

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ681
THERMAL:TA=80(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

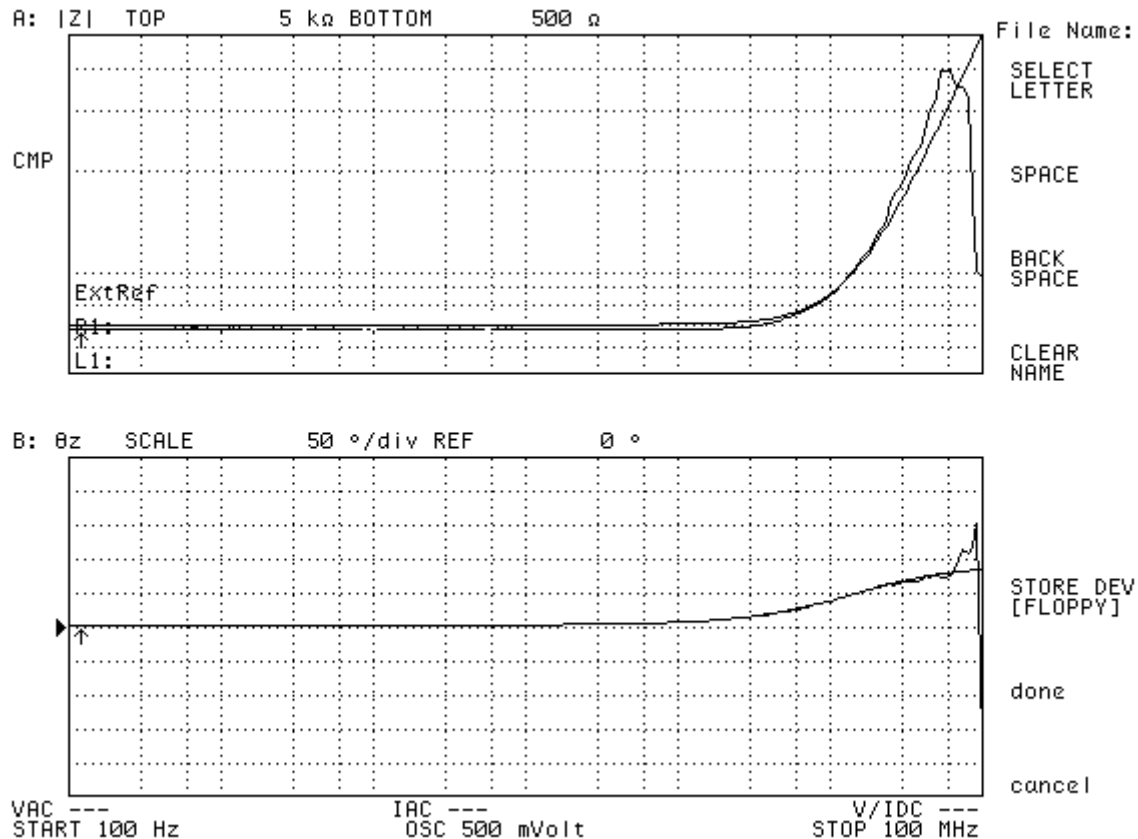
Optimization of Simulation

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

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

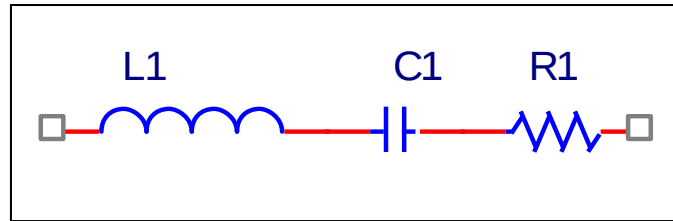
Attention

