

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ681
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

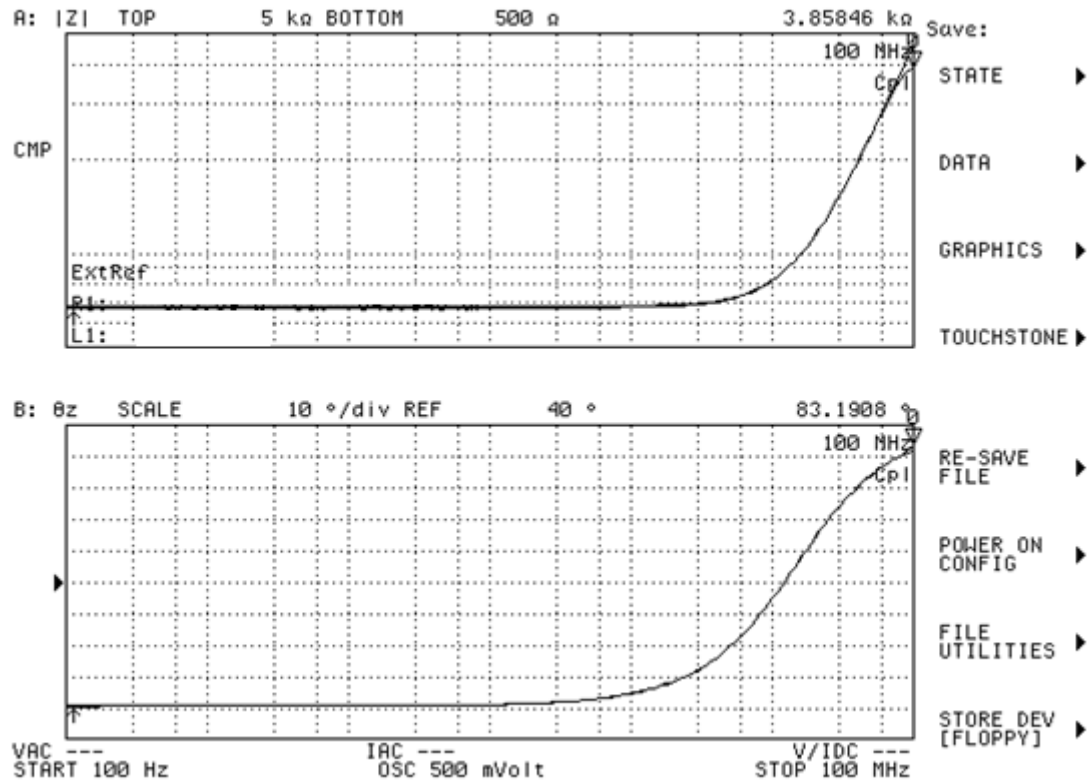
Optimization of Simulation

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

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

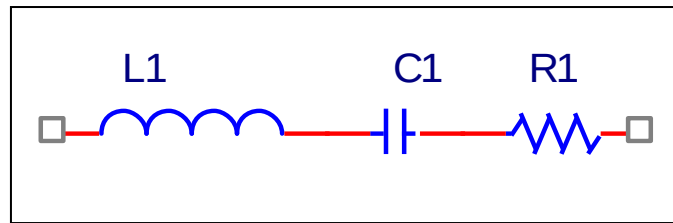
Attention

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



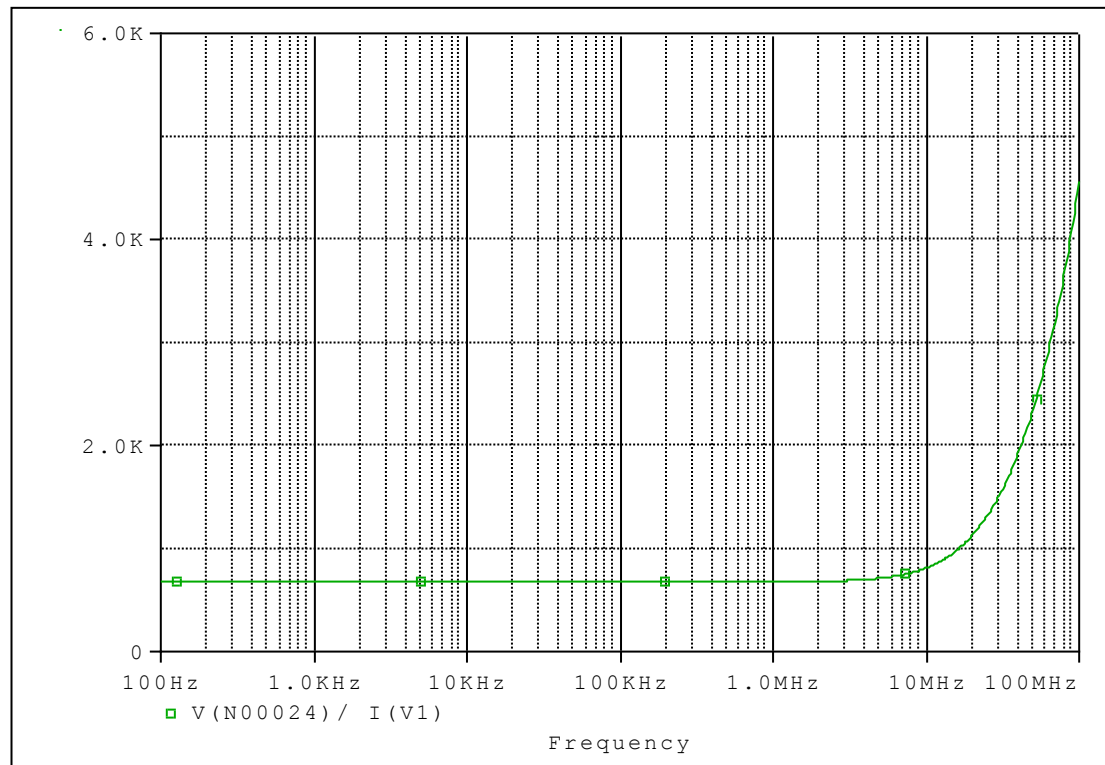
Measurement		
R1		
L1		
C1		

Equivalent circuit

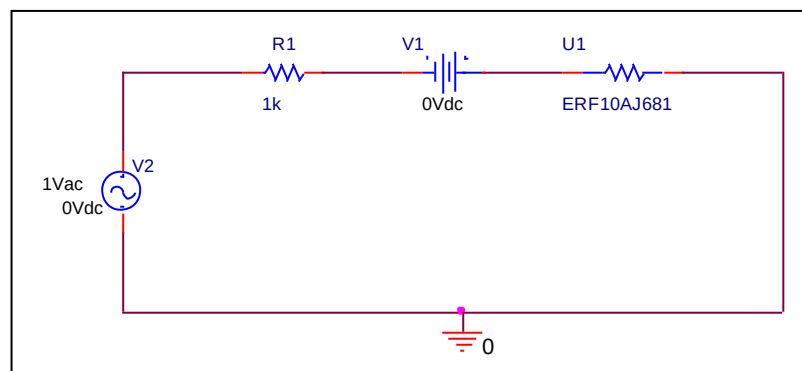


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	668.55	675.693	1.068
1K	668.69	675.69	1.047
10K	668.718	675.69	1.043
100K	668.613	675.605	1.046
1M	670.414	677.19	1.011
10M	809.823	812.051	0.275