VICTOR
6013B Testing Clamp
Smart SMD Instrument

# Victor 6013B Testing Clamp Smart SMD Instrument Instruction Manual

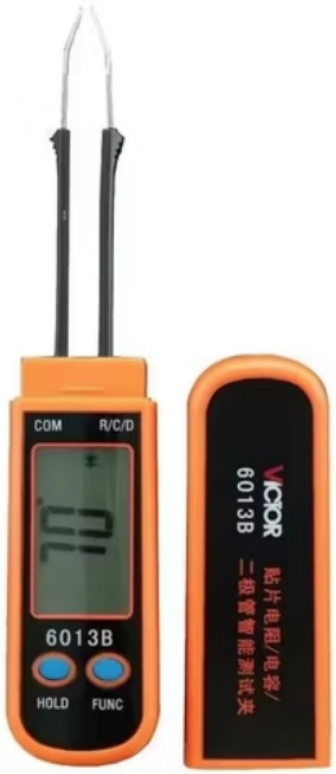


Contents

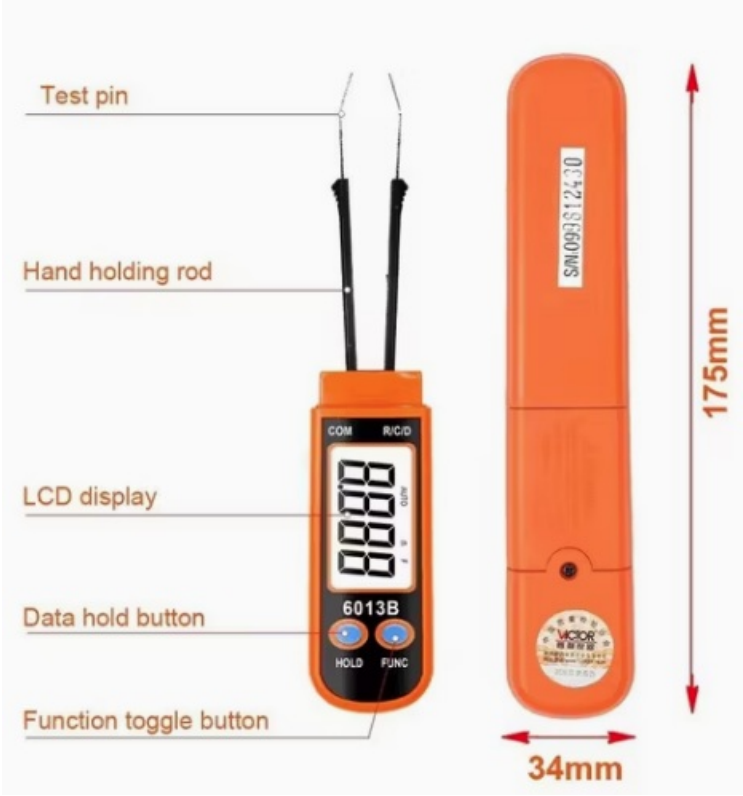


VICTOR

## Victor 6013B Testing Clamp Smart SMD Instrument




## Dimension




## Introduction

This is a deft hand-hold SMD instrument, which can automatically identify resistors, capacitors and diode and measure accurately. Design of the instrument is consistent with IEC1010-I CAT II safety standards, and conforms to the safety rules of the European Community. CE regulation 89/336 (EMC electromagnetic compatibility) Appearance design of the instrument is nice-looking, provided with a solid structure, convenient use, and accurate measurement. Users are expected to read the instruction manual carefully before use.

## Safety rules

- Before use, check whether the shell is damaged or not.
- Check whether the testing needle is complete or not.
- This instrument can not be used as a nipper to avoid damaging the testing needle.
- Do not apply any voltage to the testing needle.
- Do not use in the environment containing corrosive gas and etc.

**Notes:** Do not use this instrument on an electrified circuit.

## Use the instructions on the buttons

1. **FUNC button**: this is the function selection button, and the button can enter resistor, diode and capacitor measurement under scanning status and return the scanning mode.
   The instrument is installed with 3V lithium battery. Get through the power supply and the instrument enters the automatic scanning mode. The monitor displays SCAN symbol and the ——- symbol. This means that the instrument enters the scanning testing mode. Under the scanning mode, the FUNC button is used to select the required testing function manually. Press the FUNC button for 2 seconds to turn on or off .
2. **HOLD button**: this button is used to hold the testing data. When pressing down the button, the instrument stops refreshing the testing data and holds the current testing data. Re-press the button and return to the normal testing status.
   **Notes:** The instrument turns off automatically (sleeping state) 10 minutes after turning on. Press any button to turn on the power a sleeping state.

