HIGH PRECISION LCR METER



LCR-821 (12Hz~200kHz) LCR-819/829 (12Hz~100kHz) LCR-817/827 (12Hz~10kHz) LCR-816/826(100Hz~2kHz)



FEATURES

- * Test Frequency:
- 12Hz~200kHz (LCR-821) 12Hz~100kHz (LCR-819/829) 12Hz~10kHz (LCR-817/827) 100Hz~2kHz (LCR-816/826)
- * 0.05~0.1% Measurement Accuracy
- * 100 Sets Memory for Save/Recall of Settings
- * R/Q, C/D, C/R, L/Q Test Modes for all Models; Z/ θ , L/R for LCR-821 Only
- * Absolute Value, \bigtriangleup Value, and \bigtriangleup % Measurement Display
- * 240 x 128 dot Matrix LCD Display
- * Displays Condition and Test Result Simultaneously
- * Interface : RS-232C (LCR-821/819/817/816) Handler (LCR-829/827/826)

The LCR-800 Series are high-end digital LCR meters for component/material measurements, applicable to various R&D activities and assembly lines. The large 240 x 128 dot matrix LCD display provides ampleroom for two measurement items and setup parameters allowing you to grasp measurement results quickly. All test modes are able to measure supplementary factors such as, R/Q, C/D, C/R, and L/Q. The LCR-821 also contains precise resistance measurements as a combination of absolute value and phase angle. 100 sets of measurement setup memory allow sharing a single unit among multiple testing conditions or sites. For a better viewing experience with a standard PC monitor, proprietary Windows based software is accessible via the RS-232C terminal. The handler interface is also a standard feature for LCR-826/827/829.

SPECIFICATIONS							
TEST FREQUENCY							
	12Hz ~ 200kHz (504 steps) for LCR-821 12Hz ~ 100kHz(503 steps) for LCR-819/829 12Hz ~ 10kHz(489 steps) for LCR-817/827 100Hz ~2kHz (245 steps) for LCR-816/826						
BASIC ACCURACY (*)							
	0.05% for basic accuracy for LCR-821/819/817 0.1% for basic accuracy for LCR-829/827/826/816						
TEST SPEED							
	68ms for LCR-821/819/817/816, 34ms for LCR-829/827/826						
TEST SIGNAL LEVELS							
	5mV ~ 1.275Vrms (5mV/step) for LCR-821/819/829/817/827 0.1V ~ 1.275Vrms (5mV/step)for LCR-816/826						
DC BIAS							
Internal External	2V 0 ~ 35V for LCR-821; 0 ~ 30V for LCR-819/829/817/827/816/826						
DISPLAY RANGE (**)							
Resistance Capacitance	R 0.00001Ω 99999kΩ C 0.00001pF 99999μF						
Inductance Quality Factor	L 0.00001mH ~ 99999H Q 0.0001 ~ 9999						
Dissipation Factor	D 0.0001 ~ 9999						
Impedance	 Z 0.0001Ω ~ 99999k for LCR-821						
Phase Angle (Degree)	θ -180.00°~180.00° for LCR-821						
TEST MODE	•						
	R/Q, C/D, C/R, L/Q Z/ θ , L/R for LCR-821 only						
EQUIVALENT CIRCUIT							
	Parallel or series selectable						
MEMORY							
	100 memory blocks total						
AVERAGE							
	1 to 255 times						
TEST SPEED MODE							
	SLOW, MEDIUM and FAST						
DISPLAY MODE							
	Value, \triangle , \triangle %						
DISPLAY							
	240x128 dot matrix C.C.F.L back light LCD						
INTERFACE							
	Standard Interface : RS-232C for LCR-821 Standard Interface : Handler Interface for LCR-829/827/826 Optional : RS-232C Interface for LCR-819/817/816 (factory installed) (Including LCR-Viewer Software)						
POWER SOURCE							
Line Voltage Range	AC 100V ~ 240V , 47 ~ 63/400Hz						
	AC 100V ~ 240V , 47 ~ 63/400Hz						

(*): Basic accuracy varies with the speed, frequency, AC signal level and impedance of the DUT.

(**): Display range refers to the range of measurement values that can be displayed on the screen. Please see the LCR-800 user manual for the effective measurement ranges.



LCR-821

LCR-800 SERIES SELECTION GUIDE										
MODEL		LCR-821	LCR-819	LCR-829	LCR-817	LCR-827	LCR-816	LCR-826		
Display		240 x 128 dot matrix CCFL back light LCD								
Test Frequency		12Hz~200kHz (504 steps)	12Hz~100kHz (503 steps)		12Hz~10kHz (489 steps)		100Hz~2kHz (245 steps)			
Basic Accuracy		0.05%	0.05%	0.1%	0.05%	0.1%	0.1%			
Test Mode		R/Q, C/D, C/R L/Q, Z/θ , L/R	R/Q, C/D, C/R,L/Q		R/Q, C/D, C/R,L/Q		R/Q, C/D, C/R,L/Q			
Memory		100 memory blocks totally								
DC BIAS	Internal	2V	2V		2V		2V			
	External	0~35V	0~30V		0~30V		0~30V			
Interface	RS-232	Std.	Opt.		Opt.		Opt.			
	Handler			Std.		Std.		Std.		

ORDERING INFORMATION

LCR-821 200kHz High Precision LCR Meter with RS-232 Interface LCR-819 100kHz High Precision LCR Meter LCR-829 100kHz High Precision LCR Meter with Handler Interface LCR-817 10kHz High Precision LCR Meter LCR-827 10kHz High Precision LCR Meter with Handler Interface LCR-816 2kHz High Precision LCR Meter LCR-826 2kHz High Precision LCR Meter with Handler Interface ACCESSORIES : User manual x 1, Power cord x1, LCR-06A x 1 OPTION Opt.01 RS-232C Interface (Factory Installed) **OPTIONAL ACCESSORIES** LCR-05 Test Fixture for Axial & Radial Leaded Components LCR-06A Kelvin Clip Test Lead LCR-07 Test Fixture, Two-Wire with Alligator Clips LCR-08 Test Fixture (Tweezers) for SMD/Chip Components Test Fixture for SMD/Chip Components I CR-09 I CR-13 Test Fixture for SMD/Chip Components GRA-402 Rack Adapter Panel, Rack Mounting (19", 4U) GTL-232 RS232C Cable, 9-pin Female to 9-pin, null Modem for Computer GTC-001 Instrument Cart GTC-002 Instrument Cart FREE DOWNLOAD PC Software LCR-Viewer

LCR-821 Rear Panel



LCR-829 Rear Panel



LCR-819 Rear Panel



LCR-06A

LCR-05 Patent:185538

Description: Test fixture for measurement

LCR-08 Patent:188540

LCR-13

Patent:186171

Description:

SMD / chip test fixture

Frequency: DC to 1MHz

Max. Voltage: +/- 35V Size range from 0201 to 0805

of both axial and vertical

lead components Frequency: DC to 1MHz Max. Voltage: +/- 35V





Description: Kelvin clip test leads. Frequency: DC to 1MHz Max. Voltage: +/- 35V

LCR-07

Description:



Description: Test leads for conventional SMD / clip tweezers Frequency: DC to 1MHz component measurement. It is especially useful for high Max. Voltage: +/- 35V impedance measurement. (With alligator clips)

Two-wire measurement; apply to low C or high R. Frequency: DC to 1MHz Max. Voltage: +/- 35V

LCR-09 Patent:18617



Description: SMD / chip test fixture Frequency: DC to 1MHz Max. Voltage: +/- 35V Size range from 0603 to 1812