

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF5AJ331
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

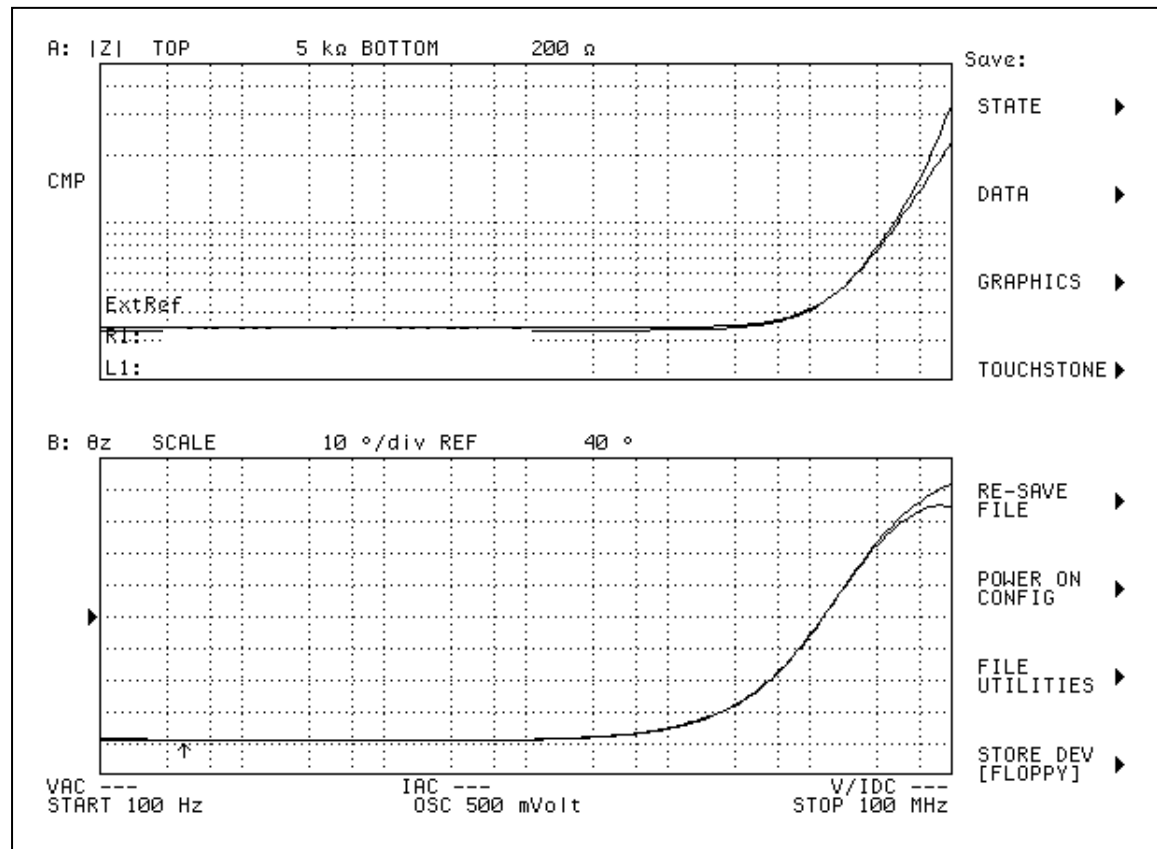
Optimization of Simulation

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

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

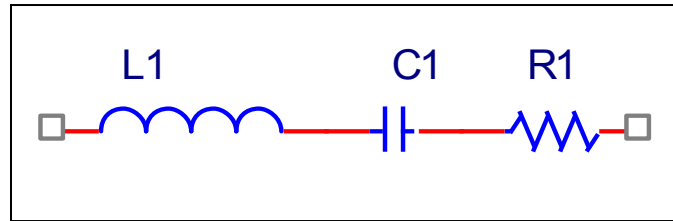
Attention

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



