Competitive Comparison

Keysight E4980AL Precision LCR Meter versus Hioki IM3533-01 LCR Meter

Keysight E4980AL

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

	Keysight E4980AL		Hioki IM3533-01	
Frequency range	20 Hz to 300 kHz (Option 032)	-	1 mHz to 200 kHz	-
Test signal level	2 Vrms	X	5 Vrms	√
Test signal level monitor	Yes	√	Yes	√
ALC	Yes	√	Yes	√
Basic accuracy (freq. range)	0.05% (100 Hz to 300 kHz)	√	0.05% (1 kHz to 10 kHz)	X
Measurement speed for basic accuracy	119 msec (med. at 300 kHz)	√	301 msec (slow2 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	-5 to 5 V	√
DCR measurement	Yes	√	Yes	√
Compensation	Open/Short/Load	√	Open/Short/Load	√
Cable length correction	1/2/4 m	√	1/2/4 m	√
List sweep	Test frequency, test signal voltage/ current (201 points)	-	Test frequency (801 points)	-
Comparator BIN sort	Yes	√	Yes	√
USB/LAN interface	Yes	√	Yes (LAN optional)	√
Test accessary	Over 20 kinds	√	11 kinds	X
Frequency upgrade	Yes (500 kHz/1 MHz)	√	No	X

Sources: E4980A/E4980AL Data Sheet (Published in December 2014, 5989-4435EN)
Product Catalog IM3523/IM3533 (as of April 5,2012, IM3523E3-24B)

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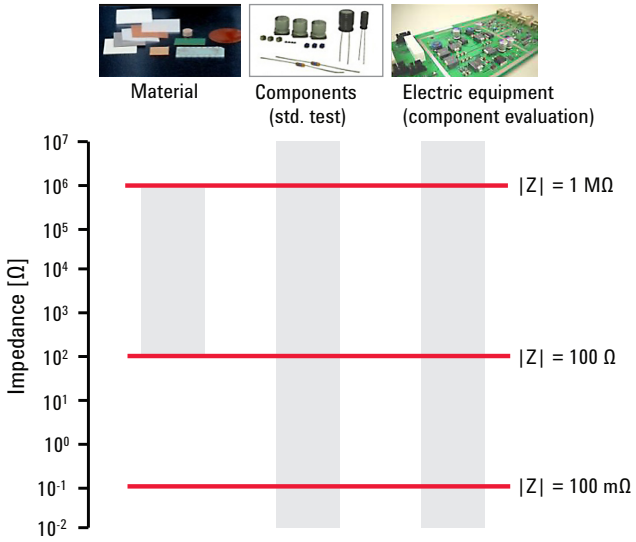
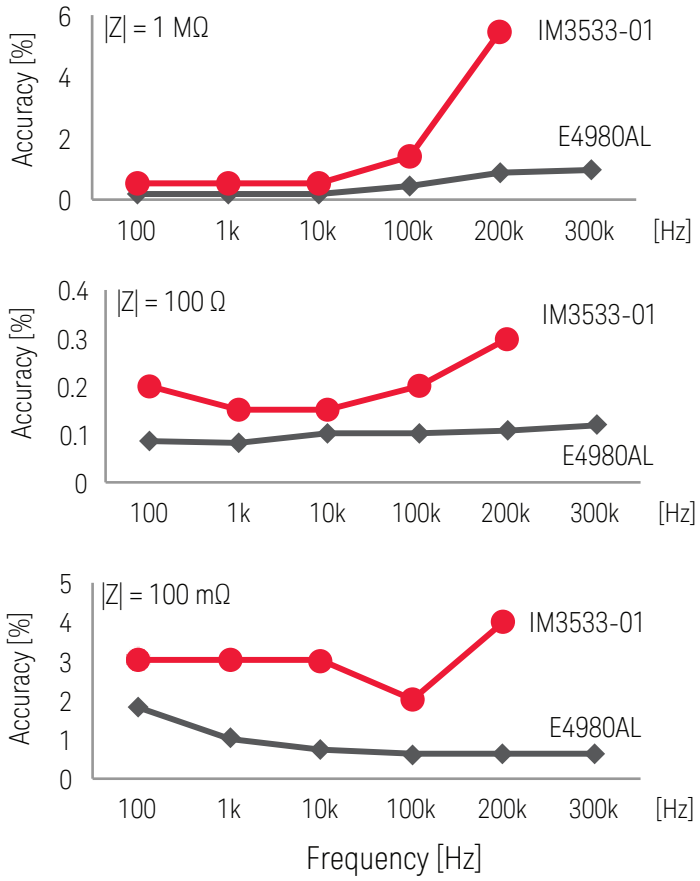
Typical Impedance Range by DUT Category



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, , Product Catalog IM3523/IM3533 IM3523E3-24B

Measurement condition:
Test signal level: 1Vrms, cable length: 0 m, measurement speed: E4980AL med., IM3533-01 slow

www.keysight.com/find/E4980AL

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