

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AK2R0
THERMAL: TA=80(degree)
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

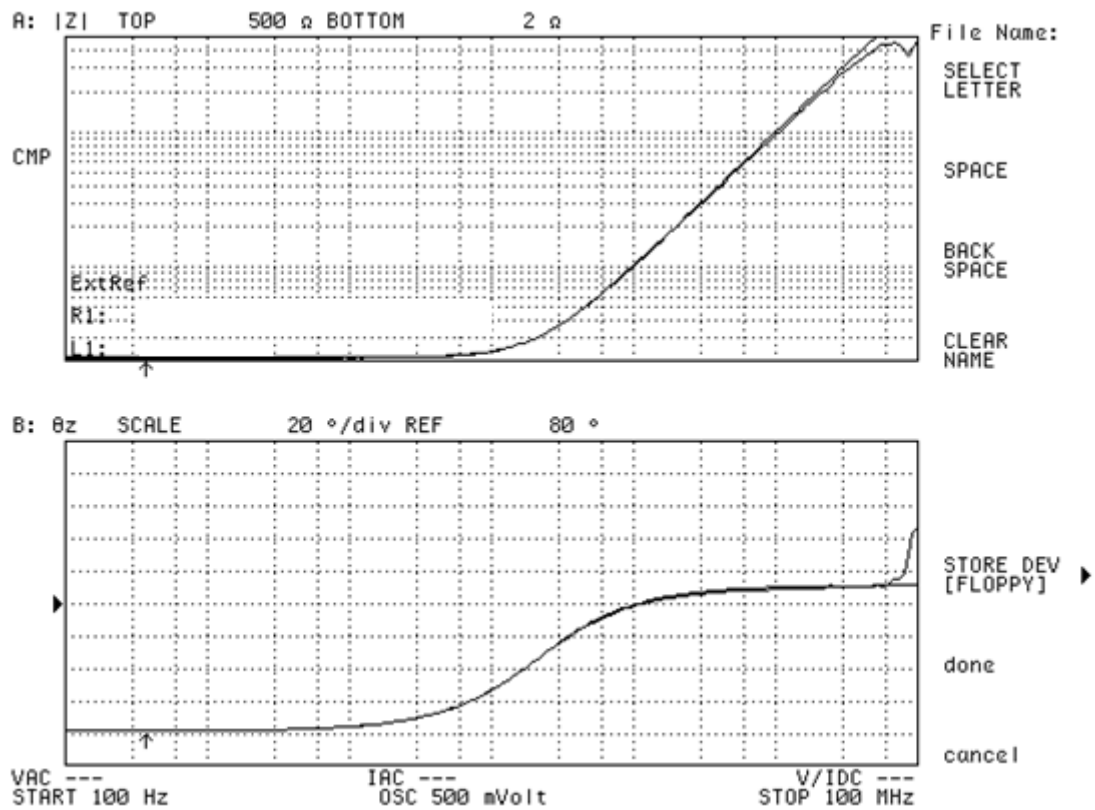
Optimization of Simulation

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

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

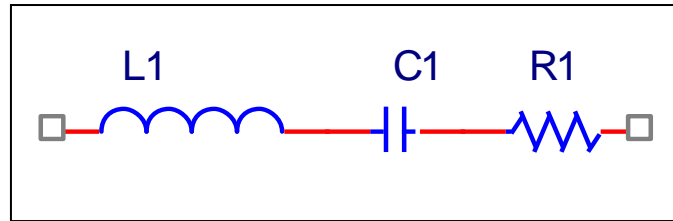
Attention

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



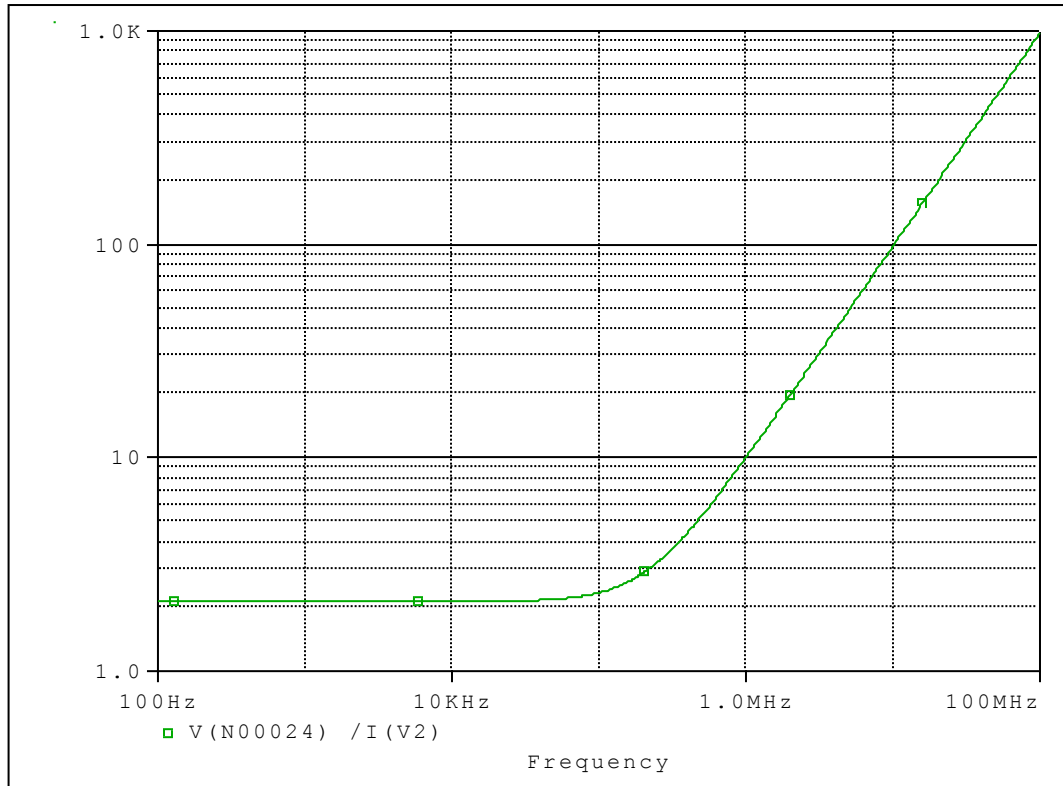
Measurement		
R1		
L1		
C1		

Equivalent circuit

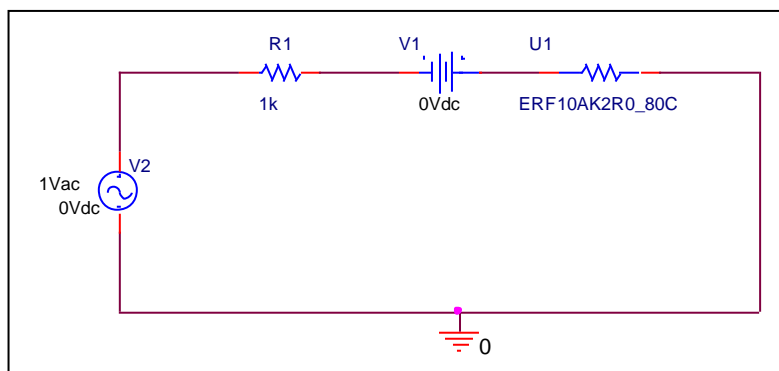


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	 Z (ohm) Measurement	 Z (ohm) Circuit Simulation	%Error
100	2.095	2.117	1.045
1K	2.097	2.117	0.949
10K	2.101	2.119	0.866
100K	2.325	2.332	0.318
1M	10.341	10.018	3.123
10M	95.388	100.915	5.794