

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF5AKR68
THERMAL:TA=80(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

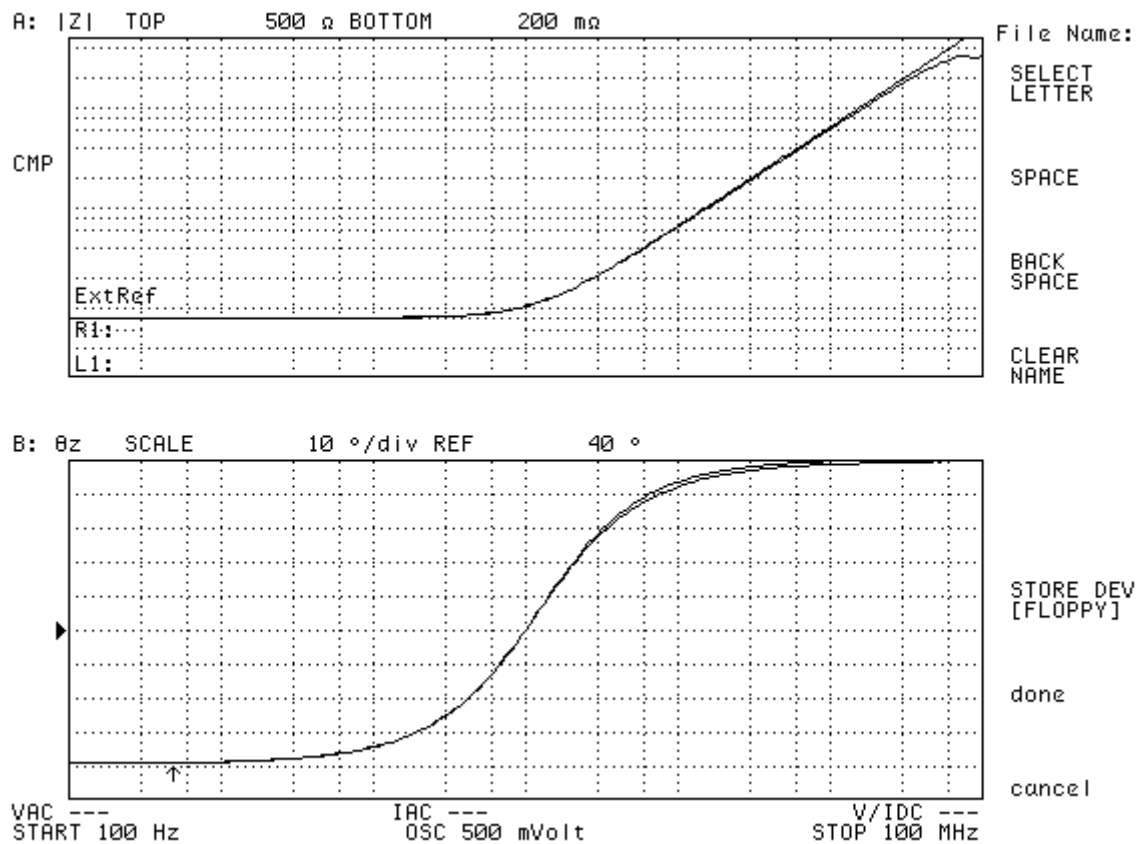
Optimization of Simulation

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

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

Attention

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



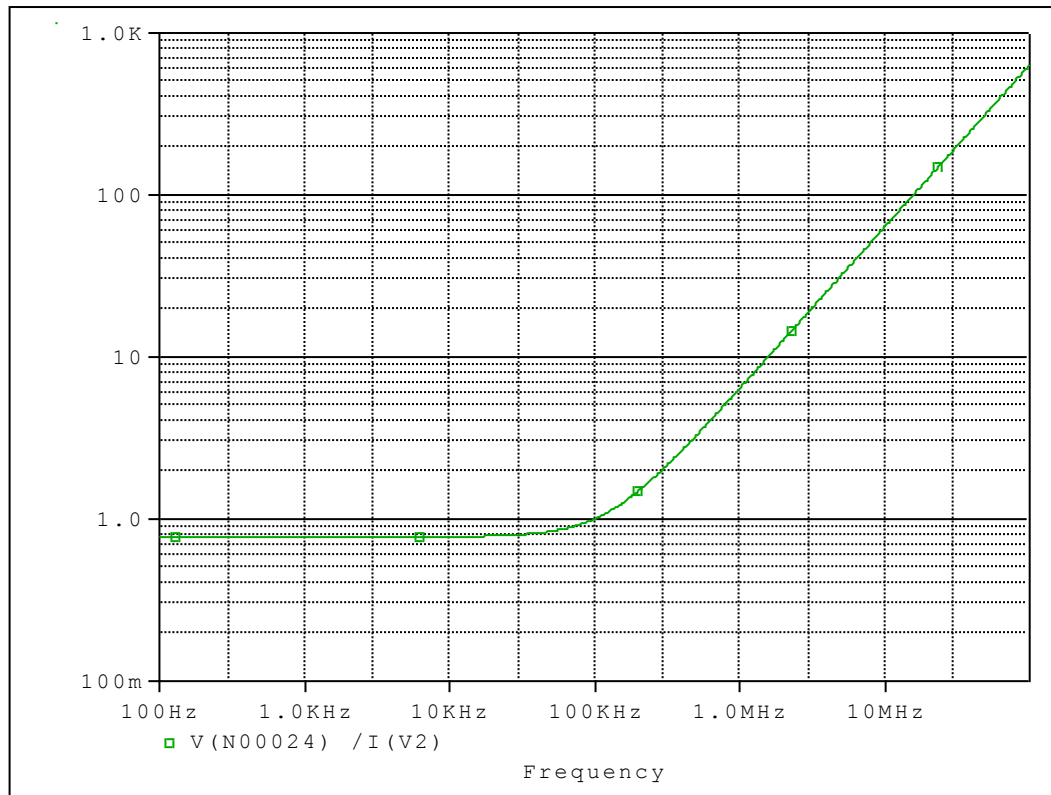
Measurement		
R1		
L1		
C1		

Equivalent circuit

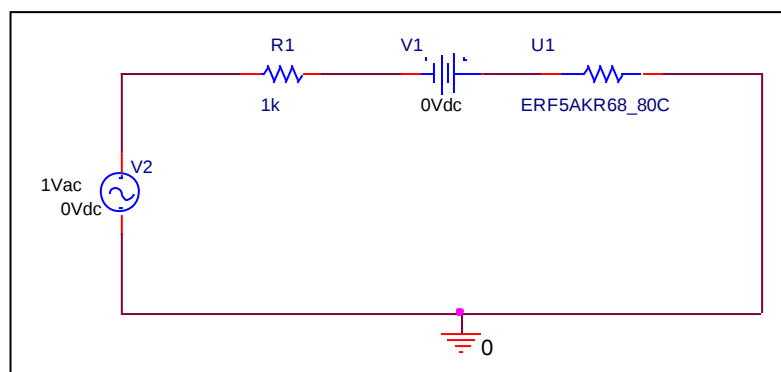


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	773.161	777.451	0.555
1K	776.307	777.477	0.151
10K	780.117	780.037	0.010
100K	1.012	1.004	0.794
1M	6.519	6.394	1.917
10M	61.168	63.472	3.766