

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF5AJ6R8
THERMAL: TA=120(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

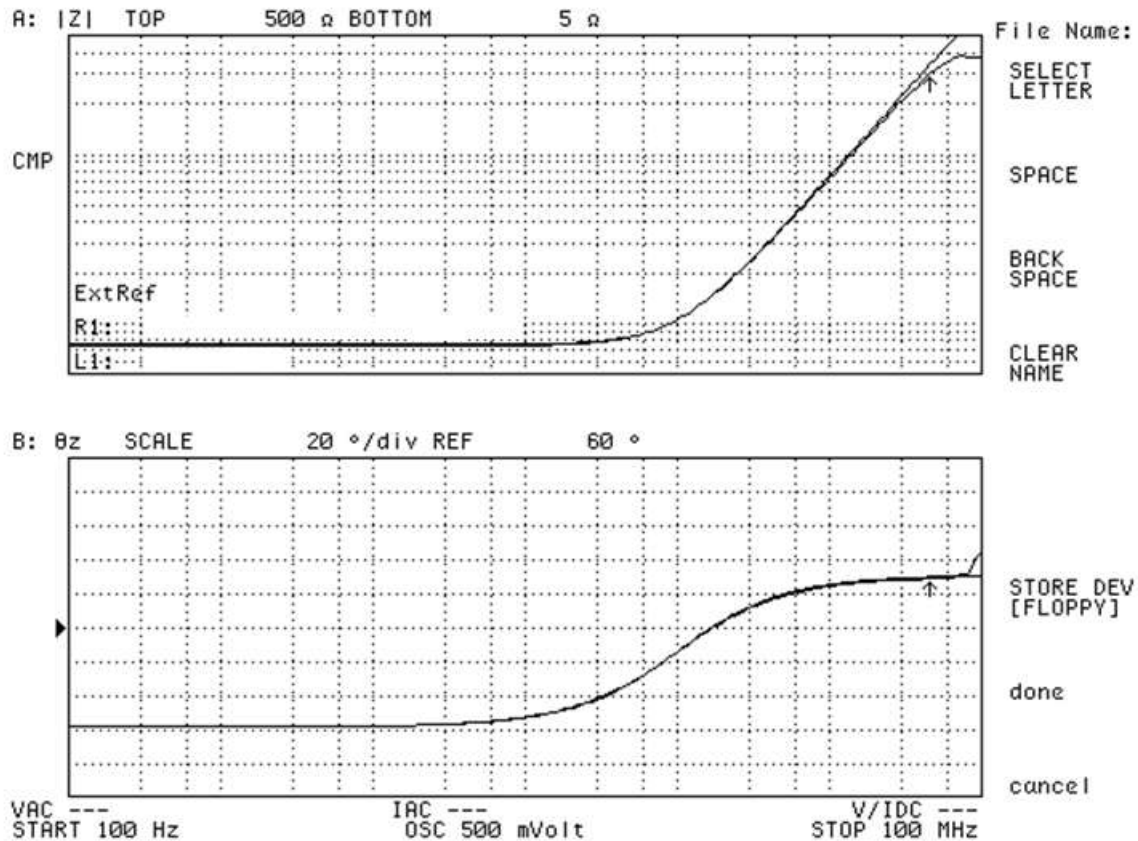
Optimization of Simulation

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

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

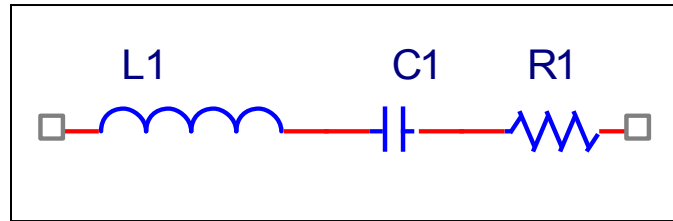
Attention

