

Component Parameter Test Instruments

I. TH2839 Series Impedance Analyzer

Features

- High accuracy: Auto-balance bridge technology, 4-terminal pair
- High stability and consistency: Up to 15 test ranges
- High speed: Up to 7.7ms
- High resolution: 7-inch, 800x600
- 201 Points List Sweep Function
- Multi-parameter Graphic Sweep Function
- Varactor diode automatic polarity function
- 10 bins sorting, sorting result with sound and light alarm
- Storage space: Internal: 40 groups of setting files
USB External: 500 groups of setting files, data log files and image files
- Simultaneous testing for $L_s - R_{DC}$
- High compatibility: Support SCPI commands, compatible with KEYSIGHT E4980A, E4980AL, HP4284A etc.



RS232	USB HOST	USB DEVICE	HANDER	LAN
standard	standard	standard	standard	standard

GPIB	SCANNER
option	option

Dimension(mm): 400mm(W)x132mm(H)x425mm(D)

Weight : 15kg

Applications

Passive component:

Impedance parameter estimation and performance analysis of capacitor, inductor, magnetic core, resistor, piezoelectric devices, transformers, chip components and network components

Semiconductor component

Parasitic parameter test and analysis of LED driver integrated circuit C-VDC features of varactors

Parasitic parameter analysis of transistors or integrated circuit

Other components

Impedance assessment of printed circuit boards, relays, switches, cables, batteries

Dielectric material

Dielectric constant and loss angle evaluation of plastics, ceramics and other materials

Magnetic materials

Magnetic permeability and loss angle assessment of ferrite, amorphous body and other magnetic materials

Semiconductor materials

Dielectric constant, electrical conductivity and C-V characteristics of semiconductor materials

Liquid crystal cell

Dielectric constant, elastic constant and C-V characteristics of liquid crystal cell

Specifications

Model	TH2839	TH2839A
Display	7-inch TFT LCD display 800XRGBX600	
AC Test parameters	Cp/Cs, Lp/Ls, Rp/Rs, Z , Y , R, X, G, B, θ, D, Q, Vac, Iac	
DC Test parameters	Rdc, Vdc, Idc	
Test Frequency	Range Highest resolution	20Hz-10MHz 1mHz
Test level	AC voltage	20Hz — 2MHz: 5mV — 2Vrms 2MHz — 10MHz: 5mV — 1Vrms
	Resolution	100uV
	AC current	20Hz — 2MHz: 50uA—20mA rms 2MHz — 10MHz: 50uA—10mA rms
	Resolution	1uA
	DC Voltage	100mV — 2V
	Resolution	100uV
DC bias	Voltage	0V — ± 40V
	Resolution	100uV
	Current	0mA — ± 100mA
	Resolution	1uA
DC voltage source	Voltage range	-10V — 10V
	Current range	-45mA — +45mA
	Output impedance	100Ω
Test terminal configuration		Four-terminal pair
Output impedance		100Ω
Typical measurement time (speed)		Fast: 7.7ms/time Medium: 120ms/time Slow: 230ms/time

Component Parameter Test Instruments

I. TH2839 Series Impedance Analyzer

Model	TH2839	TH2839A
Highest accuracy	1kHz: 0.05% 1MHz: 0.05% 2MHz: 0.1% 5MHz: 0.5% 10MHz: 1.0%	1kHz: 0.05% 1MHz: 0.05% 2MHz: 0.1% 5MHz: 0.5%
Cable length	0, 1, 2	
Graph sweep	Parameters Type Sweep points	FREQ, ACV, ACV/I, DCV/I, DC voltage source Logarithm, linearity 51, 101, 201, 401 or 801
Equivalent circuit analysis	Additional purchase required	
Interface	USB HOST, USB DEVICE, LAN, HANDLER, RS232C, SCANNER, Temperature Input sensor Optional: GPIB	
Warm-up time	60 minutes	
Input voltage	Optional 100-120VAC/198-242VAC, 47-63Hz	
Power consumption	80VA	
Dimension(WxHxD)mm ³	400 x 132 x 425	
Weight	15kg	

Standard Accessories

Three core power cord

TH26010 Gold-plated short circuit board

TH26047 Test fixture

TH26005C Four-terminal test fixture

TH26011BS 4 terminal pair Kelvin test clip leads