZON 1DGL-JC-10W-WW

# Chanzon 10W Warm White LED Chip (3000K-3500K) Instruction Manual

Model: 1DGL-JC-10W-WW

## 1. INTRODUCTION

---

This instruction manual provides essential information for the safe and effective use of your Chanzon 10W Warm White LED Chip. This high-power SMD COB emitter is designed for various DIY lighting applications, offering high brightness and a long lifespan. Please read this manual thoroughly before installation and operation.

## 2. SAFETY INFORMATION

---

To prevent injury or damage to the product, always adhere to the following safety guidelines:

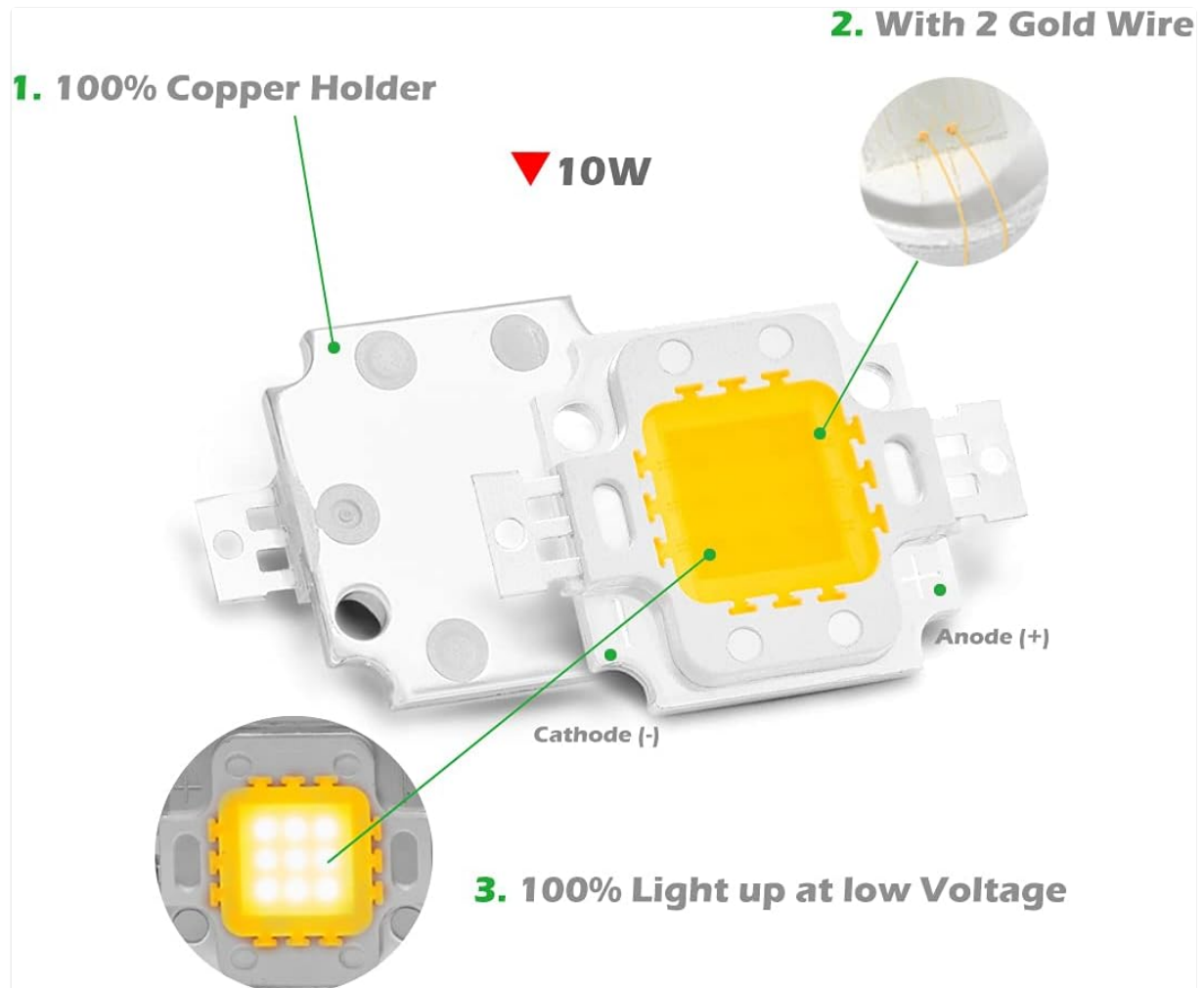
- **Electrical Safety:** Always disconnect power before installing or servicing the LED chip. Work with electricity carries inherent risks; if you are unsure, consult a qualified electrician.
- **Constant Current Driver:** A constant current LED driver is mandatory for high-power COB LEDs to ensure stable operation and prevent damage from overcurrent. Using a constant voltage power supply without a current limiting device will damage the LED.
- **Heat Management:** This LED chip generates heat during operation. A suitable heatsink system is essential to dissipate heat and maintain the operating temperature below 60°C (140°F). Failure to do so will significantly reduce the LED's lifespan and may cause immediate failure.
- **Polarity:** Observe the positive (anode +) and negative (cathode -) markings on the LED chip. Incorrect polarity will prevent the LED from lighting up and may cause damage.
- **Eye Protection:** Do not stare directly into the illuminated LED. The intense light can cause eye strain or damage.
- **Handling:** Handle the LED chip carefully to avoid physical damage to the delicate components.

