

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ301
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Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

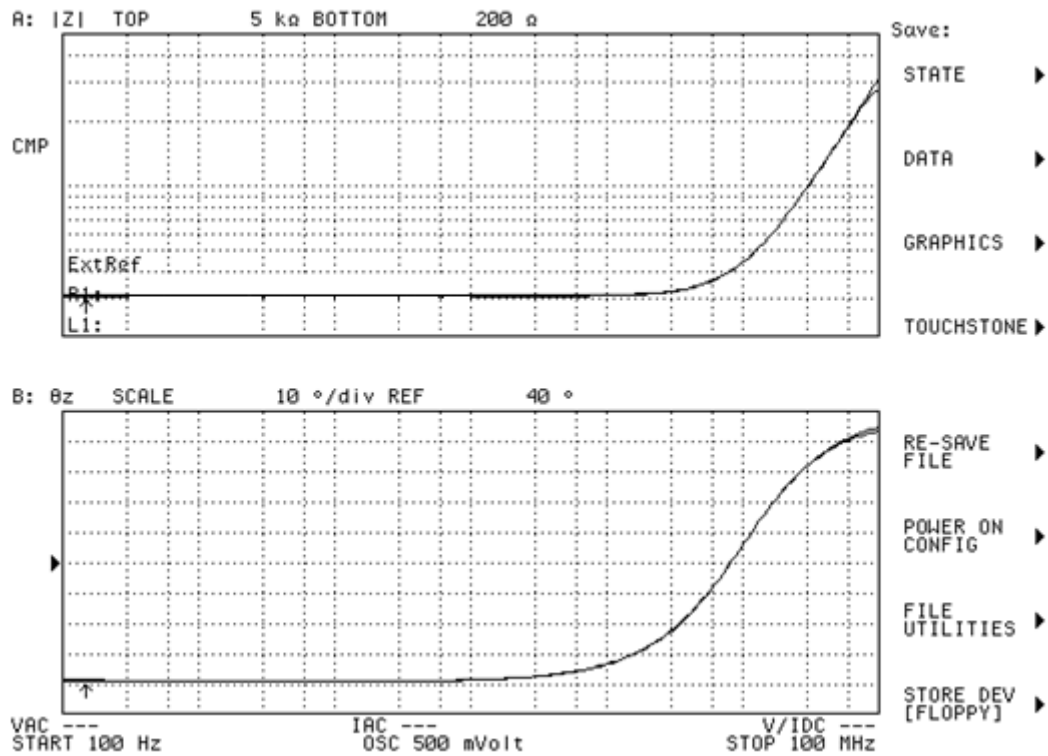
Optimization of Simulation

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

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

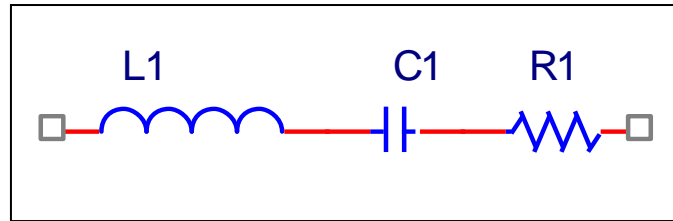
Attention

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



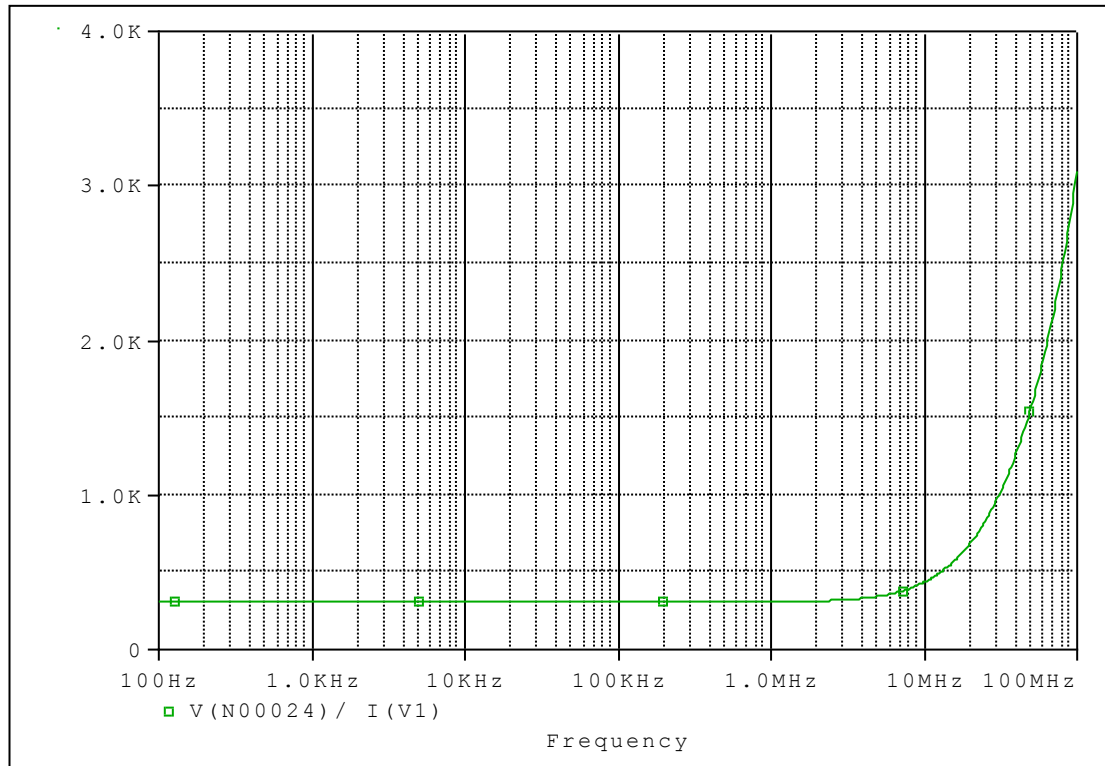
Measurement		
R1		
L1		
C1		

Equivalent circuit

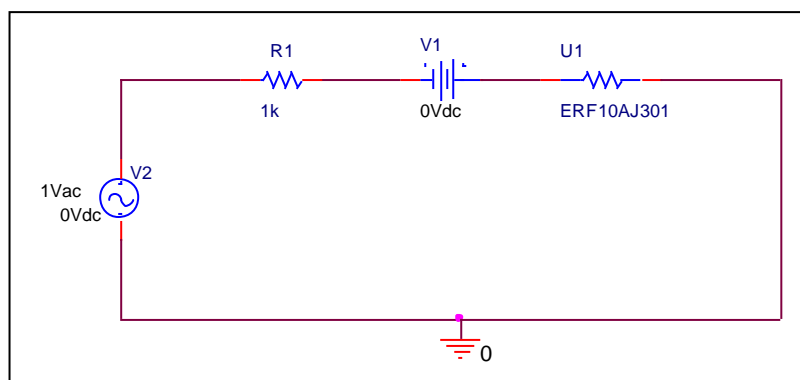


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	 Z (ohm) Measurement	 Z (ohm) Circuit Simulation	%Error
100	305.86	308.47	0.853
1K	305.935	308.296	0.772
10K	305.726	308.294	0.840
100K	305.87	308.31	0.798
1M	307.641	309.827	0.711
10M	436.331	435.641	0.158