



HESTORE.HU
elektronikai alkatrész áruház

EN: This Datasheet is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

浩祺®

LCR-T7H

Multi-function Tester (V1.1E)



浩祺®

Series Products

Please recognize 浩祺® trademark, buy the authentic products, refuse fakes and enjoy better quality!

Supports consumers to take LCR-T7H photos (exterior and interior) and send to this e-mail for authenticity verification. If the products are counterfeit, we suggest you appeal to the platform where the seller is located to safeguard your rights and interests!

E-mail: haoqidianzi@163.com

If you have any suggestions, please contact us. Thank you!

Warning Built-in Li-ion Battery, it is strictly prohibited the tester immersed in water, or near a heat source! For your personal safety, please strictly comply with the use of Li-ion Battery specifications and precautions!

Overviews

- 160*128 TFT Display
- Multifunction key
- Transistor test area
- Zener Diode test area
- IR receiver window
- Micro USB Charging Interface
- Charge indicator LED
- IR RC Detector



Features

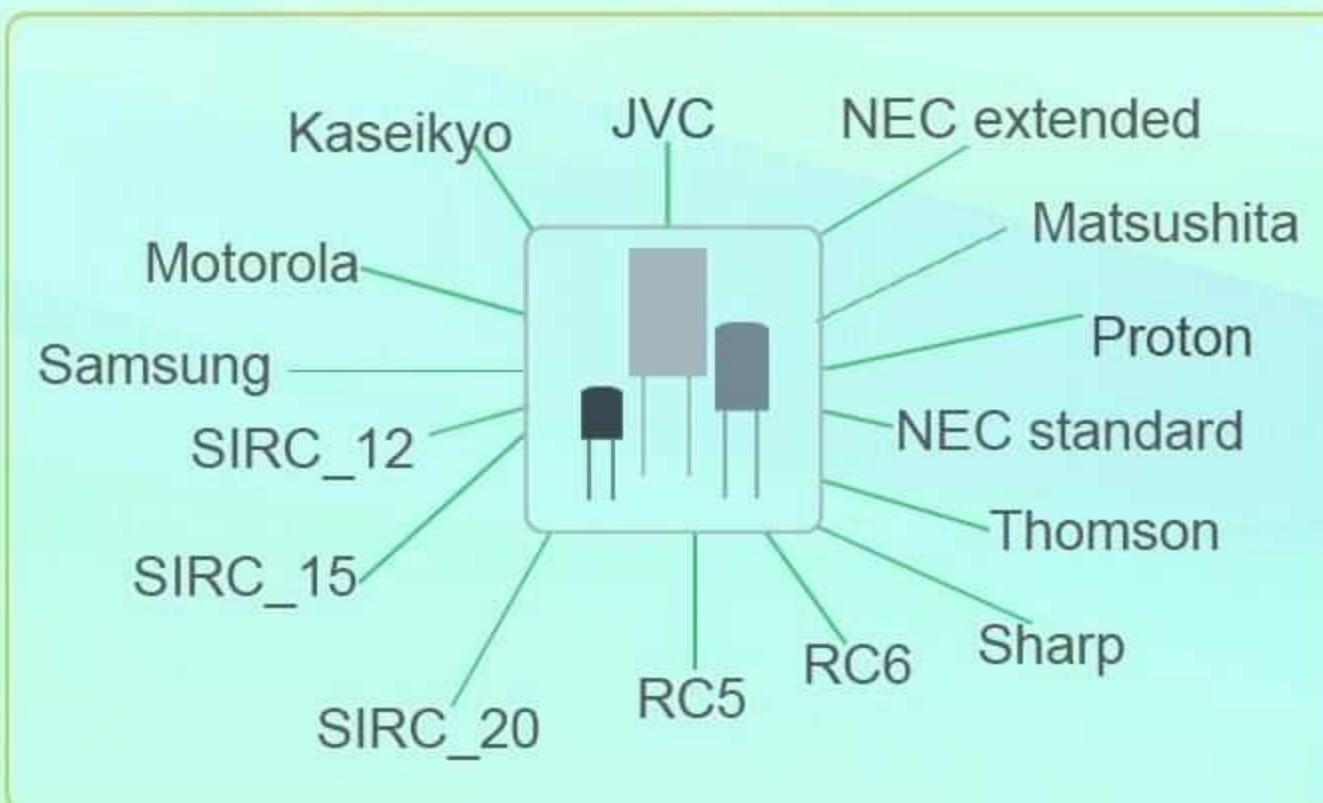
浩祺® LCR-T7H is a TFT graphic display Multiunction Tester.

