

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ680
THERMAL:TA=120(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

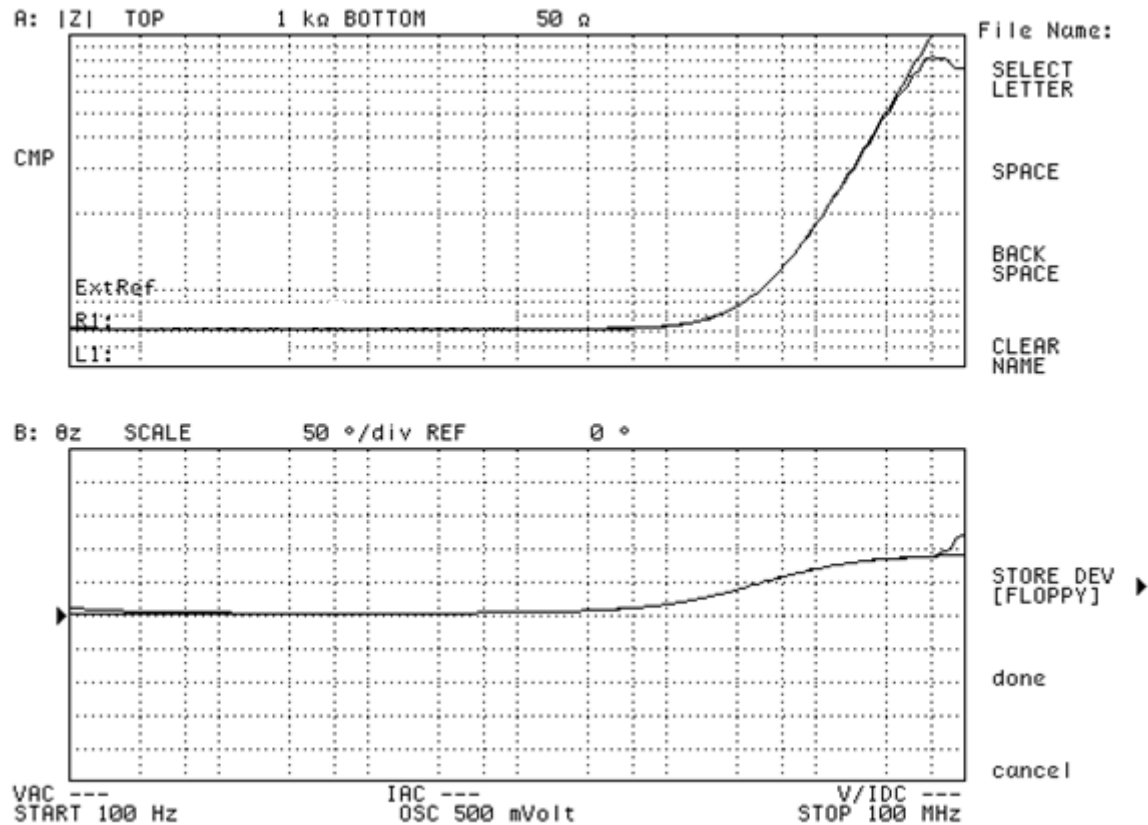
Optimization of Simulation

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

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

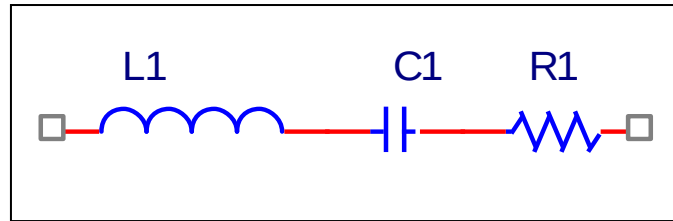
Attention

