

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ560
THERMAL:TA=150(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

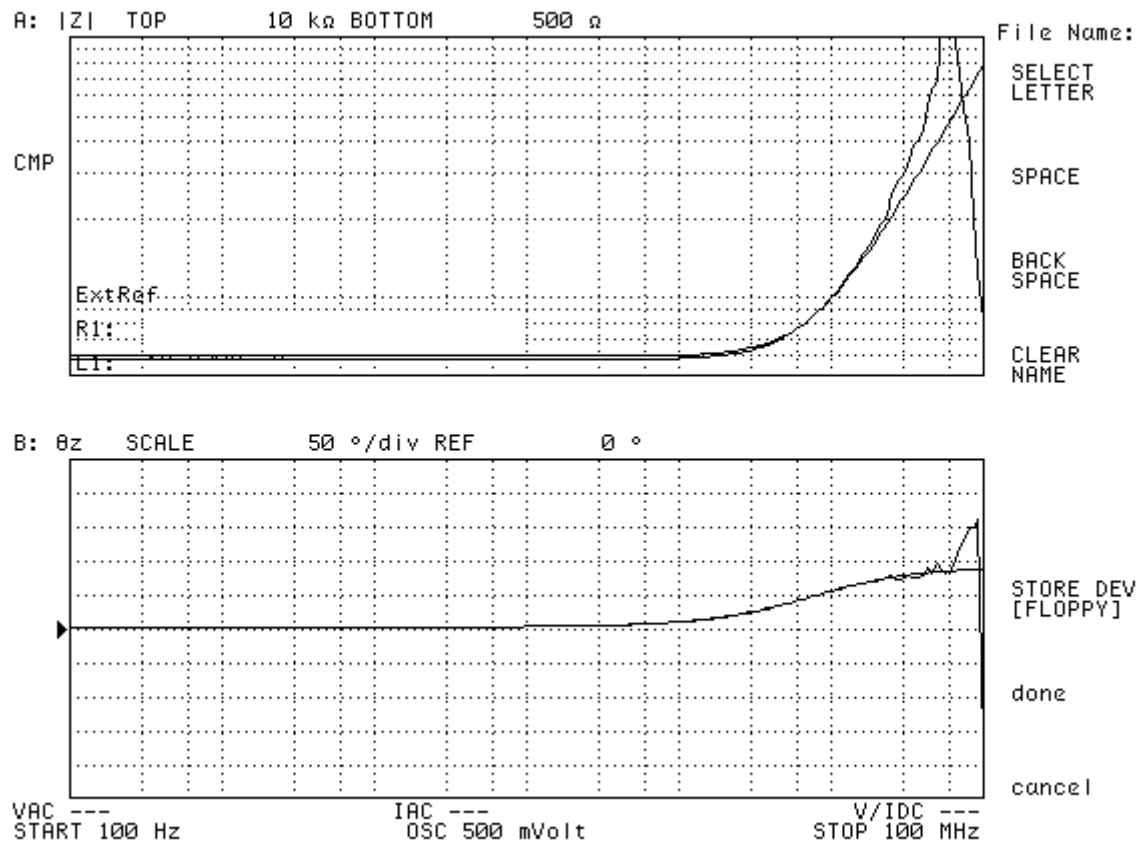
Optimization of Simulation

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

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

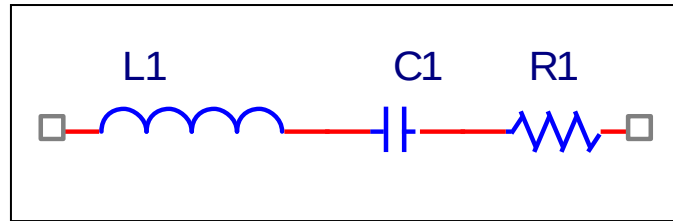
Attention