Transistor Tester

Automatic detection of NPN and PNP bipolar transistors, N-channel and P-channel MOSFETs, JFETs, diodes(including double diodes), N-and P-IGBTs, resistors(including potentiometers), inductors, capacitors, thyristors, triacs and battery (0.1-4.5V).

IR RC Detector Decoder and Transmitter

Supported protocols



Other

- Measurement results using TFT graphic display(160x128)
- One key operation
- Auto Power Off(Timeout Settable)
- Built-in high capacity rechargeable Li-ion Battery
- Li-ion Battery voltage detection

Operating Instructions

Multi-function key has Three actions:

Short press

Press the key and not less than 10ms, release key within 500ms.

Long press

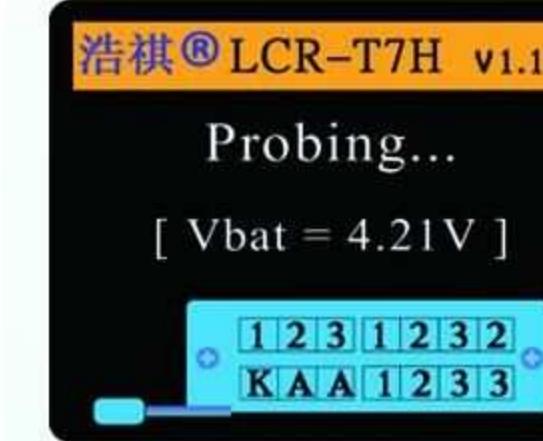
Press the key more than 500ms.

Double-Press

Press the test key twice quickly

Power on & measurement interface

In the power off state, short press the multifunction key, the tester is turned on and automatically measured.



Detect transistor

In the power off state or the test is completed, put the test element into the transistor test area of test seat, and press the locking handle, short press the multifunction key, the tester automatically measure, graphical display of measurement results when testing is complete.



* Always be sure to DISCHARGE capacitors before connecting them to the tester! The tester may be damaged before you have switched it on!

* We do not recommend using the tester to measure the battery! The battery voltage must be less than 4.5V, otherwise the tester may be damaged!

Component placement

Test seat are divided into transistors and zener diode test area .



[Resistor]



[Capacitor]



[Inductor]

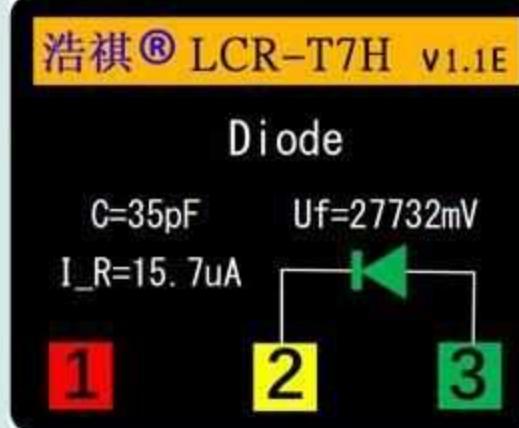


[TRICA]



Improper placement of components may damage the tester!

Diode



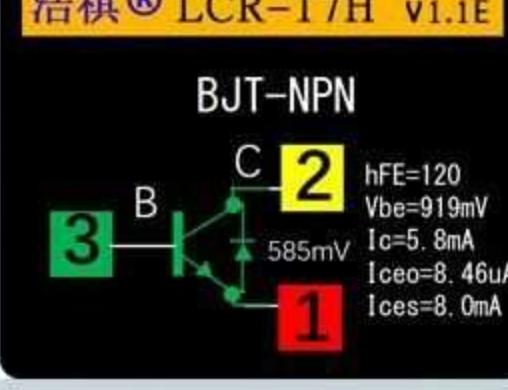
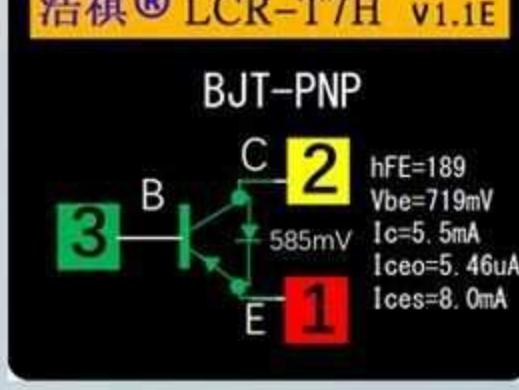
Battery