## 3. PRODUCT OVERVIEW

---

The Chanzon 10W Warm White LED Chip is a high-performance light source featuring advanced COB (Chip-on-Board) technology. It is designed for applications requiring efficient and bright illumination.

- **High Brightness:** Delivers 900-1000 lumens of light output.
- **Warm White Color:** Provides a comfortable warm white light with a color temperature range of 3000K-3500K.
- **Durable Construction:** Features a high-quality COB LED panel with a 30mil chip, double golden wires, and a copper frame for enhanced reliability and heat dissipation.
- **Long Lifespan:** Engineered for a long operational life of up to 50,000 hours under proper operating conditions.
- **Wide Beam Angle:** Offers a 120-140 degree beam angle for broad illumination.



*Image: Internal structure of the Chanzon 10W LED chip, highlighting the copper holder and double gold wire construction for improved performance and durability.*

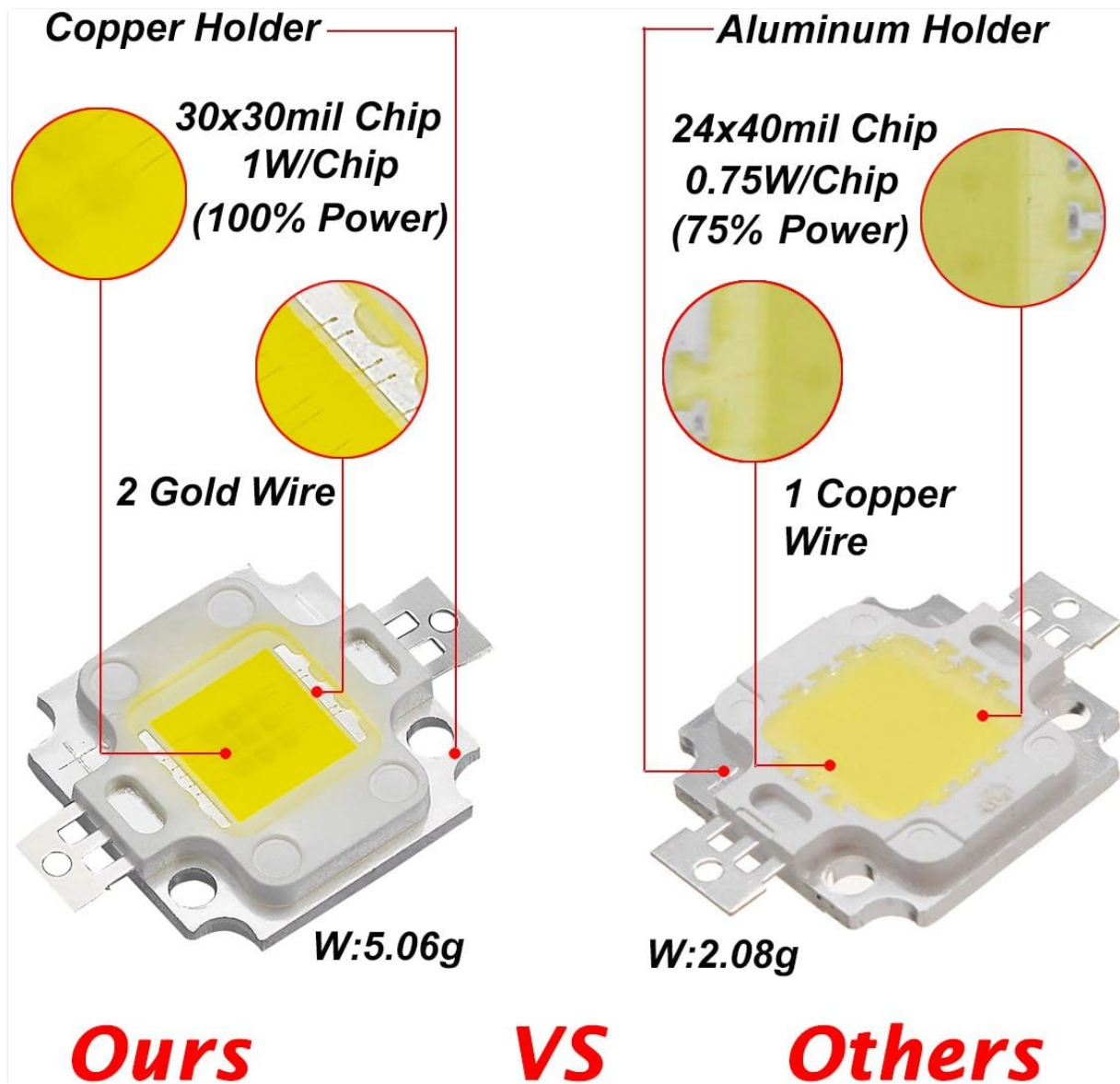


Image: A visual comparison illustrating the superior construction of Chanzon LED chips, featuring a copper holder and two gold wires, compared to typical designs with aluminum holders and single copper wires.

#### 4. SPECIFICATIONS

Detailed technical specifications for the Chanzon 10W Warm White LED Chip:

Parameter	Value
Brand	CHANZON
Model Number	1DGL-JC-10W-WW
Power	10W (Max)
