

TH2819 Precision LCR Meter

Features

- 320×240 dot-matrix large graphics LCD display
- Chinese and English language user interface selectable
- Frequency up to 200kHz with resolution of 10mHz
- Basic accuracy: 0.05%
- 2 different signal source output impedances: 30Ω and 100Ω
- Open, Short and Load correction
- List sweep function
- Built-in comparator; 10 bins and bin counters.
- Test signal level monitor function
- Automatic level control function for V and I
- 0 V, 1.5 V and 2 V internal DC bias voltage
- Capable to operate with TH1773/TH1775 external DC bias current
- Optional ±10 V(±100mA) and 1A internal DC bias source
- 20 sets of settings saved and loaded
- Standard RS232C interface
- Optional HANDLER, GPIB interfaces



TH2819

Brief Introduction

■ TH2819 is a precision LCR meter with high accuracy, wide measurement range and six digit resolutions. TH2819 is used for incoming inspection of components, quality control of product line and laboratory use over a wide range of frequency (20 Hz to 200 kHz, 0.01Hz resolution) and test signal level (5 mV to 2V). The HANDLER, GPIB, RS232C interfaces make it easy to build an automatic component test system, communicate with the computer and record the test results.

General Specifications

Operating temperature & humidity		0°C - 40°C, ≤90%RH
Power supply	Voltage	198V - 242V
	Frequency	47.5Hz - 63Hz
Power consumption		≤ 80VA
Dimensions (W×H×D)		430mm×185mm×473mm
Weight		Approx. 13 kg

Specifications

Measurement Function

Measurement parameter	Z , Y , C, L, X, B, R, G, D, Q, θ
Basic accuracy	0.05%
Equivalents circuit	Series, parallel
Mathematical function	ΔABS, Δ%
Rang mode	Auto, Hold, Manual
Trigger mode	Internal, Manual, External, BUS ($\geq 1\text{kHz}$)
Measurement time	Fast: 32ms, Medium: 90ms, Slow: 650ms
Average times	1—255
Delay time	0—60s, with step of 1ms
Calibration function	Open/Short frequency point, full frequency correction, Load correction
Measurement terminal	5-terminal
Display mode	Direct, Δ, Δ%, V/I (voltage/current monitor)
Display	320×240 dot-matrix large graphics LCD display, with resolution of 6 digits

Measurement signal

Signal frequency	20Hz—200kHz, resolution: 10mHz
Output impedance	30Ω, 100 Ω
Test level	Range: 5 mV—2 V, Accuracy: 5% Auto level range: 10 mV—1 V, resolution: 1mV
DC bias source	0V, 1.5V, 2V, with accuracy of 1% 0-10V DC bias voltage and 0-100mA DC bias current can be added while using TH1802A

Measurement display range

Z , R, X	0.00001Ω — 99.9999MΩ
Y , G, B	0.00001μS — 99.9999S
C	0.00001pF — 9.99999F
L	0.00001μH — 9999.99H
D	0.00001 — 9.9999
Q	0.00001 — 9999.9
θ (DEG)	-179.999° — 179.999 °
θ (RAD)	-3.14159 — 3.14159
Δ%	-999.999% — 999.999%

Comparator and interface

Comparator	10-bin sorting, bin counter
Memory	20 sets of measurement settings saved
Interface	RS232C, Handler (option), GPIB (option)

Ordering Information

TH2819 Precision LCR Meter

Instrument Accessories

TH26005	4-terminal test fixture
TH26011	4-terminal Kelvin test cable
TH26010	gilded shorting plate

Options

TH26001	4-terminal test fixture
TH26005	4-terminal test fixture
TH26005-2	4-terminal test fixture
TH26006	axial component test fixture (used with TH26005)
TH26007	core inductor test fixture
TH26008	SMD component test fixture
TH26009	SMD test tweezers
TH26029A	SMD test tweezers
TH26004-1	4-terminal Kelvin test cable
TH26011A	4-terminal pair Kelvin test cable
TH1802A	100mA/10V bias current board
TH1802B	1A bias current board
TH10002	GPIB interface board
TH10202	Handler/Scanner interface board
TH11002	GPIB control software
TH12002	RS232C control software

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