

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ121
THERMAL:TA=120(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

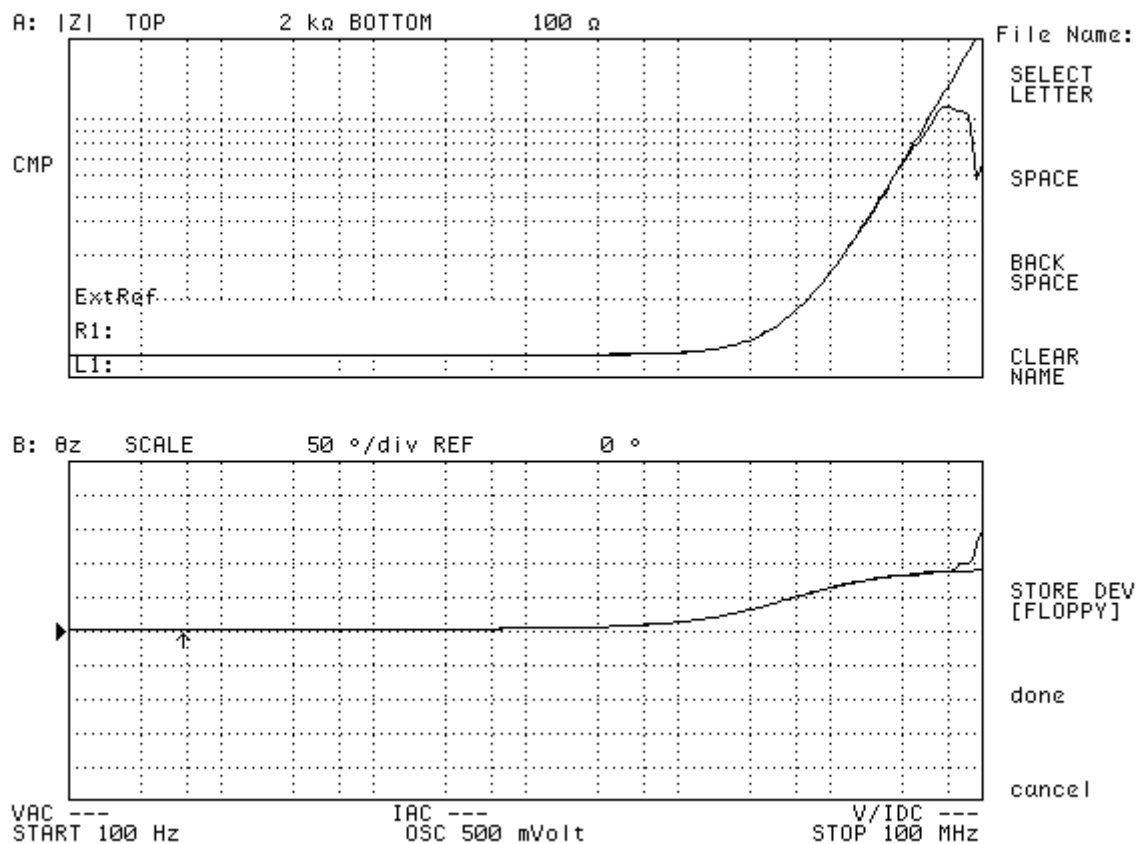
Optimization of Simulation

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)



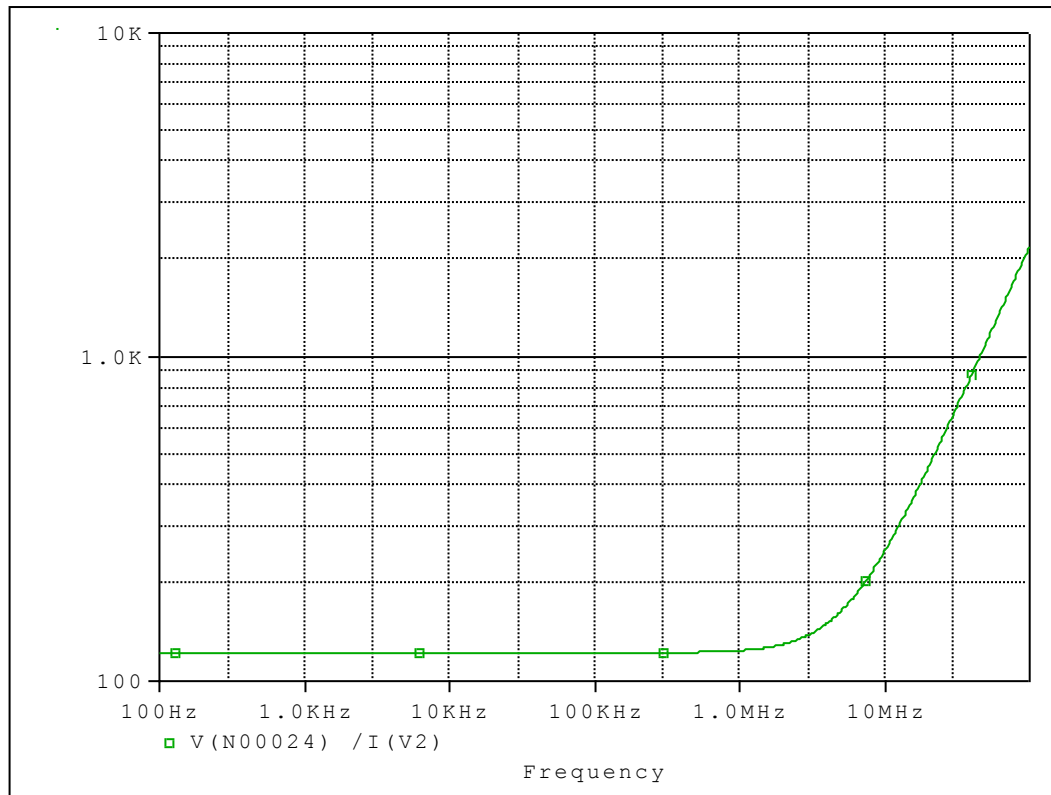
Measurement		
R1		
L1		
C1		

Equivalent circuit

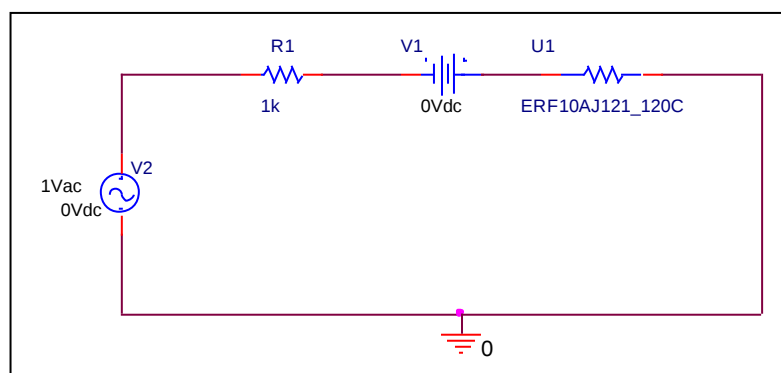


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	122.416	122.374	0.034
1K	122.443	122.364	0.064
10K	122.339	122.364	0.021
100K	122.397	122.384	0.011
1M	124.812	124.320	0.394
10M	255.315	251.466	1.508