Light Color	Warm White
Color Temperature	3000K-3500K
Recommended Forward Current	900mA
Forward Voltage	9V-11V DC
Luminous Flux	900-1000LM

Parameter	Value
Beam Angle	120-140 degrees
Lifespan	50,000 hours (under optimal conditions)
Chip Type	30mil SMD COB
Material	Plastic, Aluminum, Copper
Operating Temperature (Max)	60°C (140°F) with heatsink

Power	Color	Color Temperature Wavelength	Forward Voltage	Forward Current	Luminous Flux
10W (3x3)	Warm White	3000-3500K	9-11V	840-1000mA	900-1000LM
	Natural White	4000-4500K	9-11V	840-1000mA	900-1000LM
	White	6000-6500K	9-11V	840-1000mA	900-1000LM
	Cool White	10000-15000K	9-11V	840-1000mA	900-1000LM
	Red	620-625nm	6-7V	840-1000mA	350-450LM
	Blue	460-470nm	9-11V	840-1000mA	90-100LM
	Cyan	490nm	9-11V	840-1000mA	120-130 LM
	Green	520-525nm	8-10V	840-1000mA	600-800LM
	Yellow	590-592nm	6-7V	840-1000mA	450-500LM
	Orange	600-605nm	9-11V	840-1000mA	600-700LM
	UV/Purple	395-400nm	9-12V	800-900mA	/
	Royal Blue (Grow LED)	440-445nm	9-11V	840-1000mA	90-100LM
	Deep RED (Grow LED)	660nm	6-7V	840-1000mA	350-450LM
	Full Spectrum (Grow LED)	380-840nm	9-11V	840-1000mA	200-300LM
	IR(730nm)	730-740nm	6-7V	840-1000mA	/
	IR(850nm)	850nm	5-6V	840-1000mA	/
IR(940nm)	940nm	4.5-5.5V	840-1000mA	/	
RGB	R: 620-630nm G: 520-525nm B: 460-465nm	R: 6-7V G: 9-11V B: 9-11V	R: 280-350mA G: 280-350mA B: 280-350mA	R: 90-100LM G: 120-130LM B: 30-40LM	

