PCB Tester

9332

Features

- 0.1% basic accuracy
- 64 test channels
- Test 32 sets of inductive impedance (Ls/Rs/DCR/Q)
- Can be used with pneumatic composite fixtures to perform multi-board (panel) tests
- Supports multi-board test modes and LCR value measurementmode





Application

- NFC antenna board
- Wireless charging coil board
- Layout the coil on PCB/FPC

Accessories / Fixtures

Standard

Option

- Power cord - Kelvin Clip - F9332

- PC Link software - Handler Box - RS-232 Cable

Specification

| Model Name | | 9332 | | |
|--|-------------------------|------------------------------------|------------|--|
| Test Frequency | | 10Hz-200kHz | | |
| Channel | | 64 | | |
| Frequency trimming resolution | | 5 Digits | | |
| Frequency output accuracy | | ±0.01% | | |
| Output Impedance | | 100Ω | | |
| AC Drive Level | | 10mV to 2Vrms (1m Vrms resolution) | | |
| Parameters Measurement | | | | |
| $ Z \cdot \theta \cdot R \cdot L \cdot Q \cdot DCR \cdot C$ | | | | |
| Ranges and Accuracy | | | | |
| Parameters | Ranges | Basic Accuracy (AC 1kHz) | Test Speed | |
| L | 0.1nH ~ 9999.99H | 0.1% | 25ms | |
| С | 0.00001pF ~ 999.99mF | 0.1% | 25ms | |
| Q | 0.00001 ~ 99999 | 0.0005 | 25ms | |

0.1%

0.1%

25ms

25ms

 $0.00001\Omega\sim$

 $99.9999M\Omega$ $0.01 \mathrm{m}\Omega \sim$

 $99.999 M\Omega$

General

Z,R

DCR

| ESR | Series/Parallel | | |
|----------------------|--|--|--|
| Measurementmode | Meter Mode/List Mode | | |
| Calibration | Open Circuit/ Short Circuit | | |
| Built-in storage | testing files 128 sets | | |
| Operation | Auto \ Manual \ Remote Trigger | | |
| Interface | RS-232 \ Handler \ LAN \ USB Host \ EXT. I/O | | |
| Power Supply | Voltage 98Vac-132Vac or 195Vac-264Vac | | |
| | Frequency 47-63Hz | | |
| Power Consumption | 200VA | | |
| Display | 800*480 Color Screen, 7" TFT | | |
| Environment | Temperature: 10°C-40°C \ Humidity: 20-90%RH | | |
| Dimension (W*H*D) | 344x145x343 mm | | |
| Weight | 8.4Kg | | |

Key Features

Why Wireless Charging efficiency became worse?



Capacitance become bigger

- Etching process not enough, distance between wires will become large.

Resistance become bigger

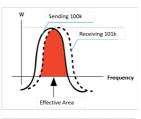
- Etching process not well, wires will become slender.

Quality of coil is also a key factor effect resonance frequency

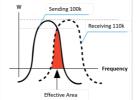


- Diameter of coil wire
- Diameter and number of turns of coil
- Material of magnetic component (increase induction intensity)

B The closer of working frequency and resonance point, the better transmission efficiency.



Poor processes will result in the resistance value of the copper foil circuit to increase as well as the parasitic capacitance; these will all cause high levels of losses to the inductance. Inductance offset causes a direct impact to the resonance frequency that is the key for wireless charging; once the resonance frequency curve has been offset, it may result in the risk of NG for products delivered to the module factory to test their functionalities.





1-to-32 LCR super-capacity electrical measurement artifact 9332.

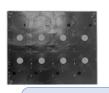




Using LCR Meter to check Inductor Impedance characteristics of FPC Coil.

PC control





Provides coil boards with the function to test multiplesets of measurements at once (Ls/ACR/DCR/Q)

Can be used with pneumatic composite fixtures



- Multi-Step Setting (List Mode)
- PASS / FAIL (Panel multi-board electrical test)
- Operators have intuitive and simple layout screen

Data saving teh test report (SSV→EXCEL)

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