

KEYSIGHT TECHNOLOGIES (AGILENT HP)

4268A

The Keysight Agilent 4268A is a high-speed, precision 120 Hz / 1 kHz capacitance meter designed specifically for production-line testing of high-value multilayer ceramic capacitors (MLCCs). Offering constant-voltage AC test signals up to 1 V rms in compliance with IEC 384-10, it enables accurate testing of high-capacitance components at measurement speeds down to 25 ms. With built-in comparator sorting, a quick contact-check function, and flexible interface options, the 4268A maximizes manufacturing throughput while ensuring highly reliable measurement quality.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488), Handler (standard), Scanner (optional, Option 101)
Display	Character LCD display

Physical

Power Supply	90 V to 132 V AC or 198 V to 264 V AC, 47 Hz to 66 Hz, < 45 VA
Operating Temperature	0 °C to 45 °C °C
Dimensions (W×H×D)	320 mm × 100 mm × 300 mm mm
Weight	4.5 kg
Measurement Terminal Configuration	4-terminal pair

Measurement Capabilities

Primary Parameters	Capacitance (Cp, Cs)
Secondary Parameters	Dissipation Factor (D)
Equivalent Circuit Modes	Series, Parallel
Capacitance Measurement Range (1 kHz)	10 pF to 15 μF (constant voltage mode: up to 10 μF)
Capacitance Measurement Range (120 Hz)	100 pF to 100 μF (constant voltage mode: up to 60 μF)
Dissipation Factor (D) Range	0.00001 to 9.99999

Test Signal Specifications

Test Frequencies	120 Hz, 1 kHz
Test Frequency Accuracy	±0.01%
Normal AC Signal Level Range	0.05 V to 1.0 V rms
Normal AC Signal Level Resolution	0.01 V
Constant AC Signal Level Range	0.1 V to 1.0 V rms
Constant AC Signal Level Resolution	0.1 V
Internal DC Bias Voltage Settings	0 V, 1.5 V, 2.0 V
DC Bias Voltage Accuracy	±(5% + 2 mV)

Accuracy and Speed

Basic Capacitance Accuracy	±0.07% (at 1 kHz)
Basic Dissipation Factor Accuracy	±0.0005 (at 1 kHz)
Measurement Time (Fast, 1 kHz)	9.7 ms
Measurement Time (Fast, 120 Hz)	27 ms
Measurement Time (Medium, 1 kHz)	26 ms
Measurement Time (Slow, 1 kHz)	82 ms

Correction and Compensation

Open/Short Correction	Supported
Load Correction	Not supported

Comparator and Binning Functions

Comparator Binning Functions	9-bin comparator for primary parameter sorting
Secondary Parameter Limits	1-bin (In/Out)
Contact Check Function	Built-in Quick Contact Check (detects open/short test connection)

System Interfaces and Connectivity

Front Panel Test Ports	4-terminal pair BNC configuration
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User Interface and Memory

Internal Storage Capacity	10 instrument setup configurations
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Environmental and Compliance

Storage Temperature Range	-40 °C to 70 °C
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Measurement Signal

Source Impedance (Normal Mode)	100 Ω
Source Impedance (Constant Voltage Mode)	25 Ω

Measurement Configuration

Averaging Range	1 to 256
Trigger Delay Range	0 ms to 9.999 s (1 ms resolution)
Trigger Source Options	Internal, Manual, External (Handler), GPIB
Measurement Ranging Modes	Auto, Hold
Deviation Measurement Functions	Δ , $\Delta\%$

Measurement Performance

Test Signal Level Monitors	Voltage (Vm), Current (Im)
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Power Requirements

AC Line Frequency Range	47.5 Hz - 66 Hz
AC Line Input Voltage	90 V - 132 V / 198 V - 264 V (automatic selection)
Maximum Power Consumption	65 VA

Software & Control

Programming Language	SCPI
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Options

Option 001 Internal DC Bias	1.5 V and 2 V
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Performance

Capacitance Display Range	0.01 pF to 99.999 mF
Dissipation Factor (D) Display Range	0.00001 to 9.99999

Compliance

Safety Compliance	Conforms to IEC 61010-1 / EN 61010-1
EMC Compliance	Conforms to EN 55011 / EN 50082-1

Accessories

Compatible Test Fixtures	Keysight 16047A, 16047C, 16047D, 16047E, 16048A, 16048D, 16048E, 16089A, 16089B, 16089C, 16089D, 16089E
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Inputs & Outputs

External Trigger Input	BNC (female) on rear panel
Handler Interface Connector	36-pin Amphenol

TECHNOLOGY

LCR Meter / Capacitance Meter

APPLICATIONS

High-speed testing of high-value multi-layer ceramic capacitors (MLCC)

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.