*Image: Comprehensive specification table for various 10W LED chip types, including the Warm White model, outlining electrical and optical characteristics.*

# 10W SIZE

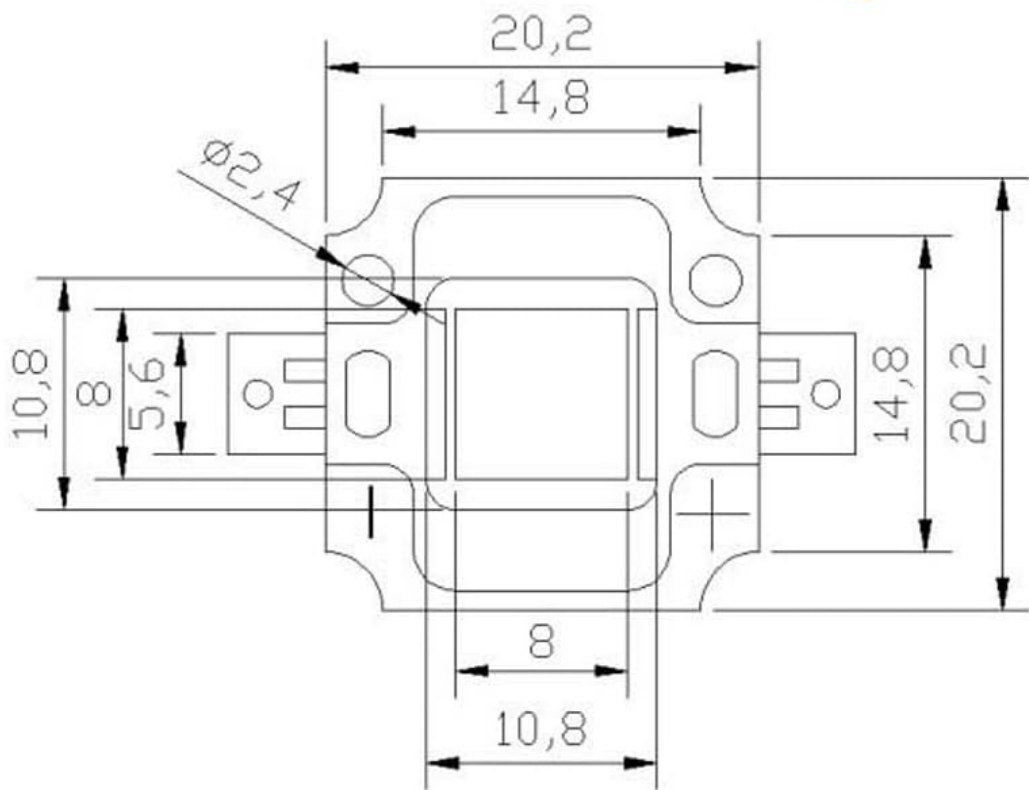
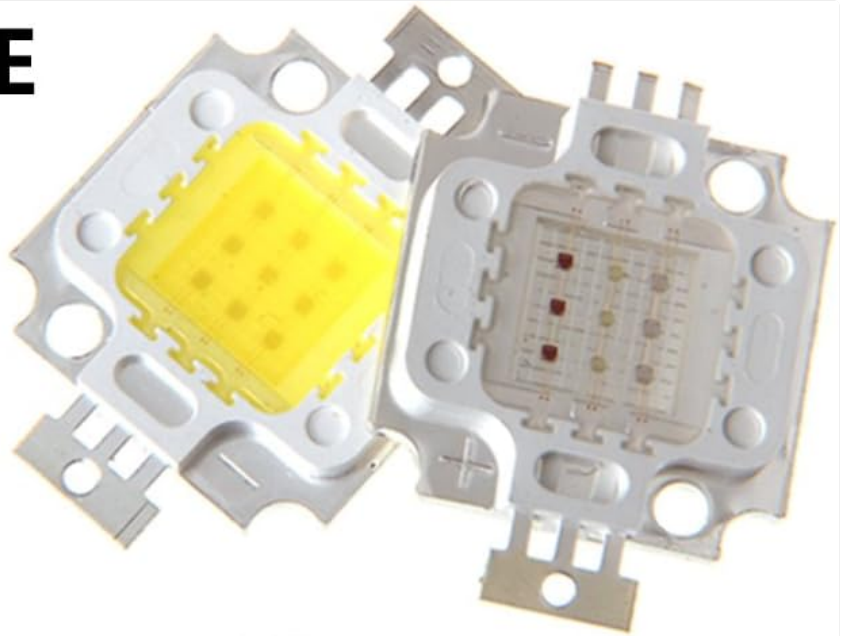


