

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF5AKR68
THERMAL:TA=150(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

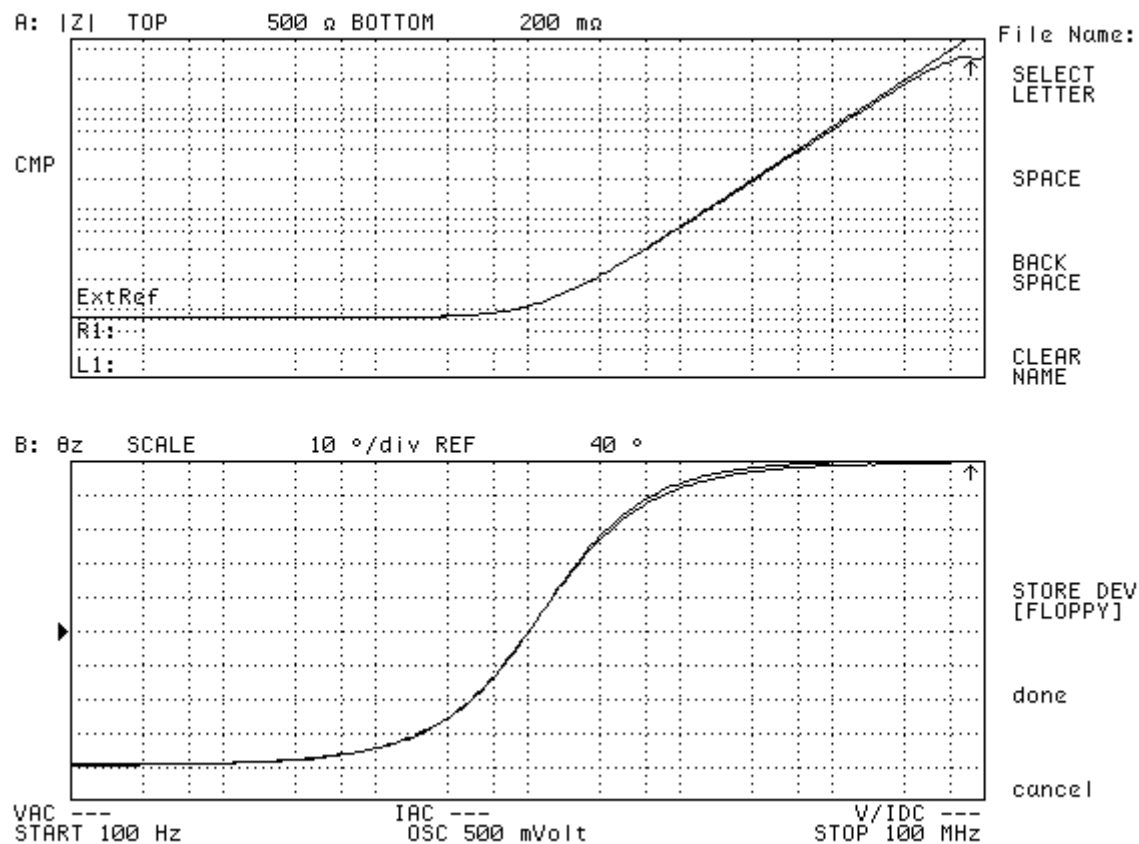
Optimization of Simulation

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

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

Attention

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



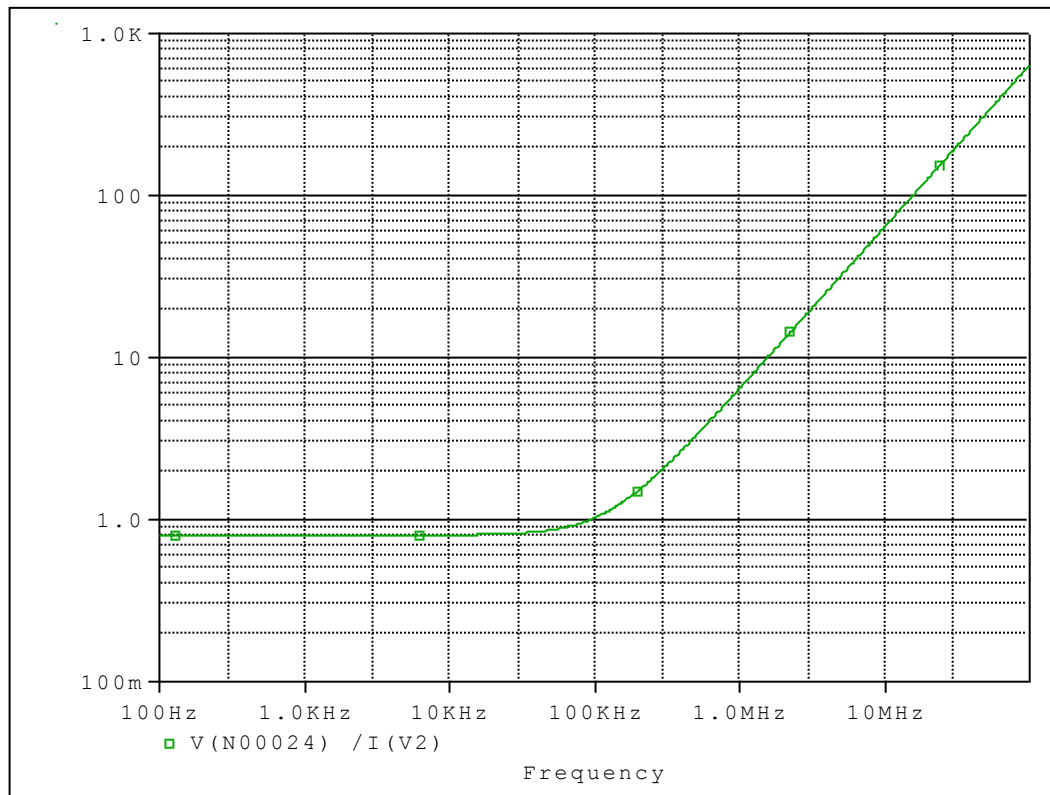
Measurement		
R1		
L1		
C1		

Equivalent circuit

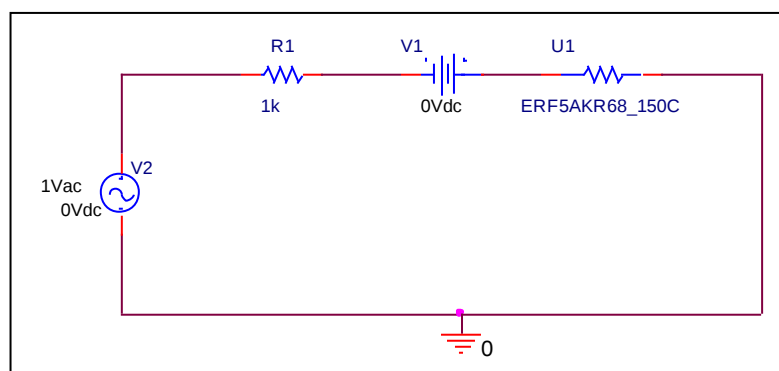


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	795.597	801.753	0.774
1K	795.538	801.753	0.781
10K	798.515	804.290	0.723
100K	1.026	1.025	0.103
1M	6.566	6.442	1.892
10M	61.550	63.925	3.858