

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ361
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Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

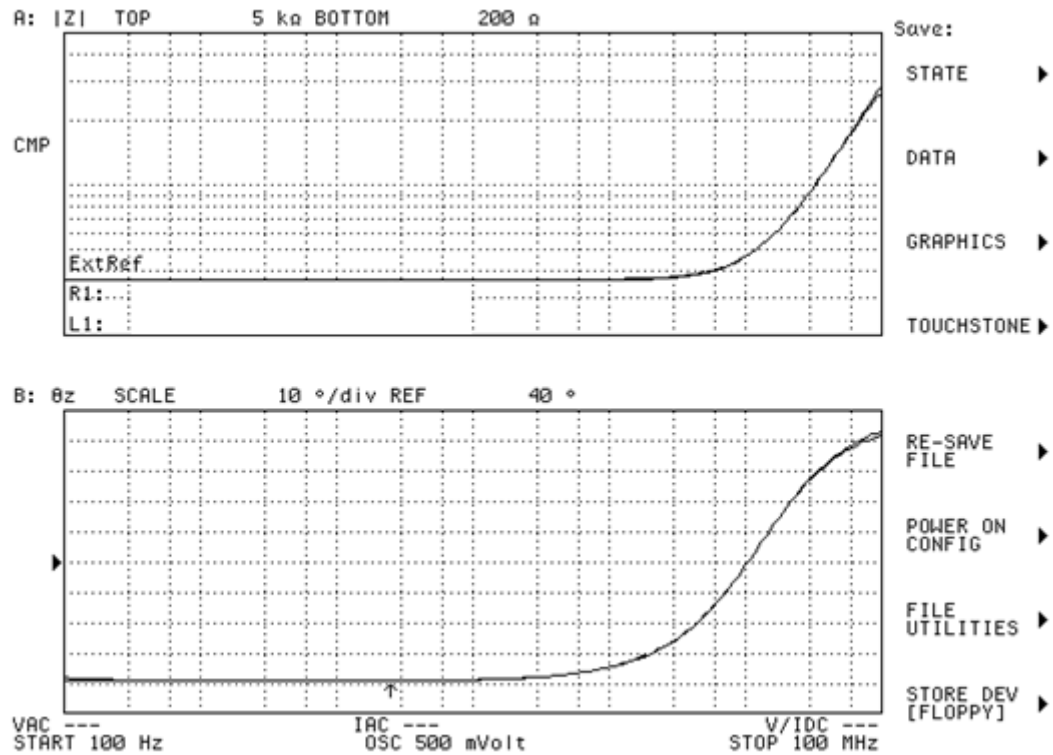
Optimization of Simulation

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

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

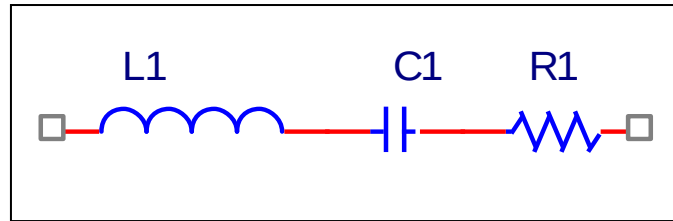
Attention

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



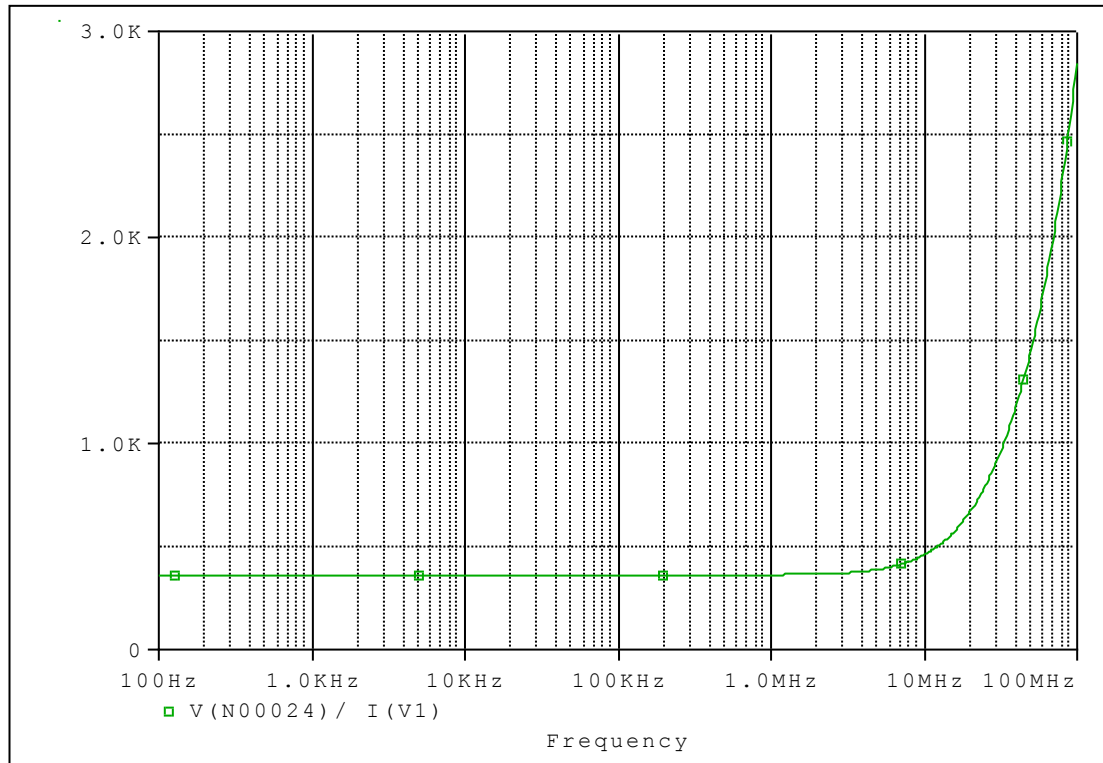
Measurement		
R1		
L1		
C1		

Equivalent circuit

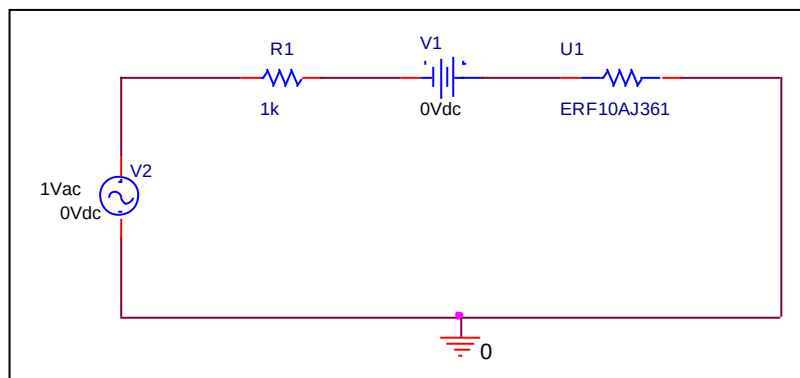


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	358.801	362.525	1.038
1K	358.928	362.448	0.981
10K	358.933	362.447	0.979
100K	358.813	362.458	1.016
1M	360.154	363.452	0.916
10M	458.403	459.163	0.166
100M	2.613	2.854	9.252