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



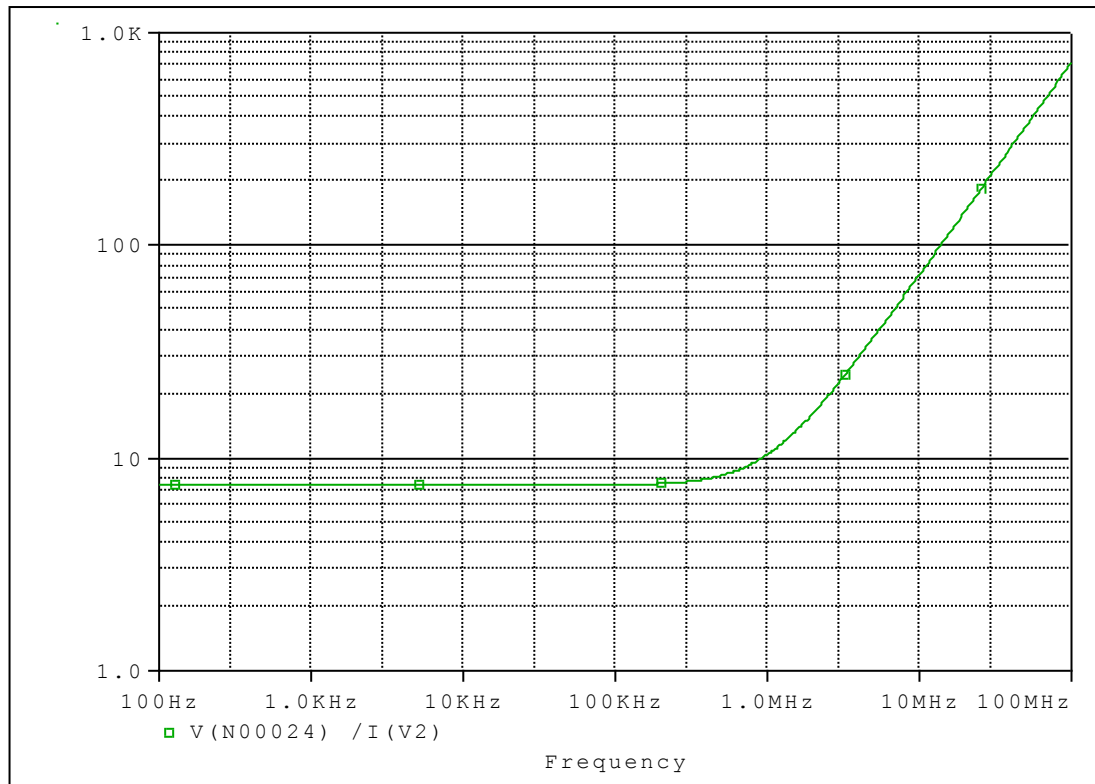
Measurement		
R1		
L1		
C1		

Equivalent circuit

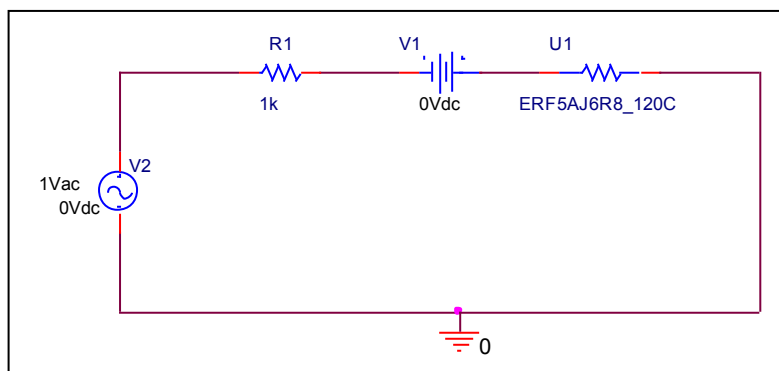


Frequency vs. $|Z|$ Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	7.345	7.449	1.416
1K	7.347	7.449	1.383
10K	7.349	7.449	1.358
100K	7.390	7.484	1.267
1M	10.671	10.387	2.661
10M	72.146	72.778	0.877