Image: Dimensional drawing of the 10W LED chip, providing precise measurements for integration into custom lighting designs.

## ▼ 10W LED Size

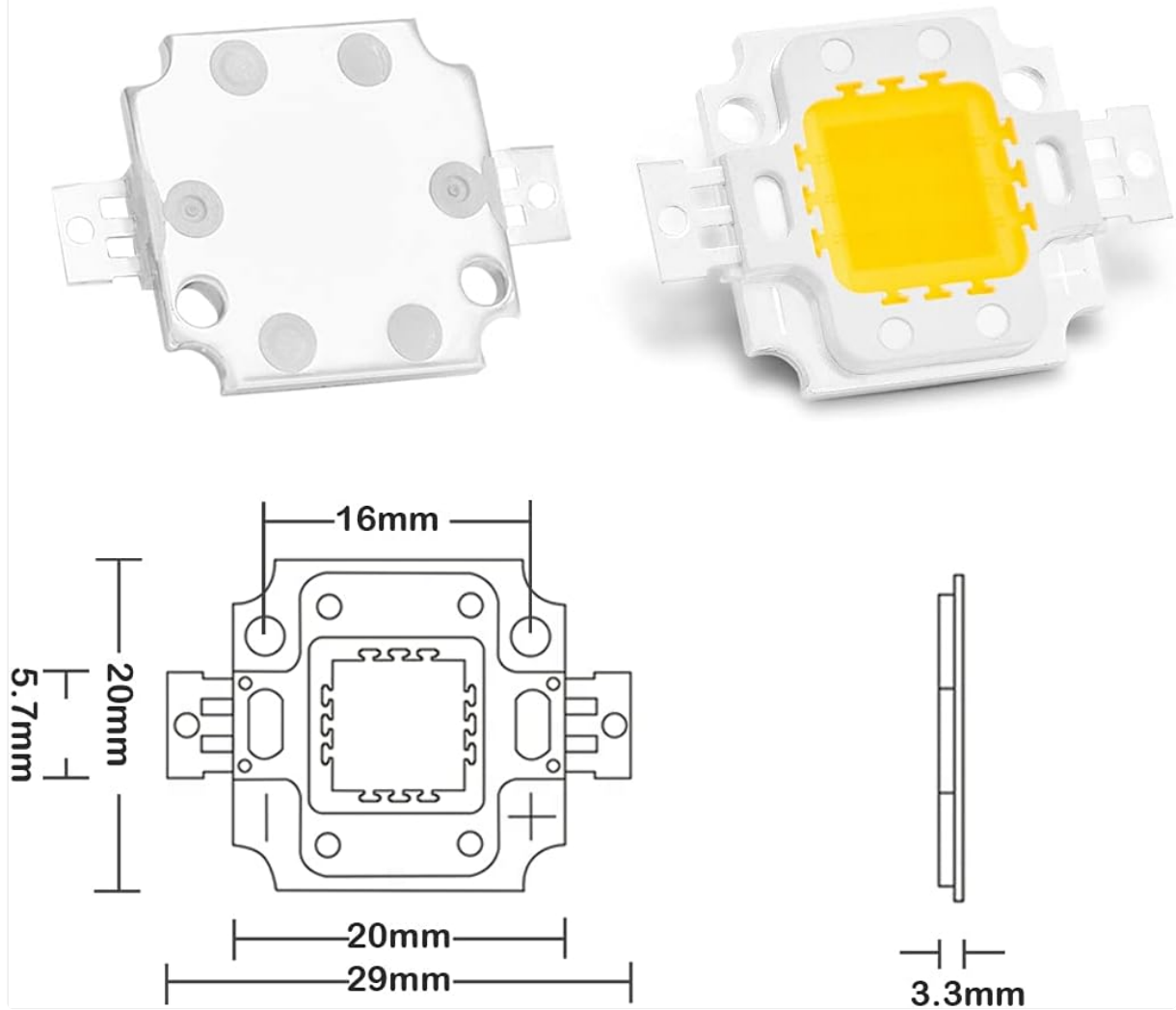


Image: Another detailed technical drawing illustrating the dimensions of the 10W LED chip, crucial for mounting and enclosure design.

## 5. SETUP AND INSTALLATION

Follow these steps for proper installation of your Chanzon 10W LED Chip:

- 1. Prepare Workspace:** Ensure your workspace is clean, dry, and well-lit. Gather all necessary tools, including a soldering iron, solder, wires, a constant current LED driver (900mA, 9-11V output), and a suitable heatsink.
- 2. Heatsink Attachment:** Apply a thin, even layer of thermal paste to the back of the LED chip. Securely attach the LED chip to an appropriately sized heatsink. Good thermal contact is critical for the LED's longevity.