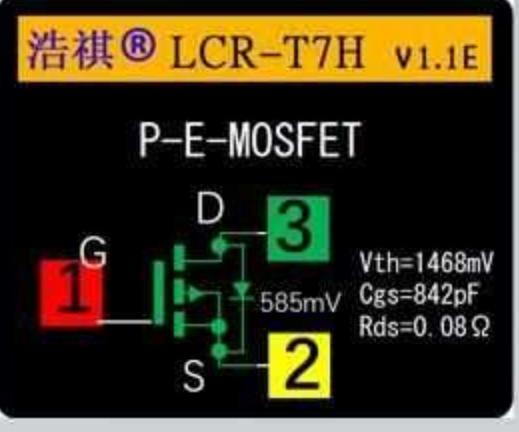
2 Diodes



BJT

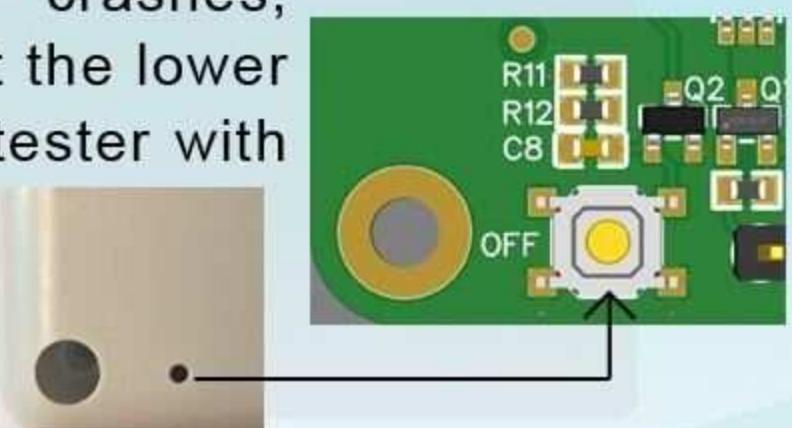


MOS



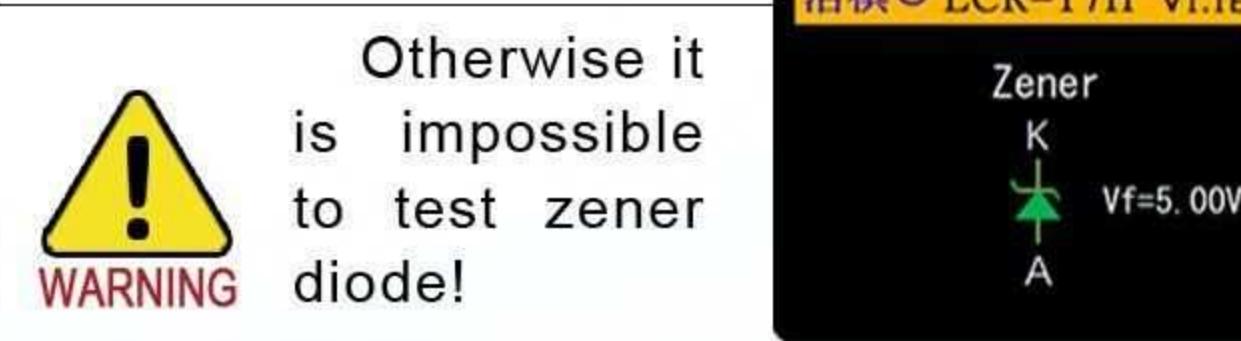
Forced shutdown

When the tester crashes, push the switch at the lower left corner of the tester with a needle to force shutdown!



