

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF5AKR68
THERMAL:TA=120(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

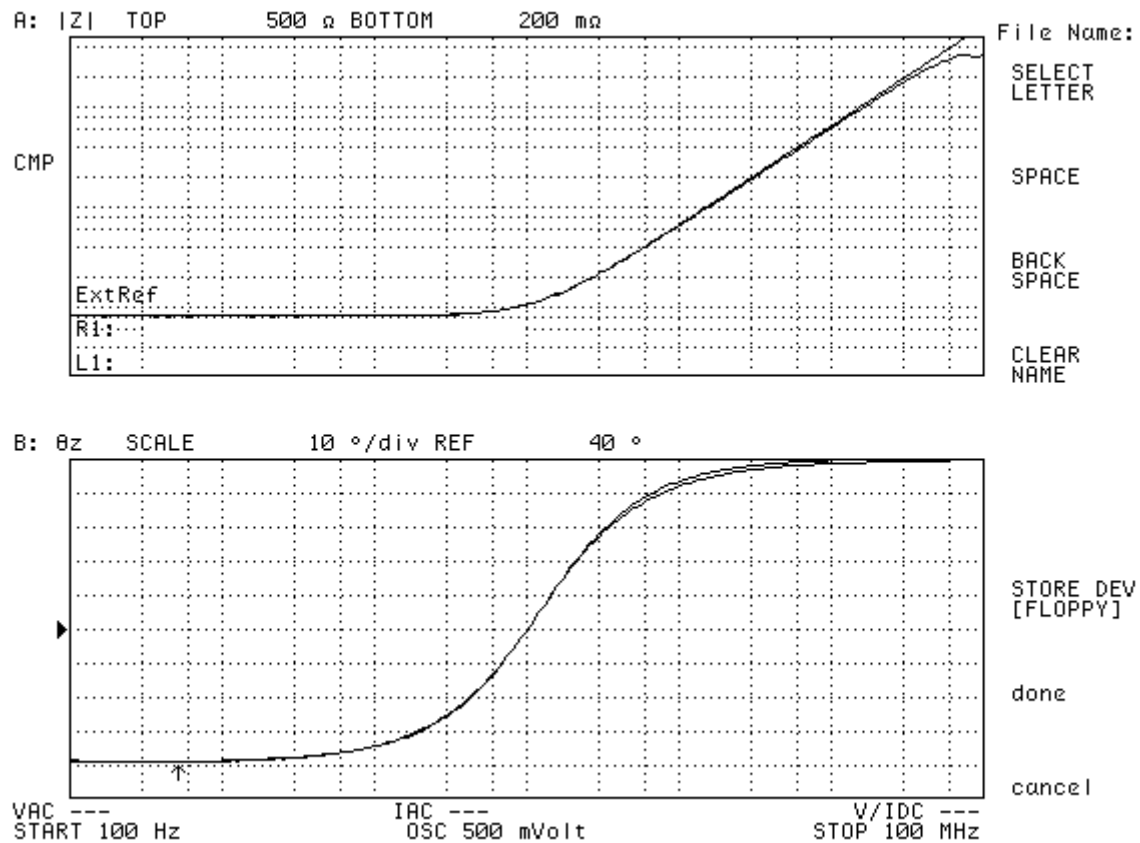
Optimization of Simulation

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

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

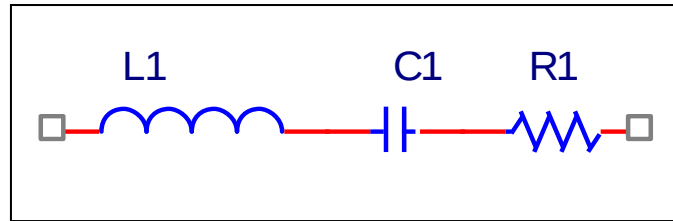
Attention