- 3. Wiring:** Identify the positive (+) and negative (-) terminals on the LED chip. Solder wires to these terminals, ensuring strong, clean connections. Connect these wires to the output terminals of your constant current LED driver, matching polarity (+ to + and - to -).
- 4. Power Connection:** Connect the input of the constant current LED driver to your power source. Ensure the power source matches the driver's input voltage requirements.
- 5. Initial Test:** Before final assembly, briefly apply power to test the LED. If it lights up, proceed with securing all components. If not, immediately disconnect power and check wiring and polarity.

**Recommended Accessories:**

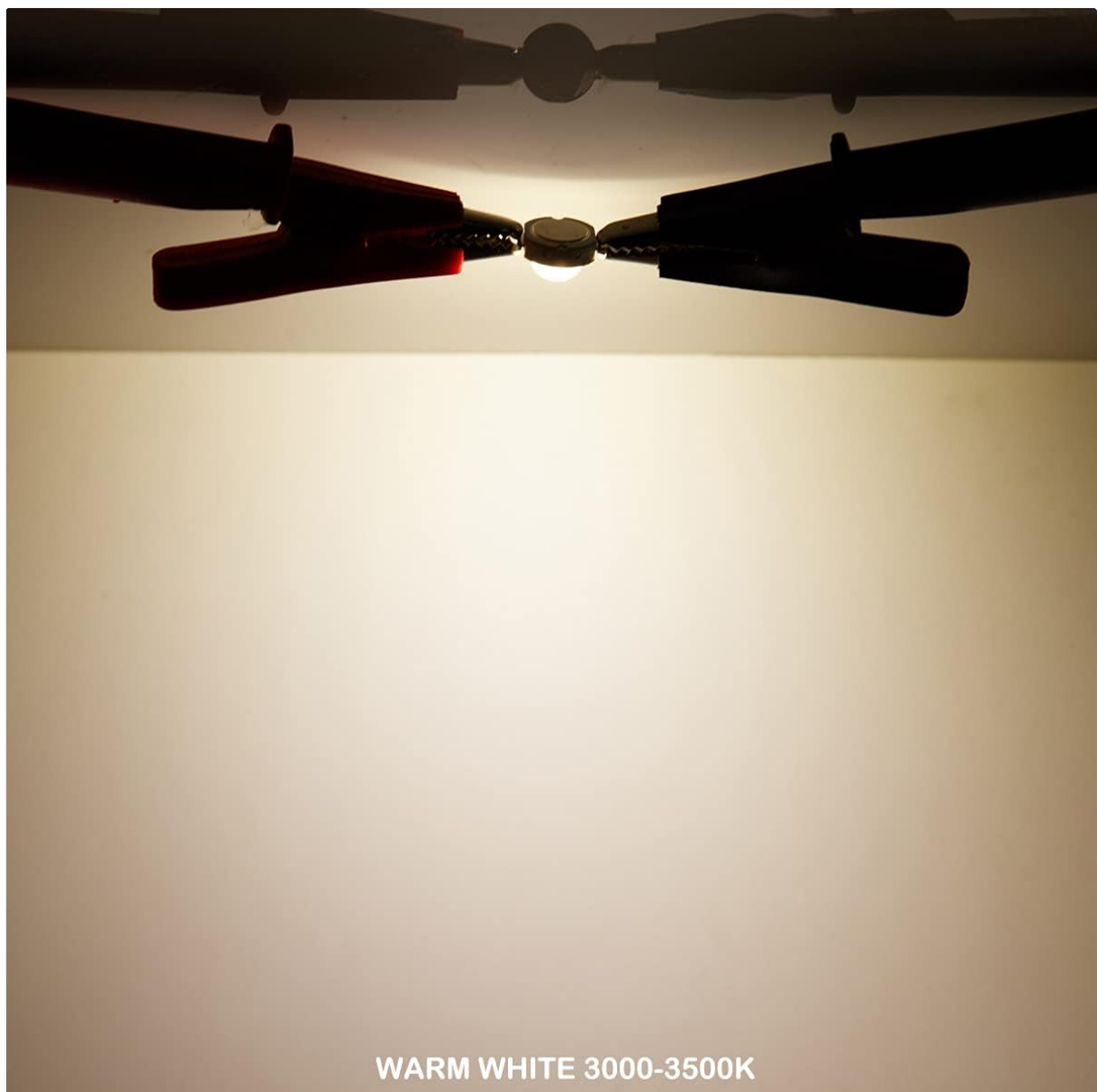
- Constant Current LED Driver (900mA, plastic case): Search for B01MTC9QPD on Amazon.
- Constant Current LED Driver (900mA, aluminum case, waterproof): Search for B01N9UXZ4C on Amazon.
- Constant Current LED Driver (900mA, PCB board only): Search for B01MUDW4A7 on Amazon.

