

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF5AJ330
THERMAL:TA=120(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

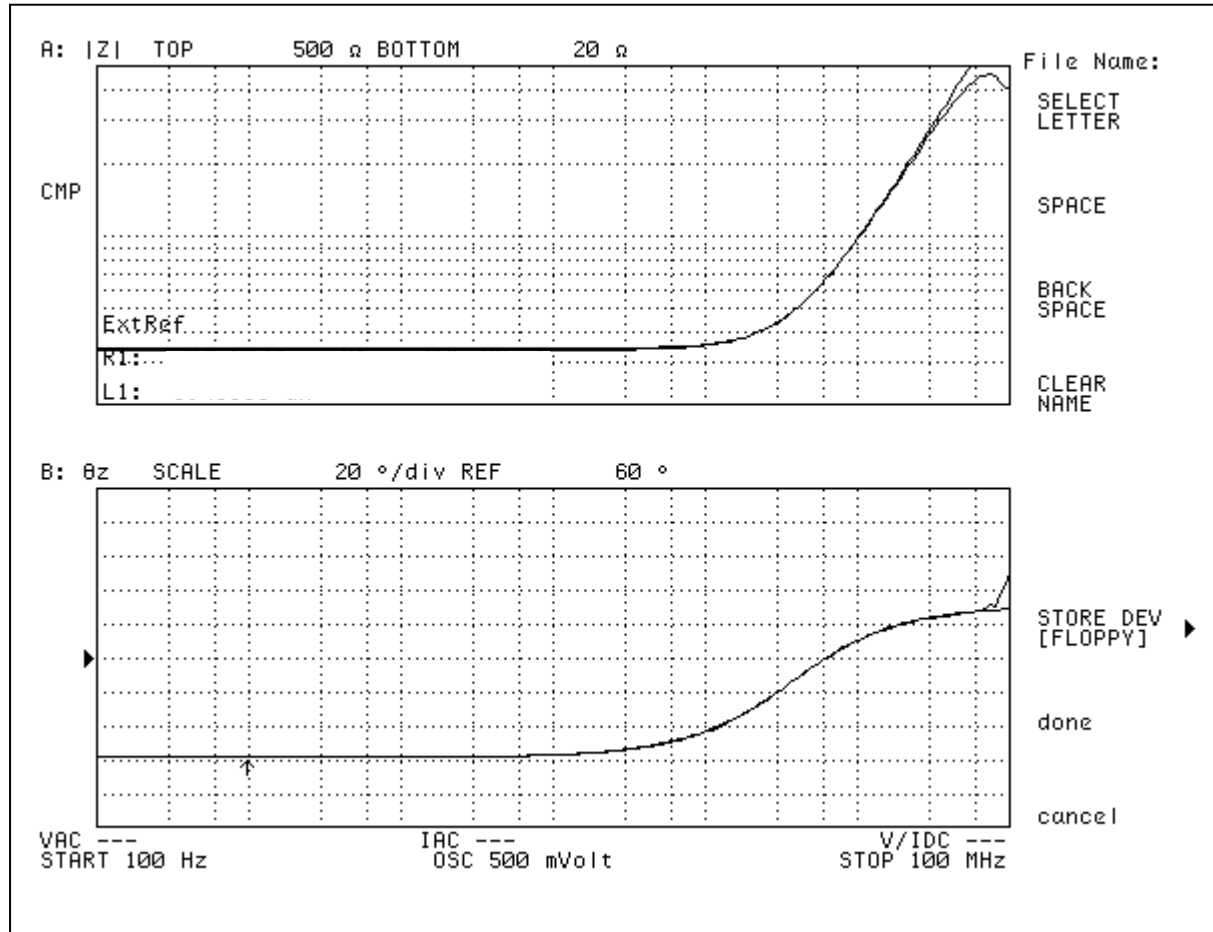
Optimization of Simulation

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

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

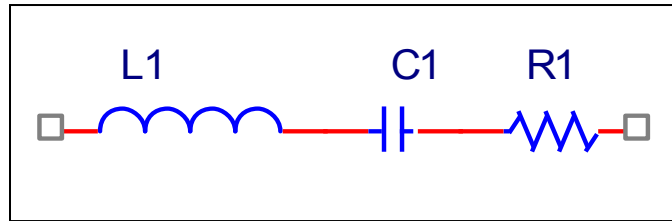
Attention

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



