

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ680
THERMAL:TA=150(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

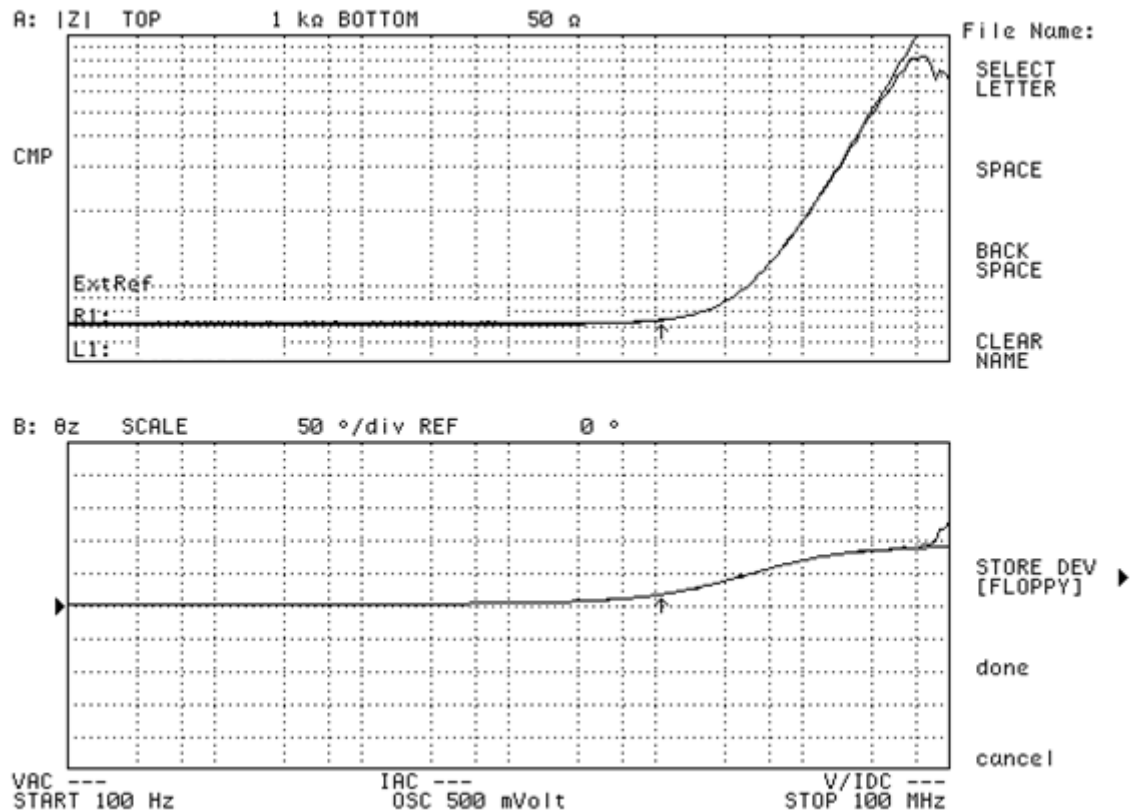
Optimization of Simulation

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)



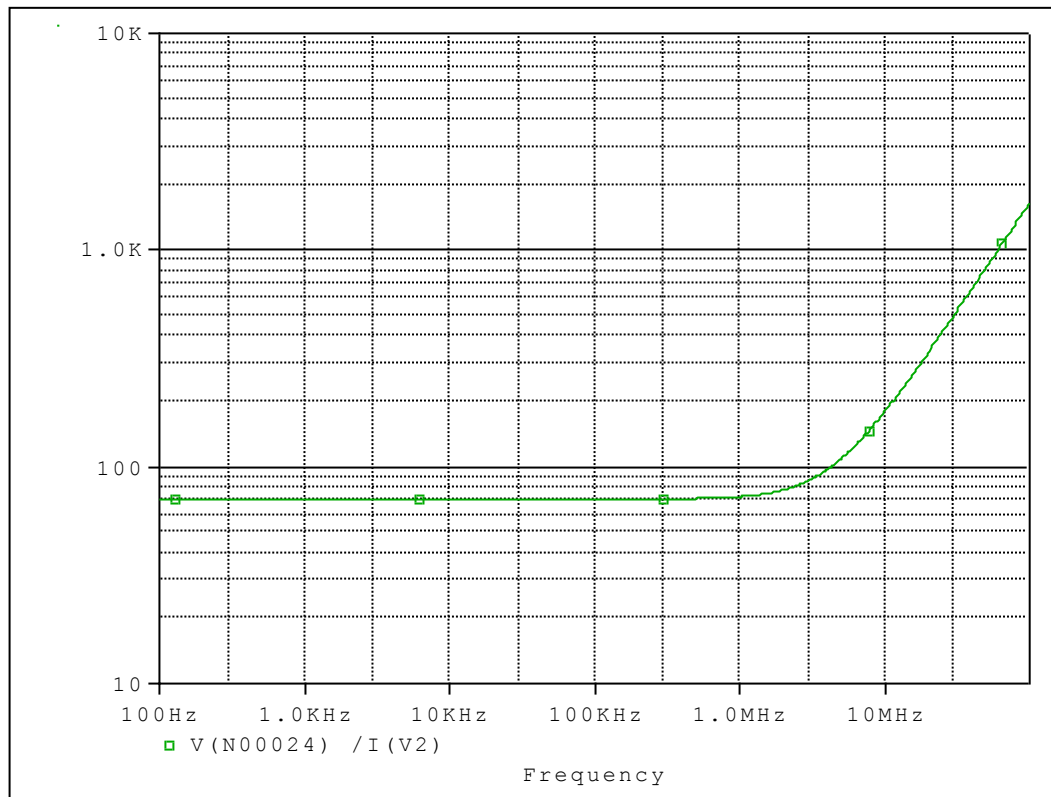
Measurement		
R1		
L1		
C1		

Equivalent circuit

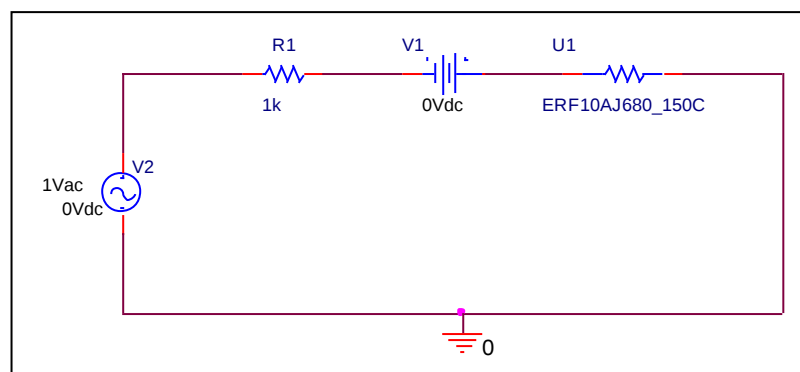


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	70.373	70.982	0.866
1K	70.389	70.940	0.782
10K	70.319	70.939	0.881
100K	70.396	70.958	0.798
1M	72.704	72.831	0.175
10M	182.357	179.534	1.548