Competitive Comparison

Keysight E4980AL Precision LCR Meter versus IET 1693 RLC Digibridge

Keysight E4980AL

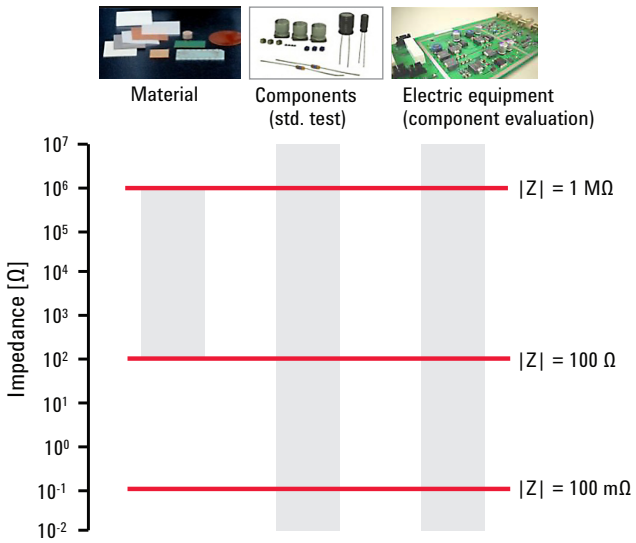
- Combination of accuracy, speed and versatility
- Wide variety of accessories
- Upgradability

	Keysight E4980AL		IET 1693	
Frequency range	20 Hz to 300 kHz (Option 032)	-	12 Hz to 200 kHz	-
Test signal level	2 Vrms	√	1.275 Vrms	X
Test signal level monitor	Yes	√	Yes	√
ALC	Yes	√	Yes	√
Basic accuracy (freq. range)	0.05% (100 Hz to 300 kHz)	-	0.02% (1 kHz)	-
Measurement speed for basic accuracy	119 msec (med. at 300 kHz)	√	974 msec (slow at 1 kHz)	X
Measurement accuracy for high/med/ high/med/low Impedance	See next page	√	See next page	X
DC bias signal level	1.5 V, 2 V	X	2 V	X
DCR measurement	Yes	√	No	X
Compensation	Open/Short/Load	√	Open/Short	X
Cable length correction	1/2/4 m	√	No	X
List sweep	Test frequency, test signal voltage/ current (201 points)	√	No	X
Comparator BIN sort	Yes	√	Yes	√
USB/LAN interface	Yes	√	No	X
Test accessary	Over 20 kinds	√	6 kinds	X
Frequency upgrade	Yes (500 kHz/1 MHz)	√	No	X

Sources: E4980A/E4980AL Data Sheet (Published in December 0214, 5989-4435EN)
1693 RLC Digibridge User and Service Manual (1693 im/September 2012)

KEYSIGHT TECHNOLOGIES

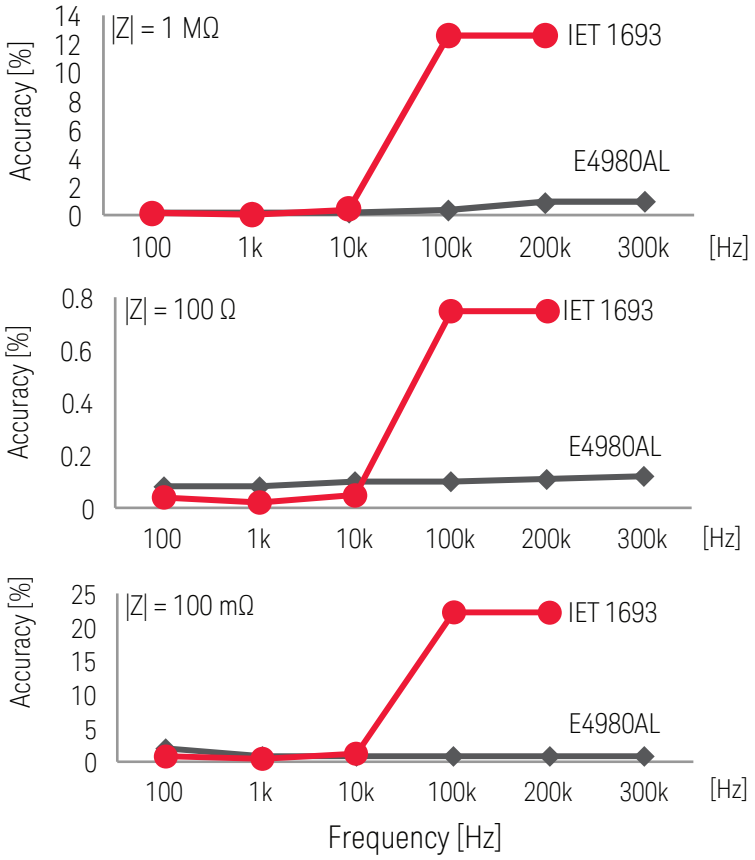
Typical Impedance Range by DUT Category



For basic testing or evaluation of electronic components such as capacitors and materials, wide impedance measurement range and test frequency range are required. For example, the high-value capacitance is measured at 120 Hz, and the low-value capacitance is measured at 1 MHz.

e.g. 10 mF capacitor: |Z| = 133 mΩ at 120 Hz
1 pF capacitor: |Z| = 159 kΩ at 1 MHz

Impedance Measurement Accuracy over Test Frequency



Sources: E4980A/E4980AL Data Sheet 5989-4435EN, , 1693 RLC Digibridge User and Service Manual

Measurement condition:
Test signal level: 1Vrms, cable length: 0 m, measurement speed: E4980AL med., IET 1693 slow

www.keysight.com/find/E4980AL

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