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



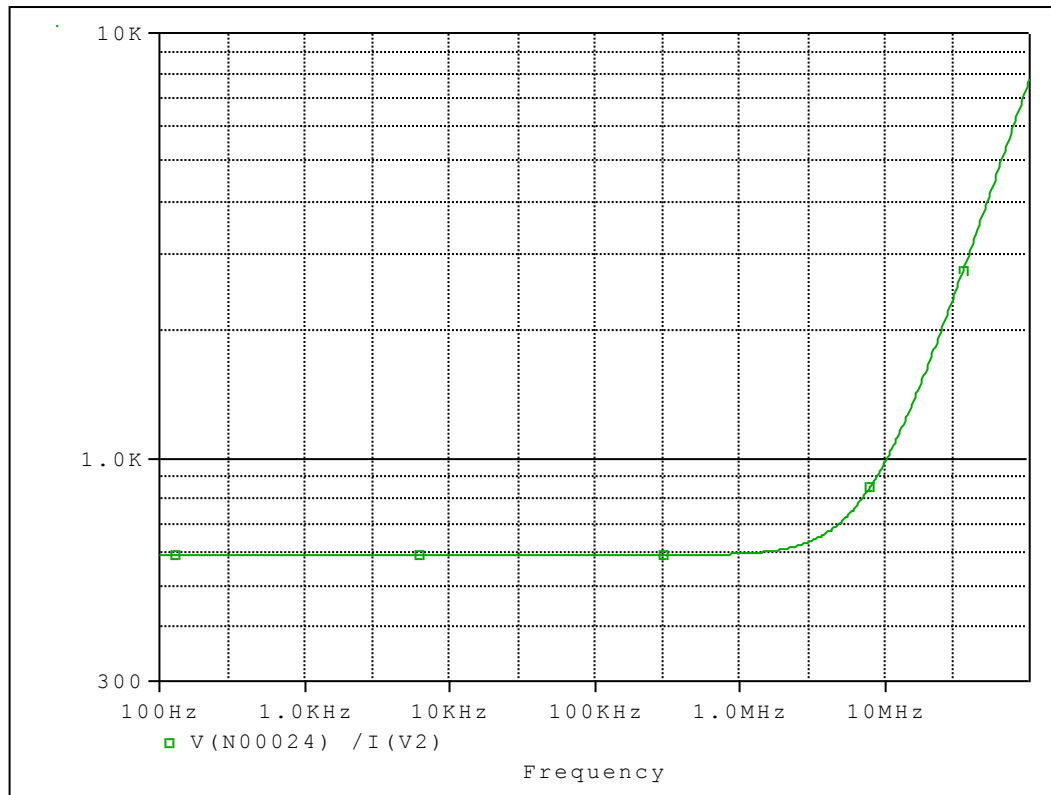
Measurement		
R1		
L1		
C1		

Equivalent circuit

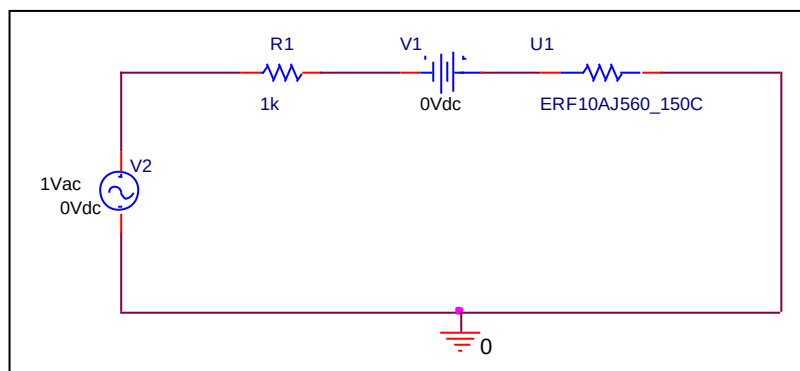


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	575.406	592.818	3.026
1K	575.470	592.635	2.983
10K	575.098	592.633	3.049
100K	575.579	592.684	2.972
1M	581.824	597.708	2.730
10M	1003.065	977.410	2.558