

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ331
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

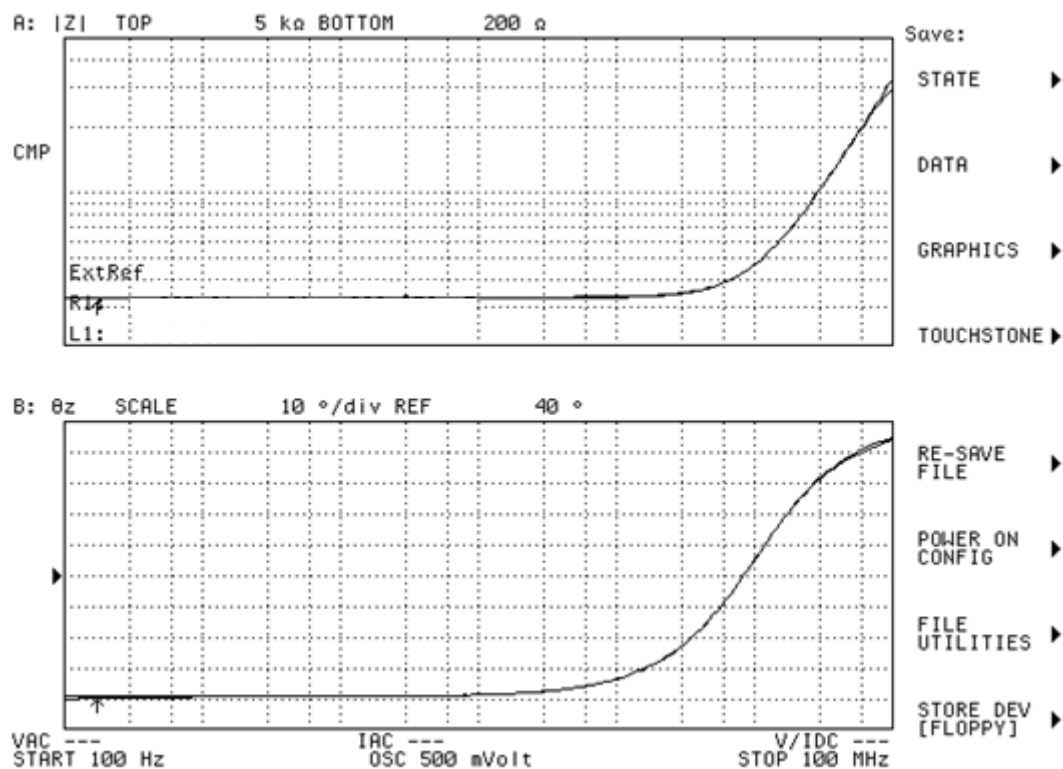
Optimization of Simulation

Range of adjustment Frequency: 100 to 100M(Hz)

Frequency vs. $|Z|$ and Frequency vs. θz Characteristic

Attention

Please use SPICE MODEL within the range from 100 to 100M(Hz)



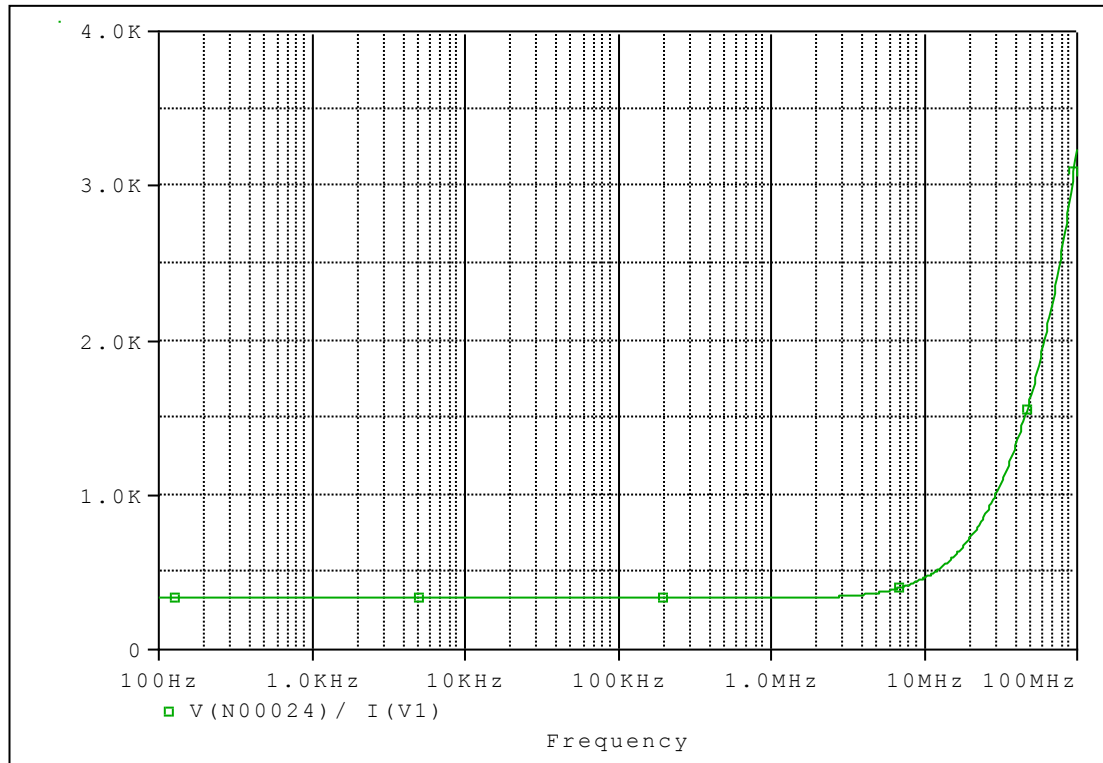
Measurement		
R1		
L1		
C1		

Equivalent circuit

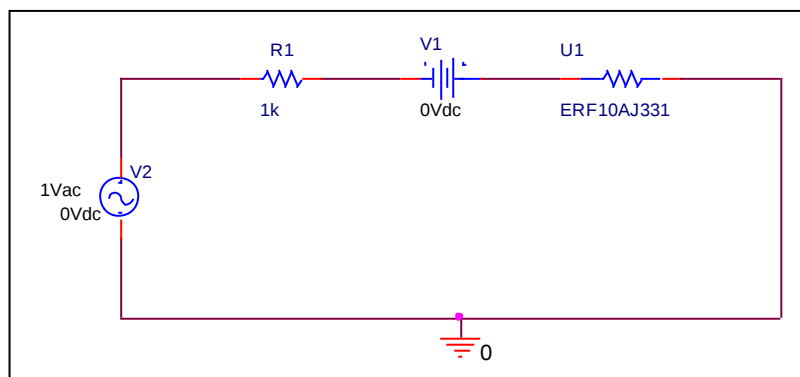


Frequency vs. $|Z|$ Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	328.430	330.947	0.766
1K	328.460	330.910	0.746
10K	328.540	330.910	0.721
100K	328.370	332.475	1.250
1M	330.220	332.475	0.683
10M	462.056	464.891	0.614
100M	2.950	3.239	9.797