Component Parameter Test Instruments

A. TH2817B/TH2817C LCR Meter

Features

- Special LCD display
- 10 typical measurement frequencies from 50Hz to 100kHz
- Built-in ±2VDC bias voltage source, extendable to -5VDC~+5VDC bias voltage or max. bias current of 50mA(only TH2817C)
- = 2 selectable source impedance: $30\Omega/100\Omega$, easy to be compatible with other LCR meters
- Measurement speed up to 20 times/second
- Transformer parameter measurement function (only for TH2817C)
- Built-in 5-bin comparator
- Key lock function
- Automatic LCZ function
- 10 sets of measurement parameters saved
- Automatically recalling saved measurement parameters
- HANDLER and RS232C interfaces
- Optional GPIB (IEEE-488) interface



TH2817B/TH2817C

Brief Introduction

■ TH2817B/TH2817C LCR meter is newly-developed component measurement instrument providing high performance at low cost. It is perfect combination of general LCR meter and high-performance LCR meter with high-accuracy. The meter provides measurement speed up to 20times/second, 10 measurement frequencies from 50Hz to 100kHz, 3 common typical test levels, 5-digit resolution, two innersource resistance selections and strong measurement functions. So it's suitable for measurement of quality control on production line, incoming inspection, component design and evaluation.

High performance at low cost

■With the base of our years' experience of developing LCR meter, the meter reasonably combines easy operation and strong functions, and improves performance of 100kHz LCR meter. It is ideal instrument for incoming inspection and production line use.

Communication interfaces

TH2817B/TH2817C provides HANDLER, RS232C, GPIB interfaces, through which the meter can communicate with computer and build automatic measurement system and product test line.

Convenient parameter saving and loading

■TH2817B/TH2817C can save 10 sets of measurement parameters, and automatically load saved parameters, which doesn't have the trouble of repeat setting.

Useful transformer measurement function

■TH2817C has transformer measurement function. Using special transformer test fixture, turns ratio (N, 1/N), mutual inductance (M), primary and secondary inductances (L2A, L2B), primary and secondary DC resistances (DCR, R2) can be measured without changing test cable mode. With adjustable bias voltage from -5V to +5V or DC bias current up to 150mA, the meter can conveniently measure communication transformer and choke with small power.

Specifications

Measurement functionMeasurement parameterLCR[Z], R,X,G,B,C, L, Q,D, $\theta(deg),\theta(red)$ TransformerDCR, M, N, 1/N, L2, DCR2Basic accuracy0.1%Equivalents circuitSeries, parallelMathematical functionAbsolute value deviation, Δ %Ranging modeAuto, Hold, Manual selectionTrigger modeInternal, Manual, External, BUSMeasurement speedFast: 20, Med: 8, Slow: 2 (times/second) (≥1kHz)Average times1 - 99Calibration functionOpen/Short frequency point, full frequency correctionMeasurement terminal5-terminalDisplay modeDirect, Δ, Δ %Display5-digit resolution, special LCD display with backlightMeasurement signal10 points: 50Hz, 60Hz, 100Hz, 120Hz, 1kHz, 10kHz, 20kHz, 40kHz, 50kHz, 100kHzSignal frequency10 points: 50Hz, 60Hz, 100Hz, 120Hz, 1kHz, 10kHz, 20kHz, 40kHz, 50kHz, 100kHzOutput impedance30 Ω , 100 Ω Test level0.1Vrms, 0.3Vrms, 1VrmsDC bias sourceFixed ±2VDC, 0~±5VDC adjustable $0~±50mA DC adjustable$ Measurement display range[Z], R, X0.0001 Ω - 99.999M Ω C0.001 μ - 99.999M Ω C0.001 μ - 99.999M Ω Q0.0001 Γ - 99999Q0.0001 Γ - 99999Q0.0001 Γ - 99999Q0.0001 Γ - 99999Q0.0001 Γ - 99999DC C0.001 μ - 99.998MD0.001 Γ - 99999Q	-		TH2817B	TH2817C	
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Comparator 5 bins (3 PASS bins, 1 FAIL bin), 1 AUX bin Memory 10 sets of inner instrument settings saved	M,L2			0.001µH - 99.99kH	
Memory 10 sets of inner instrument settings saved	Comparator a	nd interface			
Memory	Comparator		5 bins (3 PASS bins, 1 FAIL bin), 1 AUX bin		
	Memory			10 sets of inner instrument settings saved and recalled	
Interface RS-232C, HANDLER, GPIB (option)	Interface		RS-232C,	HANDLER, GPIB (option)	

General Specifications

Operating temperature & Humidity	0°C - 40°C, ≤90%RH
Power supply	198V - 242V, 47.5Hz - 52.5Hz
Power consumption	≤ 30VA
Dimensions (W×H×D)	275mmx120mmx425mm
Weight	Approx. 3.8 kg

Ordering Information

TH2817B LCR Meter TH2817C LCR Meter

Instrument Accessories

TH26005A4-terminal test fixtureTH26011A4-terminal Kelvin test cableTH26010Gilded shorting plateTH26038transformer test fixture (only for TH2817C)

Options

TU00047	A terminal test first une
TH26047	4-terminal test fixture
TH26048	4-terminal test fixture
TH26005B	4-terminal test fixture
TH26006	axial component test fixture (used with TH26005A)
TH26007A	core test fixture
TH26008A	SMD component test fixture
TH26009B	SMD test tweezers
TH26029B	SMD test tweezers
TH10001	GPIB interface