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



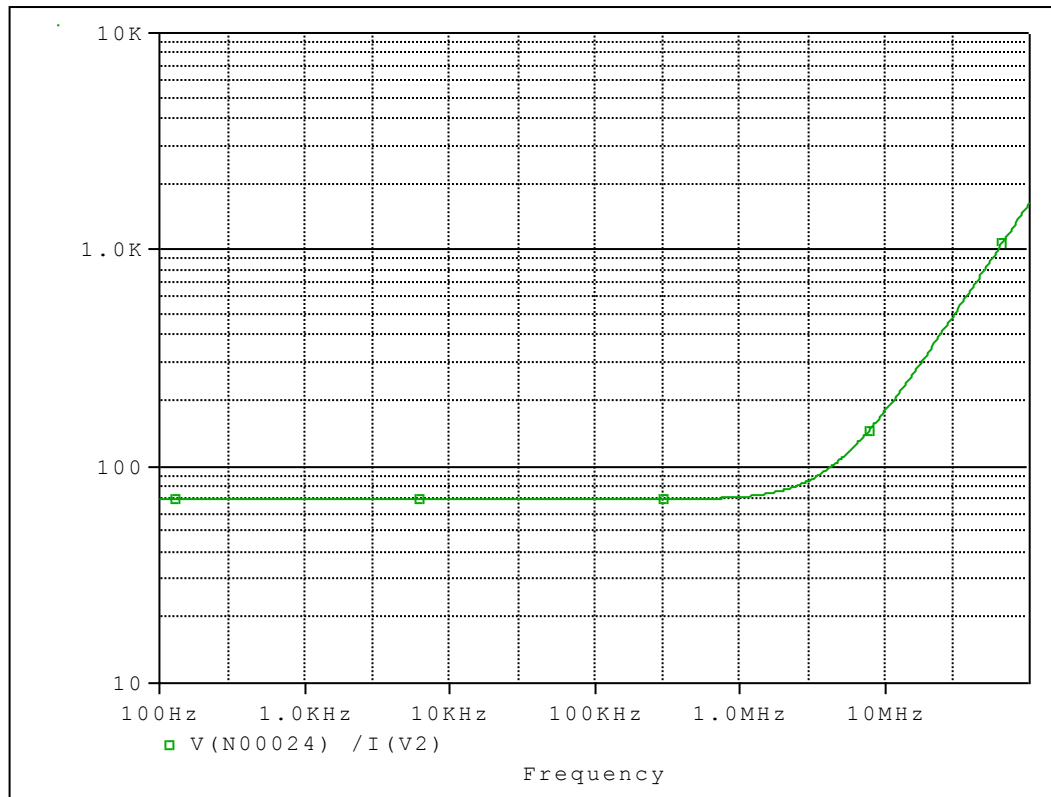
Measurement		
R1		
L1		
C1		

Equivalent circuit

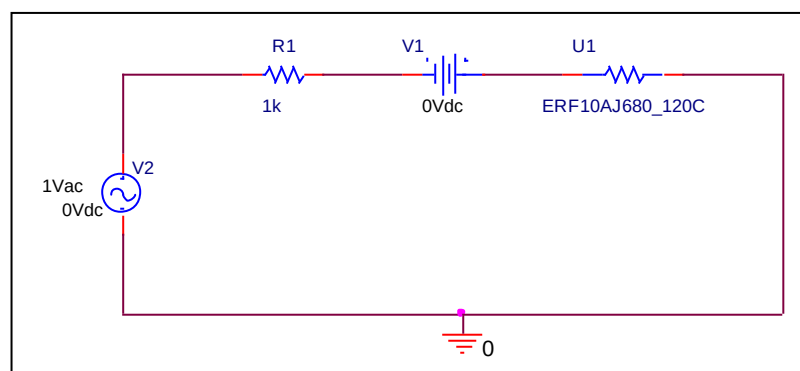


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	69.861	70.345	0.693
1K	69.852	70.332	0.688
10K	69.857	70.332	0.680
100K	69.851	70.351	0.717
1M	72.176	72.235	0.082
10M	181.743	179.130	1.438