## Technical specifications

### General characteristics

- Maximum display: 2999
- Automatic resistor/capacitor/diode scanning
- The FUNC button is used to select the testing mode manually
- Data holding function
- Overload indication OL
- Battery under-voltage indication
- Power supply: 3V lithium battery (CR2032), 1 piece
- Automatic turnoff: turn off automatically 10 minutes after turning on
- Working temperature and humidity: 0-40℃(32-104℉)&<80%RH
- Storage temperature and humidity: 0-50℃(32-122℉)&<85%RH
- Dimensions (L×W×H)& weight: 175×34×18.5mm, approx. 68g

### Technical specifications

Guaranteed temperature accuracy: 23℃± 5℃, relative humidity: <70%, and guarantee period for accuracy: 1 year

| Function | Range | Accuracy |
|---|---|---|

| | | |
|---|---|---|
| Resistor | 300/3k/30k/300kΩ | ±(1%rdg+5dgt) |
| | 3MΩ/30MΩ | ±(2%rdg+5dgt) |
| Capacitor | 3nF/30nF/300nF/3uF/30uF/300uF | ±(3%rdg+5dgt) |
| | 3mF/30mF | ±(5%rdg+5dgt) |
| Diode | Open circuit voltage: 2.8V, testing current:1mA | |

## Testing

**Scanning mode**
The 3V lithium battery is installed. Get through the power supply, and the instrument enters the automatic scanning mode. The monitor displays the SCAN symbol and the —-symbol. The instrument can identify a resistor, a capacitor and a diode automatically. The testing data is displayed onthe  LCD immediately.

**Notes:** SMD on printing circuit board is tested, and testing must be carried out under the power off, and the discharge voltage in the capacitor.

**Resistor measurement**

1. Under automatic mode:
    - Measurement range: 0.1Ω-3.000MΩ
2. Press the button FUNC to select the resistance measurement mode, and the measurement range is increased to 30MΩ, namely 0.1Ω-30.000MΩ. In case of overload, OL is displayed.

**Notes:** The instrument is not provided with a beeper measurement. Press FUNC and select the symbol  , and this function is a 300Ω resistance measurement function.

**Capacitor measurement**

1. Automatic scanning mode: measurement range: 0.3nF-300.0uF.
2. Press the FUNC button to enter the capacitor measurement, and the range is expanded to 30.00mf, namely, 0.1nF-30.00mF.
   **Notes:** Before testing, discharge the voltage on the high-voltage capacitor to avoid an electric shock.

**Diode testing**
Automatic scanning and the FUNC button are used to select the testing mode.

1. This function is used to test diodes, triodes, and another unidirectional semi conductor.
2. To test the positive direction voltage reduction of the diode, the R/C/D probe contacts the positive electrode of the tested part and the COM probe contacts the negative electrode, and the positive direction voltage reduction is displayed on the LCD.

## Maintenance

1. As for the replacement of the battery, the battery needs to be replaced if the symbol  is displayed on the

LCD.

1. Open the battery cover with a screwdriver.
2. Take the used battery out and put it into a conforming battery.

**Notes:** specifications of the lithium battery: 3V CR2032

**Cleaning**
Wipe off dirt on the surface with a soft cloth and etc. Chemical solvent is not allowed.

## Frequently Asked Questions

**Q: How do I know if the battery is low?**
A: The instrument will show a battery under-voltage indication when the battery is low.

**Q: What happens if I press any button when the instrument is in the sleeping state?**
A: Pressing any button will turn on the power and wake up the instrument from a sleeping state.

## Documents / Resources

| | |
|---|---|
|  | Victor 6013B Testing Clamp Smart SMD Instrument [pdf] Instruction Manual<br>6013B Testing Clamp Smart SMD Instrument, 6013B, Testing Clamp Smart SMD Instrument, Clamp Smart SMD Instrument, Smart SMD Instrument, SMD Instrument, Instrument |

## References

- User Manual