*100 Hz, 1 KHz test frequency, RS232/ USB interface*

# LCR METER

Model : LCR-9073A

***ISO-9001, CE, IEC1010***


LUTRON ELECTRONIC

*The Art of Measurement*

*100 Hz, 1 KHz test frequency*
*RS232/ USB computer interface*

# LCR METER

Model : LCR-9073A

FEATURES

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|---|
| * Professional LCR meter, used the LSI-circuit and exclusive microprocessor circuit, high reliability and High measuring accuracy. |
| * Wide ranger measurement for Inductance, Capacitance and Resistance measurement. |
| * Test frequency : 100 Hz, 1 KHz. |
| * Input overload protection |
| * Rotary switch function selector. |
| * RS232/USB Computer interface. |
| * Diode test. |
| * Large LCD display with backlight. |
| * Built-in low battery indicator |

GENERAL SPECIFICATIONS

| | |
|---|---|
| Display | 67 mm x 27 mm large LCD display.<br>17 mm x 9 mm, digit size.<br>** With LCD backlight ON/OFF control.* |
| Measurement | *Inductance ( L ) :*<br>5 ranges : 2 mH to 20 H. |
| | *Capacitance ( C ) :*<br>6 ranges : 2 nF to 200 uF. |
| | *Resistance ( R ) :*<br>6 ranges : 200 ohm to 20 Mega ohm. |
| | *Diode test* |
| Circuit | Custom one-chip of microprocessor LSI circuit |
| Sampling Time | Approx. 0.4 second. |
| Data Output | RS 232/USB PC computer interface.<br>** Connect the optional RS232 cable UPCB-02 will get the RS232 plug.*<br>** Connect the optional USB cable USB-01 will get the USB plug.* |
| Over Input Indication | Show " 1 " indicator. |
| Operating Temperature | 0 ℃ to 50 ℃ ( 32 ℉ to 122 ℉ ). |
| Operating Humidity | Less than 80% RH. |
| Power Supply | Alkaline or heavy duty type DC 9V battery, 006P, MN1604 (PP3) or equivalent. |
| Power Consumption | Approx. 12 mA. |
| Weight | 314 g/0.69 lb. |
| Dimension | 204 x 90 x 36 mm<br>( 8.0 x 3.5 x 1.4 inch ). |
| Accessories Included | Instruction manual..... 1 PC.<br>Test alligator clips..... 1 Pair. |
| Optional Accessories | * Data Acquisition software, SW-801-WIN<br>* USB cable, USB-01<br>* RS232 cable, UPCB-02 |

ELECTRICAL SPECIFICATIONS ( 23 ± 5 ℃ )

## L ( Inductance )

| Range | Resolution | Test Frequency | Accuracy |
|---|---|---|---|
| 2 mH | 1 uH | 1 kHz | ± ( 2 %+2d ) |
| 20 mH | 10 uH | 1 kHz | ± ( 2 %+2d ) |
| 200 mH | 100 uH | 1 kHz | ± ( 2 %+2d ) |
| 2 H | 1 mH | 1 kHz | ± ( 5 %+2d ) |
| 20 H | 10 mH | 100 Hz | ± ( 5 %+2d ) |
| *uH = micro Henry ( 10^-6 H )*<br>*mH = mili Henry ( 10^-3 H )* | | | |

| Range | Current through Inductance under test |
|---|---|
| 2 mH | 150 u A |
| 20 mH | 150 u A |
| 200 mH | 150 u A |
| 2 H | 150 u A |
| 20 H | 15 u A |

| Overload Rating |
|---|
| AC 10V ( 50 Hz/60 Hz ) max, or DC 10V max., less than 30 second. |

## C ( Capacitance )

| Range | Resolution | Test Frequency | Accuracy |
|---|---|---|---|
| 2 nF | 1 pF | 1 kHz | ± ( 2 %+2d ) |
| 20 nF | 10 pF | 1 kHz | ± ( 2 %+2d ) |
| 200 nF | 100 pF | 1 kHz | ± ( 2 %+2d ) |
| 2 uF | 0.001 uF | 1 kHz | ± ( 2 %+2d ) |
| 20 uF | 0.01 uF | 100 Hz | ± ( 2 %+2d ) |
| 200 uF | 0.1 uF | 100 Hz | ± ( 2 %+2d ) |
| *pF = pico Farad ( 10^-12 F )*<br>*nF= nano Farad (10^-9 F )*<br>*uF= micro Farad ( 10^-6 F )* | | | |

| Range | Voltage across Capacitance under test |
|---|---|
| 2n F | 150 mV |
| 20 nF | 150 mV |
| 200 nF | 150 mV |
| 2 uF | 150 mV |
| 20 uF | 150 mV |
| 200 uF | 15 mV |

| Overload Rating |
|---|
| Charged capacitor 100 uF/ 50 V Max. |

## R ( Resistance )

| Range | Resolution | Accuracy |
|---|---|---|
| 200 Ω | 0.1Ω | ± ( 1 % + 2d ) |
| 2 kΩ | 1 Ω | ± ( 1 % + 2d ) |
| 20 kΩ | 10 Ω | ± ( 1 % + 2d ) |
| 200 kΩ | 100 Ω | ± ( 1 % + 2d ) |
| 2 MΩ | 1 kΩ | ± ( 1 % + 2d ) |
| 20 MΩ | 10 kΩ | ± ( 2 % + 2d ) |

| Range | Open circuit Voltage |
|---|---|
| 200 Ω | 2.4 V |
| 2 kΩ | 2.4 V |
| 20 kΩ | Approx. DC 250 m V |
| 200 kΩ | Approx. DC 250 m V |
| 2 MΩ | Approx. DC 250 m V |
| 20 MΩ | Approx. DC 250 m V |

| Overload Rating |
|---|
| AC / DC 500V at 20 seconds Max. |

## Diode test

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|---|
| Short/non conductance, good/defect test |