



The Measure of Quality

MIC-4070D HAND-HELD LCR METER

- 0.1 μ H to 200H Inductance Measurement
- 0.1pF to 20000 μ F Capacitance Measurement
- 1m Ω to 20M Ω Resistance Measurement
- Dissipation Factor Measurement
- Zero Adjustment
- Quick Responding of Measurement



TL-06 SMD TESTING PROBE

The optional accessory for MIC-4070D and MIC-4060D, which is special designed for measuring the SMD (Surface Mount Device) type Resistor, Capacitor and inductor.



• MIC-4070D



• MIC-4060D
(Discontinued)

MIC-4070D DIGITAL LCR METER

Measurement Range And Accuracy

CAPACITANCE

Range	Accuracy	Resolution	Test Condition
200pf	1%+2	0.1pf	Parallel Mode 1KHz, 0.5Vrms
2nf		1pf	
20nf		10pf	
200nf		100pf	
2μf		1000pf	
20μf	2%+10	0.01μf	Series Mode 120Hz, 1mArms
200μf		0.1μf	
2mf		1μf	
20mf		10μf	

DISSIPATION FACTOR

Range	Accuracy			
0~1.999	200pf	2nf ≤ Cx ≤ 2μf	2μf < Cx ≤ 2mf	20mf
	N.S.	1% + 10 + $\frac{2000}{Cx}$	2% + 20 + $\frac{2000}{Cx}$	N.S.

Cx is capacitance readout in counts.

Accuracy is applied when C is from 20 to 100% of full scale range in series mode measurements.

$$\text{Parallel Mode } D_c = \frac{1}{2\pi f C_p R_p}$$



$$\text{Series Mode } D_c = 2\pi f C_s R_s$$

INDUCTANCE

Range	Accuracy	Resolution	Test Condition
200μH	2%+2	0.1μH	10mArms, 1KHz
2mH		1μH	10mArms, 1KHz
20mH		10μH	1mArms, 1KHz
200mH	1%+2	100μH	0.1mArms, 1KHz
2H		1mH	Parallel Mode 120Hz, 0.5Vrms
20H		10mH	
200H		100mH	

The accuracy is applied from 10 to 100% of full scale range in parallel mode measurements.

DISSIPATION FACTOR

Range	Accuracy	
	Lx ≤ 200mH	200mH < Lx < 200H
0~1.999	1% + 10 + $\frac{2000}{Lx}$	2% + 20 + $\frac{2000}{Lx}$

Lx is inductance readout in counts.

Accuracy is applied when L is from 20 to 100% of full scale range in parallel mode measurements.

$$\text{Parallel Mode } D_L = 2\pi f \frac{L_p}{R_p}$$

$$\text{Series Mode } D_L = \frac{R_s}{2\pi f L_s}$$

RESISTANCE

Range	Accuracy	Resolution	Test Condition
2Ω	1%+5	1mΩ	Series Mode 10mArms
20Ω		10mΩ	
200Ω	1%+2	100mΩ	Mode 1mArms
2KΩ		1Ω	1KHz 0.1mArms
20KΩ		10Ω	10μArms
200KΩ		100Ω	1μArms
2MΩ		1KΩ	Parallel Mode 1KHz, 0.5Vrms
20MΩ		10KΩ	

Accuracy is ± (% of reading + number of digits) and is applied from 10 to 100% of full scale range in parallel mode measurements.

The specifications given assume an operating temperature of 18°C to 28°C humidity up to 80% and half year calibration cycle.

GENERAL SPECIFICATIONS

Power	Single 9V 006P battery
Display	0.5" digital height, 3 1/2 digits liquid crystal display with "LOBAT" and decimal annunciators
Low Battery Warning	Display will show "LOBAT" in the last 5% of battery life
Current Consumption	17.3mA
Temperature	0°C ~ 40°C, Operating -20°C ~ 70°C, Storage
Dimensions	177x88x40mm
Weight	400 grams
Standard Accessories	Operation Manual 1 piece
Optional Accessories	Measurement clip TL-06 for SMD type component



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