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



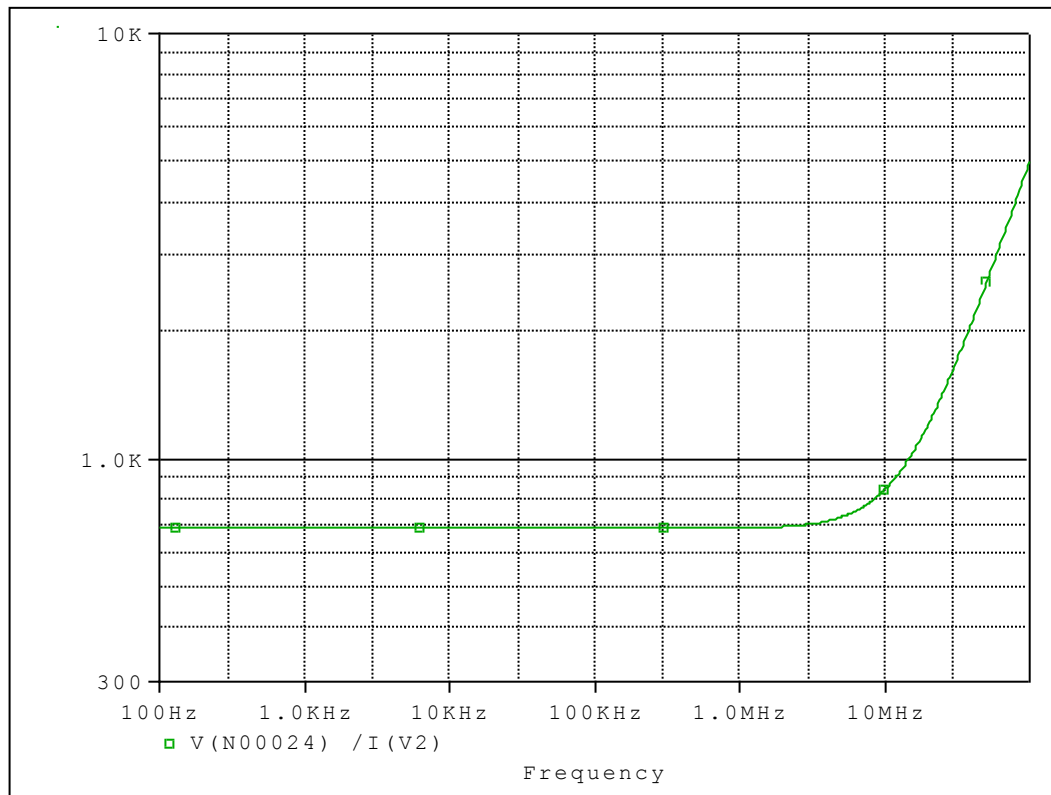
Measurement		
R1		
L1		
C1		

Equivalent circuit

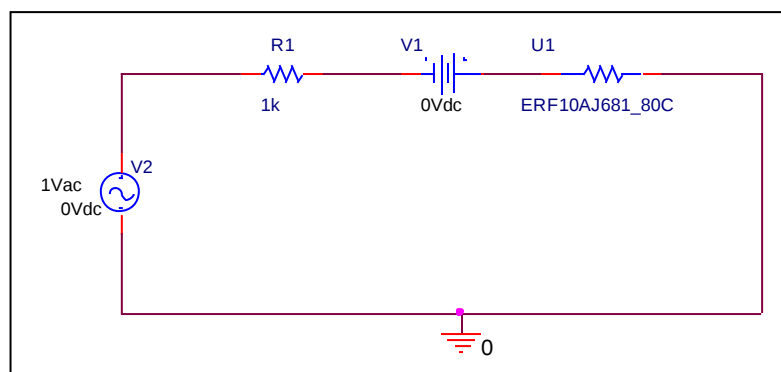


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	671.531	687.338	2.354
1K	671.641	687.033	2.292
10K	671.600	687.030	2.298
100K	671.309	687.048	2.344
1M	673.988	688.820	2.201
10M	854.564	847.500	0.827