Detect Zener diode

In the power off state or the detection is completed, put the Zener diode into the Zener diode test area of test seat, and press the locking handle, press the multifunction key, the tester automatically measure, graphical display of measurement results when testing is complete.



IR decoder

IR detector

Protocol : NEC
Pulses : 75
FirstPulse : 7 ms
FirstPause : 9 ms



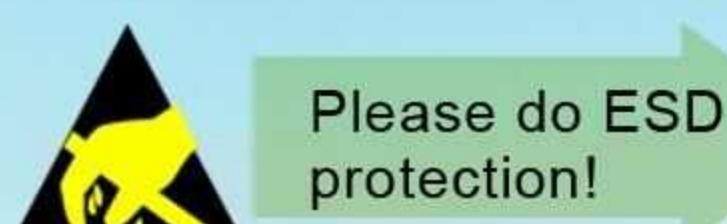
After the component detection is completed, Double click the test button to enter the IR RC Detector the infrared remote control at the tester "IR"test hole, press the remote control key, the tester will be display the user code & data code.

Automatic shutdown

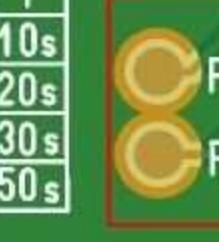
When the component detection completed and after reaching the automatically shut down time, the tester automatically shut down. Automatic shutdown time can be set by the hardware jumpers, timeout support for 10s, 20s, 30s and 50s. Factory set to 20s.

IR decoding completed the tester don't automatically shut down.

Double click the button to return to the test screen. The system shuts down automatically after the test is completed.



P1	P2	T
1	1	10s
0	1	20s
1	0	30s
0	0	50s



Packing List

Tester x1, Debug accessories x1,
Micro USB charging line x1 .

Switch on / off interface

After the component detection is completed, Double click the test button to enter the **IR RC Detector**, Short press the key twice to exit the transistor test interface and shutdown interface.



FAQ

Not all components can be tested, especially power components.

Question	Cause	Solution
Cannot power on	Built-in Li-ion Battery Charging the Li-ion Battery, charging methods is dead	

Performance Parameters

Multifunction Tester can automatically identify elements and automatic detection of pin layout, and automatic switching range.

Component	Range	Parameter Description
BJT	-	hFE(DC Current Gain), Ube(Base-Emitter Voltage), Ic(Collector Current), Ic(o)(Collector Cut-off Current (IB=0)), Ices(Collector short current), Uf(Forward Voltage of protecting diode) ②
Diode	Forward Voltage <4.50V	Forward Voltage, Diode Capacitance, Ir(Reverse Current) ②
Double Diodes	0.01-4.50V (Transistor test area)	Forward Voltage
Zener Diode	0.01-20V (Zener Diode test area)	Reverse Voltage
JFET	Vgs(Gate to Source Threshold Voltag), Uf(Forward Voltage of protecting diode) ②	Cg(Gate Capacitance), Id(Drain Current) at Vgs(Gate to Source Threshold Voltag), Uf(Forward Voltage of protecting diode) ②
MOSFET	Id(Drain Current) at Vgs(Gate to Source Threshold Voltag), Uf(Forward Voltage of protecting diode) ②	Vt(Gate to Source Threshold Voltag), Cg(Gate Capacitance), Rds(Drain to Source On Resistance), Uf(Forward Voltage of protecting diode) ②
MOSFET	Vt(Gate to Source Threshold Voltag), Cg(Gate Capacitance), Rds(Drain to Source On Resistance), Uf(Forward Voltage of protecting diode) ②	Rds(Drain to Source On Resistance), Uf(Forward Voltage of protecting diode) ②
Thyristor	Igt(Gate trigger current)<6mA	Gate trigger voltage
Triac	-	-
Capacitor	25pF-100mF	Capacitance, ESR(Equivalent Series Resistance), Vloss ②
Resistor	0.01-50MΩ	Resistance
Inductor	0.01mH-20H	Inductance, DC Resistance ②
Battery	0.1-4.5V	Voltage, Battery Polarity

① Ic(o), Ices, Uf displayed only when effective

② Diode Capacitance, Ir(Reverse Current) displayed only when effective

③ Displayed only when has protecting diode

④ ESR, Vloss displayed only when effective

⑤ Measurement of inductors with resistance below 2100Ω