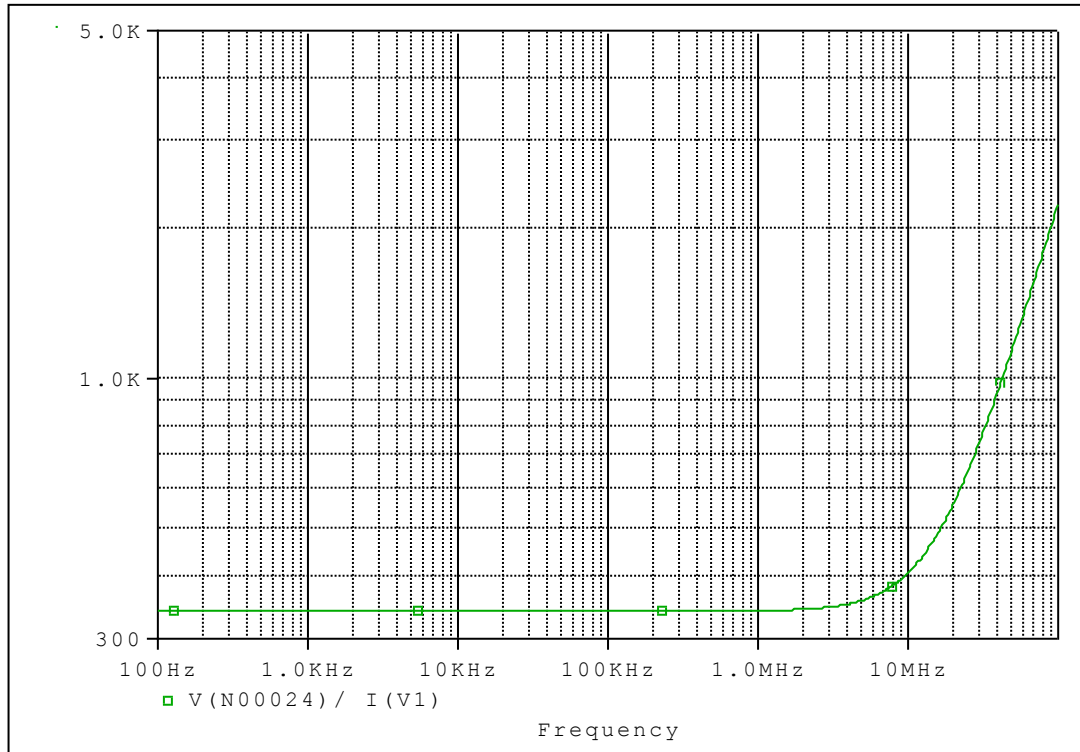
Measurement		
R1		
L1		
C1		

Equivalent circuit

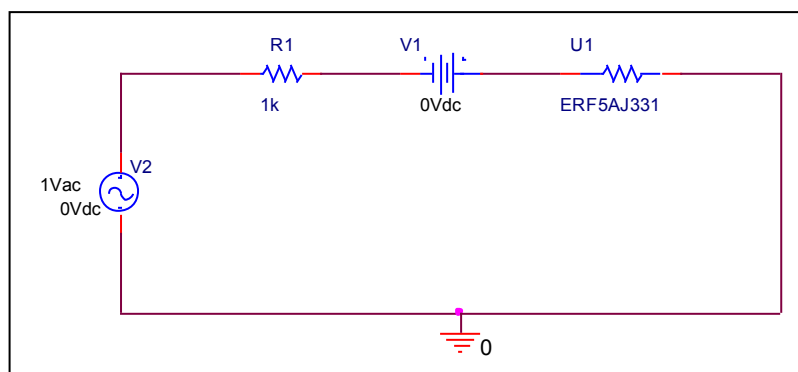


Frequency vs. $|Z|$ Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	330.262	334.993	1.432
1K	330.429	340.993	3.197
10K	330.308	340.993	3.235
100K	330.463	341.000	3.189
1M	331.902	341.708	2.954
10M	403.623	406.314	0.667