## 6. OPERATING INSTRUCTIONS

---

Once installed, operating the Chanzon 10W LED Chip is straightforward:

- **Power On:** Apply power to the constant current LED driver. The LED chip should illuminate instantly.
- **Monitoring Temperature:** Periodically check the temperature of the heatsink. It should feel warm but not excessively hot to the touch. If it's too hot, immediately disconnect power and review your heatsink setup.
- **Power Off:** Disconnect power from the LED driver when illumination is no longer required.



*Image: The 10W Warm White LED chip in operation, showcasing its characteristic warm illumination.*

## 7. MAINTENANCE

---

The Chanzon 10W LED Chip requires minimal maintenance to ensure optimal performance and longevity:

- **Keep Clean:** Gently clean the surface of the LED chip and heatsink periodically to remove dust and debris, which can impede heat dissipation. Use a soft, dry cloth.
- **Inspect Connections:** Occasionally inspect all electrical connections for any signs of corrosion or loosening. Re-solder or tighten as necessary.
- **Monitor Heatsink:** Ensure the heatsink remains free from obstructions that could block airflow.

## 8. TROUBLESHOOTING

---

If you encounter issues with your LED chip, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
LED does not light up.	No power, incorrect polarity, faulty driver, damaged LED.	Check power supply. Verify positive (+) and negative (-) connections. Test the LED driver. Inspect the LED for visible damage.
LED lights dimly or flickers.	Insufficient current, unstable power, poor connection.	Ensure the constant current driver is providing the correct current (900mA). Check all wiring connections for looseness or corrosion.
LED overheats rapidly.	Inadequate heatsink, excessive current.	Ensure the LED is properly mounted to a sufficiently sized heatsink with thermal paste. Verify the constant current driver output is 900mA.
LED lifespan is shorter than expected.	Consistent overheating, incorrect current, voltage spikes.	Ensure operating temperature remains below 60°C. Use a reliable constant current driver. Protect against power fluctuations.

## 9. WARRANTY AND SUPPORT

---

For warranty information or technical support regarding your Chanzon 10W Warm White LED Chip, please contact the seller or manufacturer directly through the platform where the product was purchased. Please have your purchase details and model number (1DGL-JC-10W-WW) ready when contacting support. For additional information and related products, visit the [CHANZON Store on Amazon](#).