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



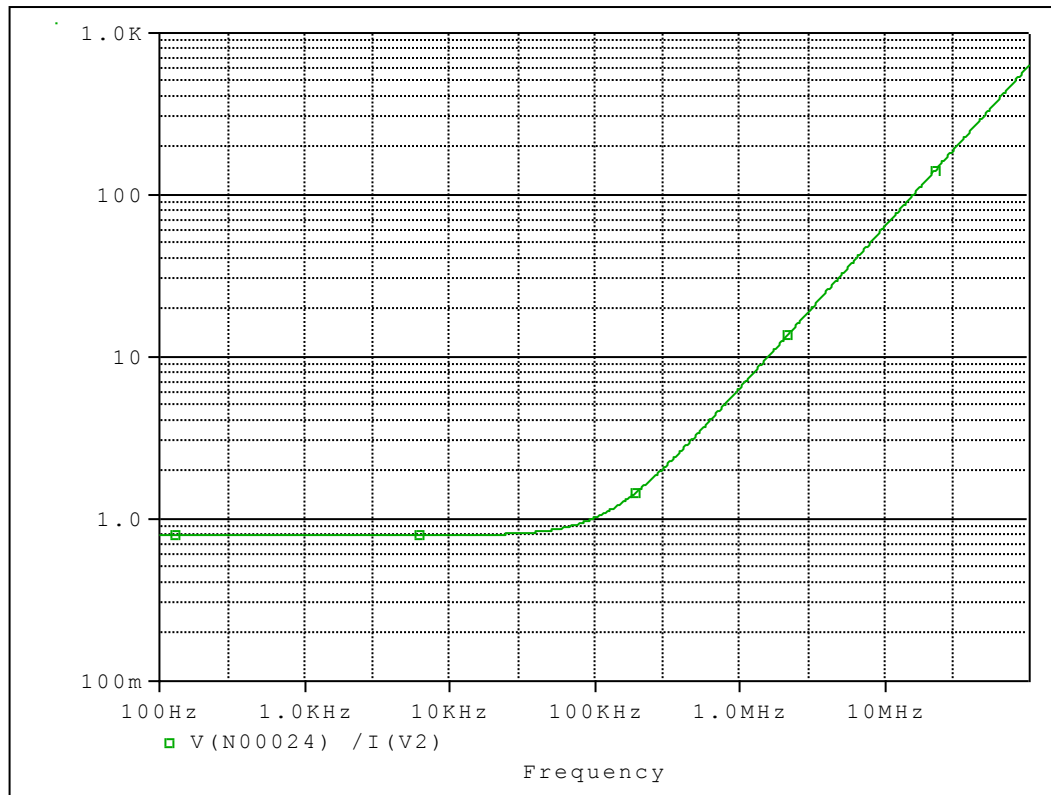
Measurement		
R1		
L1		
C1		

Equivalent circuit

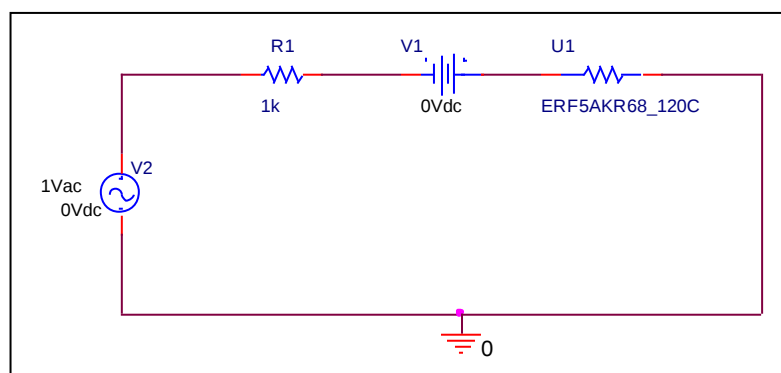


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	787.429	793.068	0.716
1K	787.040	792.975	0.754
10K	792.566	795.501	0.370
100K	1.021	1.017	0.365
1M	6.551	6.417	2.046
10M	61.419	63.184	2.874