Model AX-222 Personal LCR Meter with comparator

Judgment indications [GO] [NG] built-in digital comparator



- Measuring range: L···0.1 μ H~199.9H
 C···0.1pF~1999 μ F
 R···1m Ω ~1999k Ω
 D···0.001~1.999
- L,C,R 3½, D 3½ digit, LED display
- Sampling time: 10 times/sec. approx. (Auto range changeover time:1 step 100 msec.)
- L,C,R and D, analog voltage output (full scale DC2V)

Specifications

Measurement unit					
Measuring signal and Accuracy (23℃±5℃)	L	0.1 μ H~199.9H ±(0.5% of rdg+2digit+0.2 μ H) T			
	С	0.1pF~1999μF	$1 \text{pF} \sim 1999 \mu \text{F}$ $\pm (0.3\% \text{ of } \text{rdg} + 2 \text{digit} + 0.2 \text{pF}) \text{ TYP}$		
	R	1mΩ~1999kΩ	\pm (0.3% of rdg+2digit+2m Ω) TYP		
	D	0.001~1.999	\pm (0.5% of rdg+2digit) TYP		
Measuring frequency	1kHz±5%				
Measuring signal level	L	10mA∼1µA	Differs according to the range.		
	С	1V~0.01V			
	R	100mA~1 μ A			
Range changeover	Auto or manual				
Display	L,C,R 3½ digit, LED display				
Measuring time	Less than one second to stabilize the measured value				
Sampling time	10 times per second approx. (Auto range changeover time:1 step 100 milli second)				
Changeover of measuring item	L and D, C and D, R push-button selectable				
Measuring mode	L	Series equivalent circuit			
	С	$\begin{array}{c} 200 {\rm pF}, 2 {\rm nF}, 20 {\rm nF}, 200 {\rm nF} \mbox{ range (parallel equivalent circuit)} \\ 2\mu{\rm F}, 20\mu{\rm F}, 200\mu{\rm F}, 200\mu{\rm F} \mbox{ range (series equivalent circuit)} \end{array}$			
	R	R Resistance, parallel resistance in series equivalent circuit			
Measuring terminal	5 terminals				
Output signal	L, C, R and D, analog voltage output (full scale DC2V)				
External bias	0~50V DC, 0.1A max. (capacitance measurement)				
Power supply	AC100V~240V selectable, 50/60Hz, about 15VA				
Outer dimension	about 333 (W) \times 85 (H) \times 245 (D) mm (excluding protruding parts such as rubber legs, etc.)				
Weight	about 3kg				

%The following accuracy is representative value

Comparator unit						
Digital comparison mehod LCR, and D						
Judgment error	None					
Judgment time	about 1ms (Relay operate time)					
Setting range	1999, D1999 LCR,-NG, with + NG					
Display GO / NG	LCR	—NG	Red LED			
	LOR	+NG				
	D	NG	1			
	TOTAL	GO	Green LED			
Buzzer	NG at buzzer, Buzzer GO, No buzzer can be switched					
Hold	Possible					
Relay output	LCR	—NG	One contact each transfer DC 30V 20W AC110V 33VA (Resistance load)			
		+NG				
	D	NG				
	TOTAL	GO				
BCD Parallel Data out (Option)	LCR	1999 3½ digit and blank				
	D	1999 3½ digit and D blank	Parallel output fan out 1			
	pulse v	ement completes width about 2ms ositive pulse				

The Outline

Model AX-222, Digital LCR meter, can easily measure not only electronic part such as coil, electrostatic condenser, and resistor but also contact resistance like switch, relay and internal resistance of a battery and junction capacitance of semiconductor, and every elements.

Built-in comparator, it can be informed a judgment result by LED indication and buzzer also be printed out.

With a function of auto range and auto mode, it can measure to select the most approximate range automatically for measurement thing of an unknown value.

It is selectable a range by hand, will become shorten the measuring time by range switching.

Display shows a value of LCR for 3½ digits, at the same time indicates a value of D (loss factor) 3½ digit when L or C measurement.

Analog voltage outputs proportional to the measurement value, it can be connected to analog recorder or analog comparator, and others.