

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF5AJ6R8
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

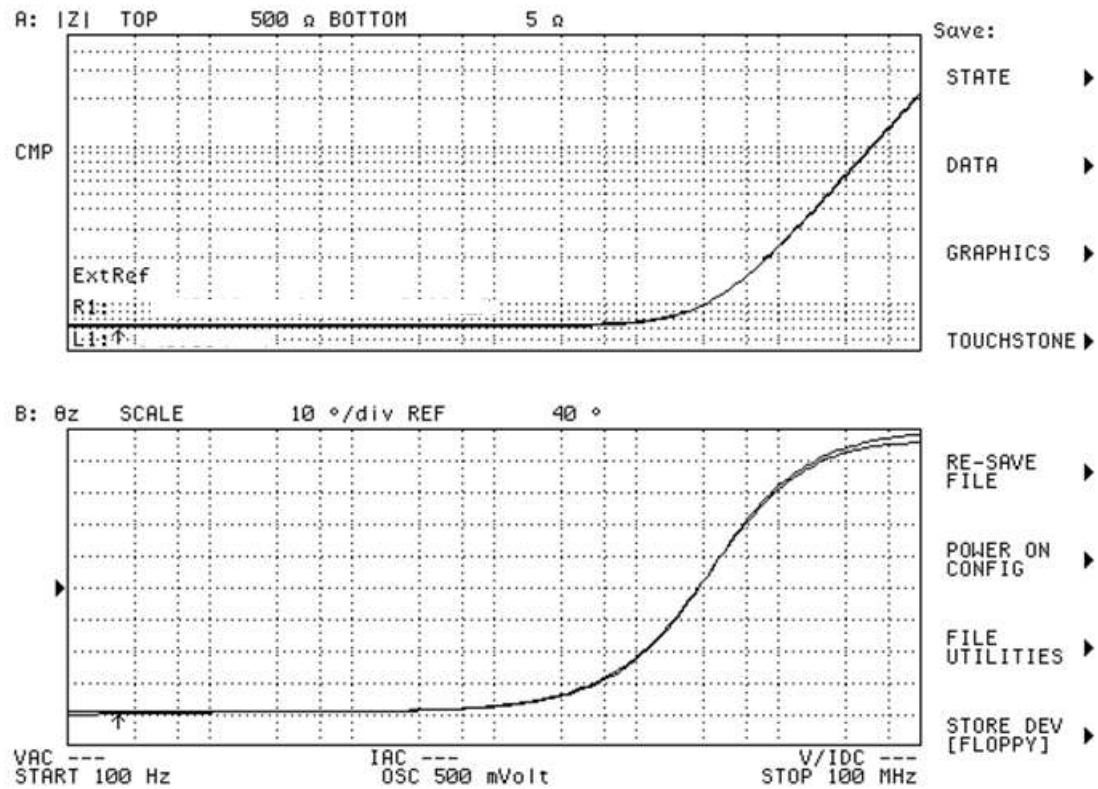
Optimization of Simulation

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

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

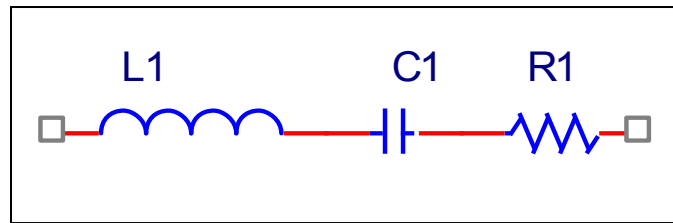
Attention

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



