100 Hz／120 Hz／1 KHz／10 KHz／100 KHz, Professional

LCR METER

Model : LCR-9183 *ISO-9001, CE, IEC1010*

SMD TEST CLIP, optional
Model：SMDC-21

HOLSTER
Model：HS-03

SMD TESTER, optional
Model：SMDA-22

Lutron

LUTRON ELECTRONIC

The Art of Measurement

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

LCR METER

Model : LCR-9183

FEATURES

* 19,999/1,999 counts dual LCD display.
* AutoLCR smart check and measurement.
* Serial/Parallel modes are selectable.
* Ls/Lp/Cs/Cp with D/Q/θ /ESR parameters.
* Support DCR mode 1.00 Ω to 200.0 MΩ .
* Five different test frequency are available : 100 Hz/120 Hz/1 KHz/10 KHz/100 KHz.
* Test AC signal level : 0.6 V rms typically.
* Test range : (ex. F = 1 KHz) L : 200.00 uH to 2000.0 H C : 2000.0 pF to 2.000 mF R : 20.000Ω to 200.0 MΩ
* Multi-level battery detector.
* RS232/USB PC Computer interface.
* Can default auto power off.

GENERAL SPECIFICATIONS

Display	LCD size : 56.4 X 52.9 mm.
Test frequency	100 Hz/120 Hz/1 KHz/10 KHz/100 KHz
Function	L/C/R Function selector Frequency selector D/Q/θ /ESR selector
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
Data output	RS232/USB PC computer interface
Power off	Auto shut off saves battery life or manual off by push button
Operating temperature	0℃ to 50℃
Operating humidity	Less then 85% R.H.
Power Supply	006P DC 9V battery ** Alkaline or Heavy duty type*
	DC 9V adapter input ** AC/DC power adapter is optional.*
Power consumption	DC 35 mA approximately
Dimension	193 x 88 x 41mm
Weight	420 g ** meter only*
Standard Accessories Included	* Instruction manual.....1 PC * Alligator clips.....1 Pair
Optional Accessories	SMD tester, SMDA-22 SMD test clip, SMDC-21 Holster, HS-03 AC to DC 9V adapter Hard carrying case, CA-06 Soft carrying case, CA-05A

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

Resistance (DCR)

Range	*Accuracy*	*Remark*
20 Ω	± (0.8% + 5d)	After Short CAL.
200 Ω	± (0.8% + 5d)	
2000 Ω	± (0.8% + 5d)	
20 KΩ	± (0.8% + 5d)	
200 KΩ	± (0.8% + 5d)	
2000 KΩ	± (0.8% + 5d)	After Open CAL.
20 MΩ	± (1.5% + 5d)	After Open CAL.
200 MΩ	± (2.5% + 5d)	After Open CAL.

Resistance (Rp/Rs)

Range	*Accuracy*	*Accuracy*	*Remark*
	100 Hz/120 Hz	1000 Hz	
20 Ω	± (1.2% + 5d)	± (1.2% + 5d)	After Short CAL.
200 Ω	± (0.8% + 5d)	± (0.8% + 5d)	
2000 Ω	± (0.8% + 5d)	± (0.8% + 5d)	
20 KΩ	± (0.8% + 5d)	± (0.8% + 5d)	
200 KΩ	± (0.8% + 5d)	± (0.8% + 5d)	
2000 KΩ	± (1.5% + 5d)	± (1.5% + 5d)	After Open CAL.
20 MΩ	± (1.5% + 5d)	± (2.5% + 5d)	After Open CAL.
200 MΩ	± (2.5% + 5d)	± (6% + 5d)	After Open CAL.

Range	*Accuracy*	*Accuracy*	*Remark*
	10 KHz	100 KHz	
20 Ω	± (1.2% + 5d)	± (2.5% + 5d)	After Short CAL.
200 Ω	± (0.8% + 5d)	± (0.8% + 5d)	
2000 Ω	± (0.8% + 5d)	± (0.8% + 5d)	
20 KΩ	± (0.8% + 5d)	± (0.8% + 5d)	
200 KΩ	± (0.8% + 5d)	± (0.8% + 5d)	
2000 KΩ	± (1.5% + 5d)	± (3% + 5d)	After Open CAL.
20 MΩ	± (2.5% + 5d)	----------	After Open CAL.

Capacitance (Cp/Cs) : D ≦ 0.1

Range	*Accuracy*	*Accuracy*	*Remark*
	100 Hz/120 Hz	1000 Hz	
20 pF	± (2.5% + 5d)	± (1.5% + 5d)	After Open CAL.
200 pF	± (1.5% + 5d)	± (1.5% + 5d)	After Open CAL.
2000 pF	± (1.2% + 5d)	± (1.5% + 5d)	After Open CAL.
20 nF	± (1.0% + 5d)	± (1% + 5d)	
200 nF	± (1.0% + 5d)	± (1% + 5d)	
2000 nF	± (1.0% + 5d)	± (1% + 5d)	
20 uF	± (1.0% + 5d)	± (1% + 5d)	
200 uF	± (1.0% + 5d)	± (1% + 5d)	After Short CAL.
2000 uF	± (2% + 5d)	± (2% + 5d)	After Short CAL.
20 mF	± (3% + 5d)	----------	After Short CAL.

Range	*Accuracy*	*Accuracy*	*Remark*
	10 KHz	100 KHz	
20 pF	± (1.5% + 5d)	± (1.5% + 5d)	After Open CAL.
200 pF	± (1.0% + 5d)	± (1.0% + 5d)	After Open CAL.
2000 pF	± (1.0% + 5d)	± (1.0% + 5d)	After Open CAL.
20 nF	± (1.0% + 5d)	± (1.0% + 5d)	
200 nF	± (1.0% + 5d)	± (1.0% + 5d)	
2000 nF	± (1.0% + 5d)	± (1.0% + 5d)	
20 uF	± (1.5% + 5d)	± (1.5% + 5d)	
200 uF	± (2% + 5d)	----------	After Short CAL.

Inductance (Lp/Ls) : D ≦ 0.1

Range	*Accuracy*	*Accuracy*	*Remark*
	100 Hz/120 Hz	1000 Hz	
20 uH	± (1.5% + 5d)	± (1.5% + 5d)	After Short CAL.
200 uH	± (1.5% + 5d)	± (1.5% + 5d)	After Short CAL.
2000 uH	± (1.5% + 5d)	± (1.5% + 5d)	
20 mH	± (1.0% + 5d)	± (1.0% + 5d)	
200 mH	± (1.0% + 5d)	± (1.0% + 5d)	
2000 mH	± (1.0% + 5d)	± (1.0% + 5d)	
20 H	± (1.0% + 5d)	± (1.0% + 5d)	
200 H	± (1.0% + 5d)	± (1.5% + 5d)	
2000 H	± (2% + 5d)	----------	After Open CAL.

Range	*Accuracy*	*Accuracy*	*Remark*
	10 KHz	100 KHz	
20 uH	± (1.5% + 5d)	± (1.5% + 5d)	After Short CAL.
200 uH	± (1.5% + 5d)	± (1.5% + 5d)	After Short CAL.
2000 uH	± (1.0% + 5d)	± (1.0% + 5d)	
20 mH	± (1.0% + 5d)	± (1.0% + 5d)	
200 mH	± (1.0% + 5d)	± (1.0% + 5d)	
2000 mH	± (1.0% + 5d)	----------	