

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ560
THERMAL:TA=120(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

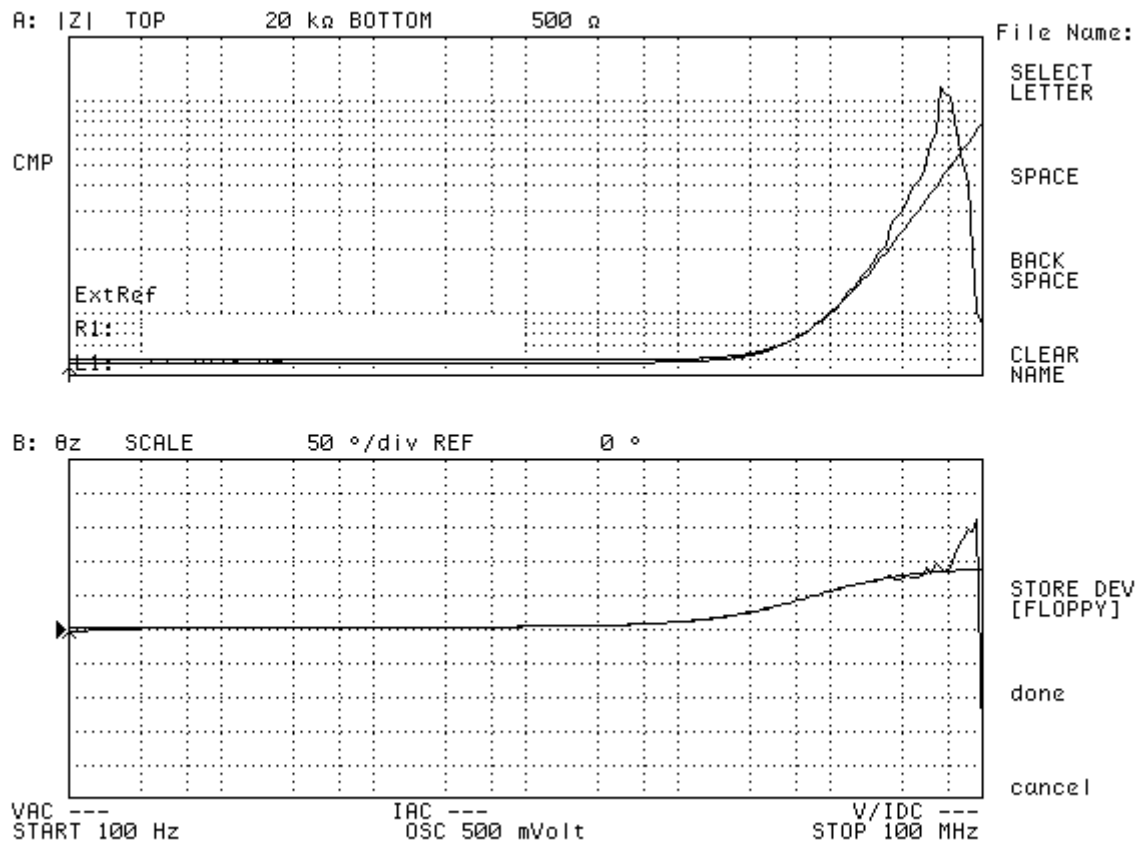
Optimization of Simulation

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)



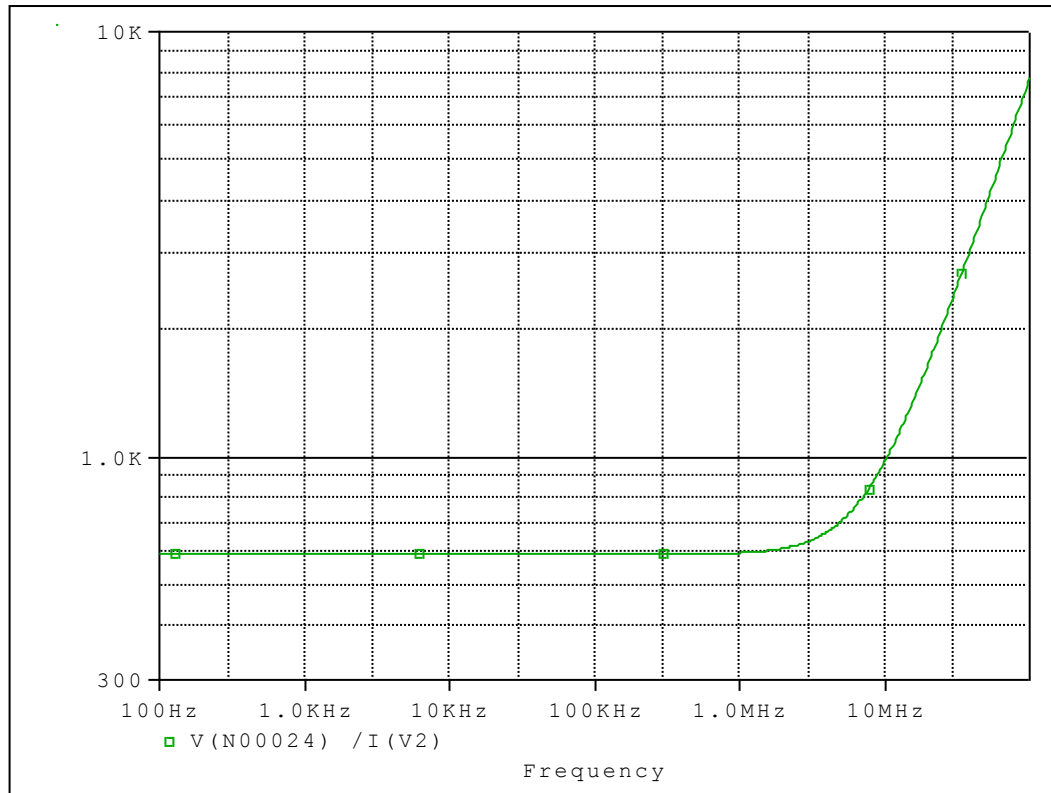
Measurement		
R1		
L1		
C1		

Equivalent circuit

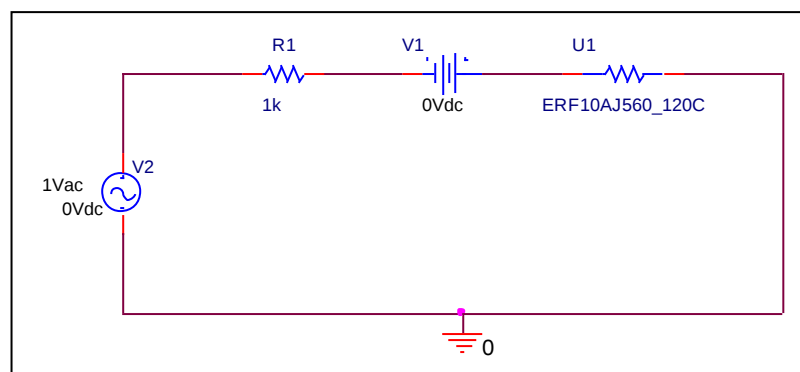


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	573.286	595.546	3.883
1K	573.333	591.226	3.121
10K	572.988	591.183	3.175
100K	573.132	591.223	3.157
1M	580.042	596.251	2.795
10M	1000.820	975.406	2.539