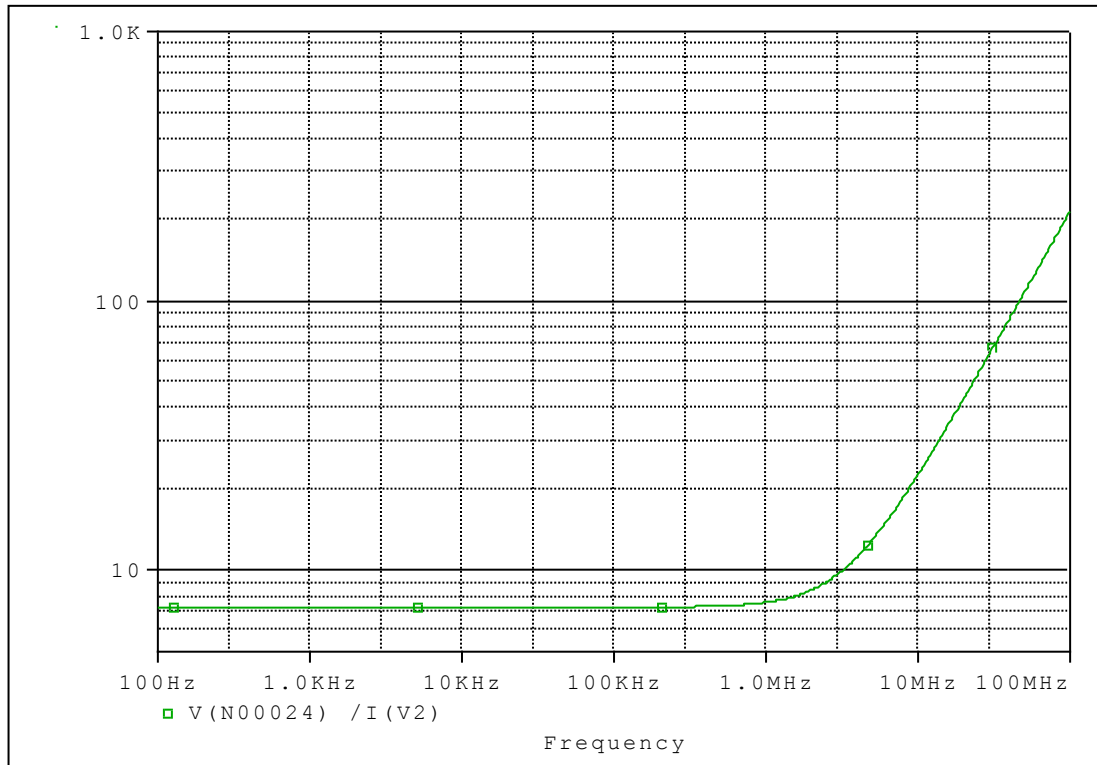
Measurement		
R1		
L1		
C1		

Equivalent circuit

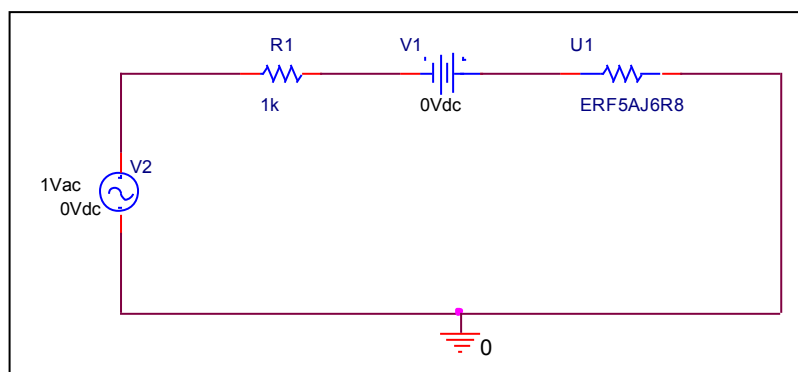


Frequency vs. $|Z|$ Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	 Z (ohm) Measurement	 Z (ohm) Circuit Simulation	%Error
100	7.111	7.310	2.796
1K	7.103	7.308	2.887
10K	7.103	7.308	2.896
100K	7.111	7.312	2.818
1M	7.502	7.618	1.544
10M	22.418	22.697	1.243
100M	206.192	215.005	4.274