

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ361
THERMAL: TA=80(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

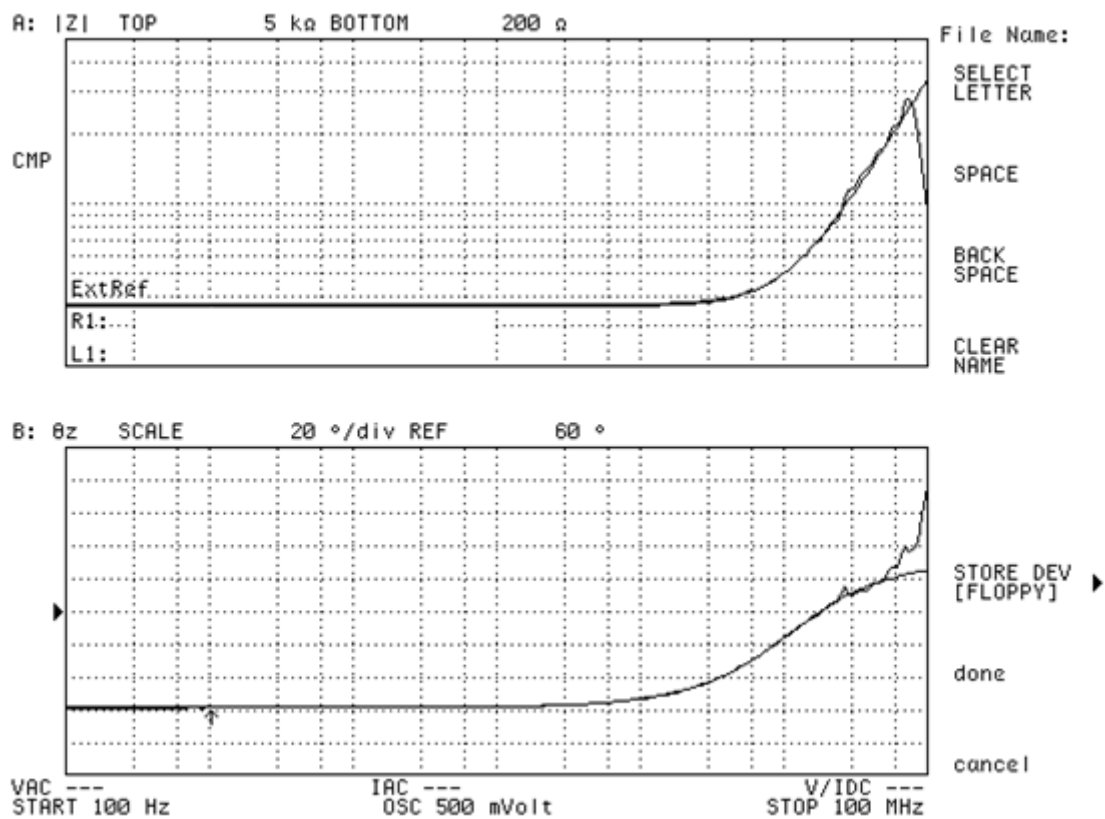
Optimization of Simulation

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

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

Attention

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



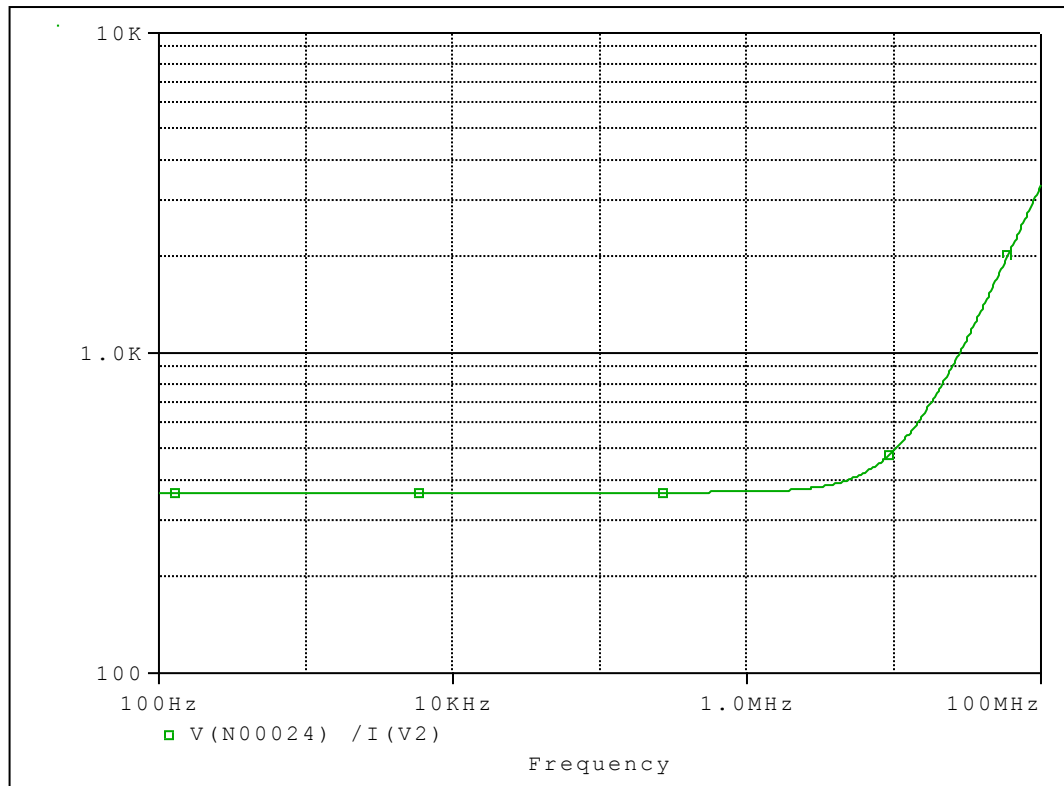
Measurement		
R1		
L1		
C1		

Equivalent circuit

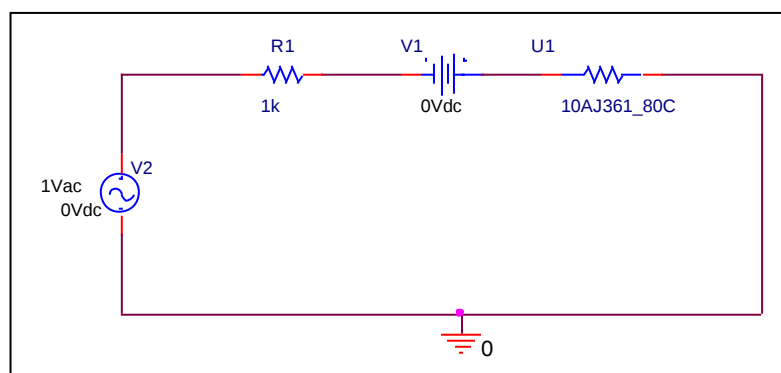


Frequency vs. $|Z|$ Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	360.812	367.361	1.815
1K	360.659	367.349	1.855
10K	360.953	367.349	1.772
100K	360.804	367.364	1.818
1M	362.884	368.857	1.646
10M	501.145	459.923	8.226