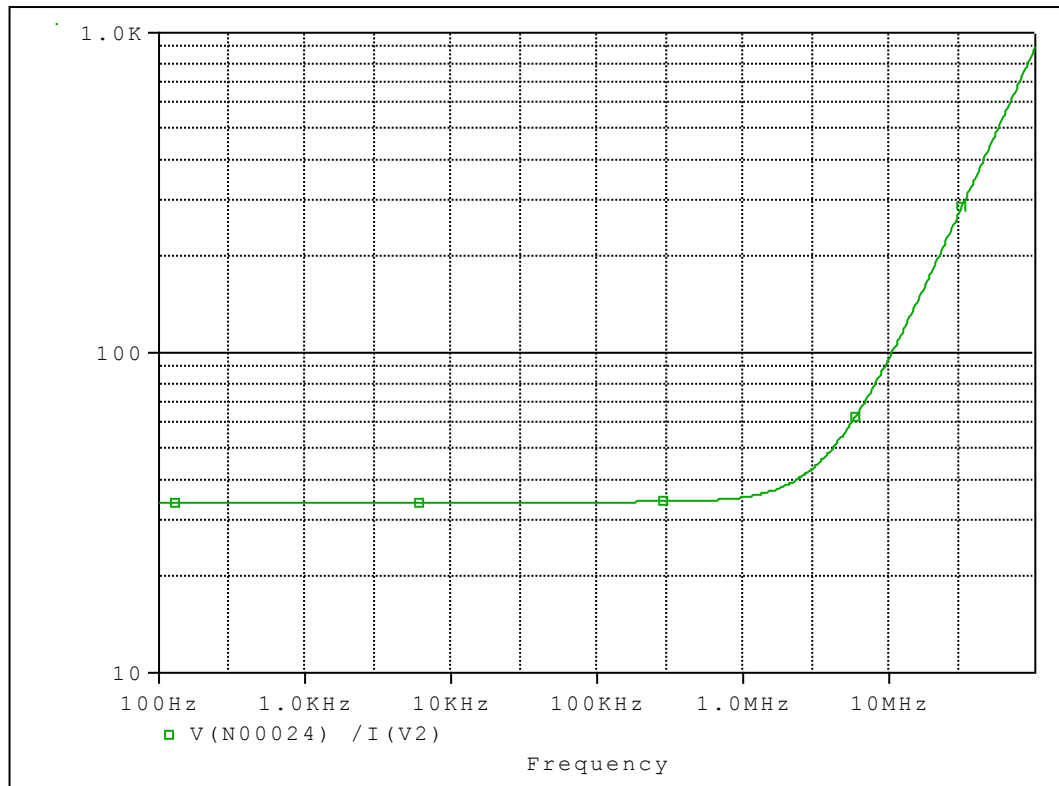
Measurement		
R1		
L1		
C1		

Equivalent circuit

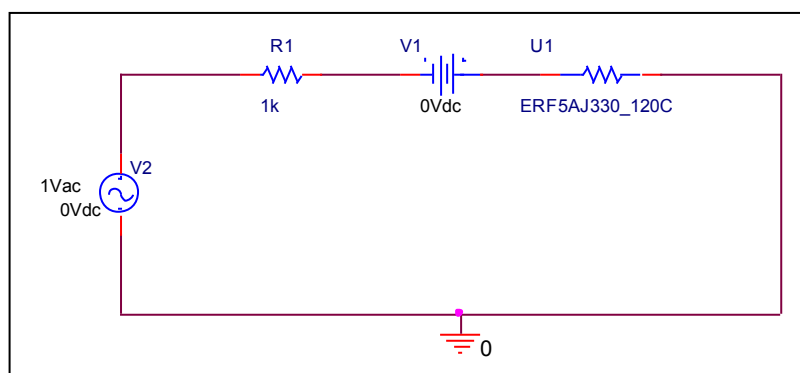


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	 Z (ohm) Measurement	 Z (ohm) Circuit Simulation	%Error
100	33.627	34.187	1.666
1K	33.628	34.187	1.662
10K	33.615	34.188	1.704
100K	33.648	34.199	1.639
1M	35.189	35.354	0.470
10M	97.268	96.342	0.952