

100 Hz / 120 Hz / 1 KHz / 10 KHz

LCR METER

Model : LCR-9173

ISO-9001, CE, IEC1010



SMD TEST CLIP, optional
Model : SMDC-21
(optional)



SMD TESTER, optional
Model : SMDA-22



Carrying case
(optional)

Lutron

LUTRON ELECTRONIC

The Art of Measurement



100 Hz/120 Hz/1 KHz/10 KHz
Ls/Lp/Cs/Cp/Rs/Rp with D/Q/θ /ESR parameters

LCR METER

Model : LCR-9173

FEATURES

- * Compact size, easy to carry.
- * AutoLCR smart check and measurement.
- * 6000 counts ADC resolution.
- * Built-in simple DMM front end circuit to support DCV/Frequency/Diode/NCV mode.
- * Test ranges :
L : 600.0 uH to 200.0 H.
C : 600.0 pF to 10.00 mF.
R : 60.00 to 20.00 M.
- * DCV : 600.0 mV to 20.00 V.
- * Frequency : 6.000 KHz to 15.00 MHz.
- * Series/Parallel modes are selectable.
- * DCR mode 60.00 to 20.00 M.
- * Four test frequencies are available :
100 Hz/120 Hz/1 KHz/10 KHz
- * Ls/Lp/Cs/Cp with D/Q/θ /ESR Parameter.
- * Optional SMD test clips, SMDC-21.
- * Optional SMD tester, SMDA-22.

GENERAL SPECIFICATIONS

Display	LCD size : 52 X 50 mm.
Test frequency	100 Hz/120 Hz/1 KHz/10 KHz
Function buttons	POWER button Mode button Function button HOLD/Backlight button Frequency button LEVEL button D/Q/θ /ESR button SER/PAL button
Dissipation factor	0.000 to 999
Quality factor	0.000 to 999
θ measurement	± 90°
Calibration	Open/Short calibration
Data Hold	Freeze the display reading
Power off	Auto shut off saves battery life or manual off by push button
Operating temperature	0°C to 50°C
Operating humidity	Less than 85% R.H.
Power Supply	005P DC 9V battery * Alkaline or Heavy duty type DC 9V adapter input * AC/DC power adapter is optional
Power consumption	DC 5 mA approximately
Dimension	152 x 78 x 43 mm
Weight	250 g (0.55 lb). * meter only
Standard Accessories Included	* Instruction manual..... 1 PC * Alligator clips (red and black)..... 1 Pair
Optional Accessories	SMD tester, SMDA-22 SMD test clip, SMDC-21 AC to DC 9V adapter USB power to DC 9V converter, USBP-59. Hard carrying case, CA-06 Soft carrying case, CA-05A

ELECTRICAL SPECIFICATIONS (23±5 °C)

Resistance (DCR)

0.5V(rms) / 0.1V(rms)

Range	Accuracy	Remark
60Ω	± (1.5%+5d)	After calibration
600Ω	± (1.0%+5d)	
6000Ω	± (1.0%+5d)	
60kΩ	± (1.0%+5d)	
600kΩ	± (1.0%+5d)	
6000kΩ	± (1.0%+5d)	
20MΩ	± (1.5%+5d)	After calibration

* Appearance and specifications listed in this brochure are subject to change without notice.

Resistance(Z)/Rs/Rp

0.5V(rms) / 0.1V(rms)

Range	Accuracy	Accuracy	Accuracy	Remark
	100Hz/120Hz	1kHz	10kHz	
60Ω	± (1.5%+5d)	± (1.5%+5d)	± (1.5%+5d)	After cal.
600Ω	± (1.2%+5d)	± (1.2%+5d)	± (1.2%+5d)	
6000Ω	± (1.2%+5d)	± (1.2%+5d)	± (1.2%+5d)	
60kΩ	± (1.2%+5d)	± (1.2%+5d)	± (1.2%+5d)	
600kΩ	± (1.2%+5d)	± (1.2%+5d)	± (1.2%+5d)	
6000kΩ	± (1.2%+5d)	± (1.2%+5d)	± (1.2%+5d)	
20MΩ	± (2.0%+5d)	± (2.0%+5d)	± (2.0%+5d)	After cal.

Capacitance (Cp/Cs) : D ≤ 0.1

0.5V(rms) / 0.1V(rms)

Range	Accuracy	Accuracy	Accuracy	Remark
	100Hz/120Hz	1kHz	10kHz	
600pF	-----	-----	± (2.0%+5d)	After cal.
6000pF	± (2.5%+5d)	± (2.0%+5d)	± (1.5%+5d)	After cal.
60nF	± (2.0%+5d)	± (2.0%+5d)	± (1.5%+5d)	
600nF	± (2.0%+5d)	± (1.5%+5d)	± (1.5%+5d)	
6000nF	± (1.5%+5d)	± (1.5%+5d)	± (1.5%+5d)	
60μF	± (1.5%+5d)	± (1.5%+5d)	± (2.5%+5d)	
600μF	± (1.5%+5d)	± (2.5%+5d)	-----	
6000μF	± (2.5%+5d)	-----	-----	After cal.
20mF	± (3.5%+5d)	-----	-----	After cal.

Inductance(Ls/Lp) : (D<0.1)

0.5V(rms) / 0.1V(rms)

Range	Accuracy	Accuracy	Accuracy	Remark
	100Hz/120Hz	1kHz	10kHz	
600uH	-----	-----	± (2.5%+5d)	After cal.
6000uH	-----	± (2.0%+5d)	± (2.0%+5d)	After cal.
60mH	± (2.0%+5d)	± (1.5%+5d)	± (1.5%+5d)	
600mH	± (1.5%+5d)	± (1.5%+5d)	± (1.5%+5d)	
6000mH	± (1.5%+5d)	± (1.5%+5d)	± (1.5%+5d)	
60H	± (1.5%+5d)	± (2.5%+5d)	-----	After cal.
200H	± (2.5%+5d)	-----	-----	After cal.

DCV

Meas. Range	Accuracy	Min. resolution
600mV to 20V	± (0.5%+3d)	0.1 mV

Frequency

Meas. Range	Accuracy	Min. resolution
6kHz~15MHz	± (0.5%+3d)	1 Hz

Scale range configuration

LCR Mode

Function mode	Frequency	Meas. Range	Min. resolution
Inductance	100 Hz/120 Hz	60 mH~200 H	0.01 mH
Ls/Lp	1 KHz	6000 uH~60 H	1 uH
	10 KHz	600 uH~6 H	0.1 uH
Capacitance	100 Hz/120 Hz	60 nF~10 mF	0.01 nF
Cs/Cp	1 KHz	6 nF~600 uF	1 pF
	10 KHz	600 pF~60 uF	0.1 pF
Resistance	100 Hz/120 Hz	60 Ω ~20 MΩ	0.01 Ω
Rs/Rp	1 KHz	60 Ω ~20 MΩ	0.01 Ω
	10 KHz	60 Ω ~20 MΩ	0.01 Ω
DC	N / A	600 Ω ~40 MΩ	0.1 Ω
Resistance			

L289-LCR9173