

Device Modeling Report

COMPONENTS: CAPACITOR/Electrolytic
PART NUMBER: SMH200VN270-22A
MANUFACTURER=Nippon Chemi-con Corporation



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

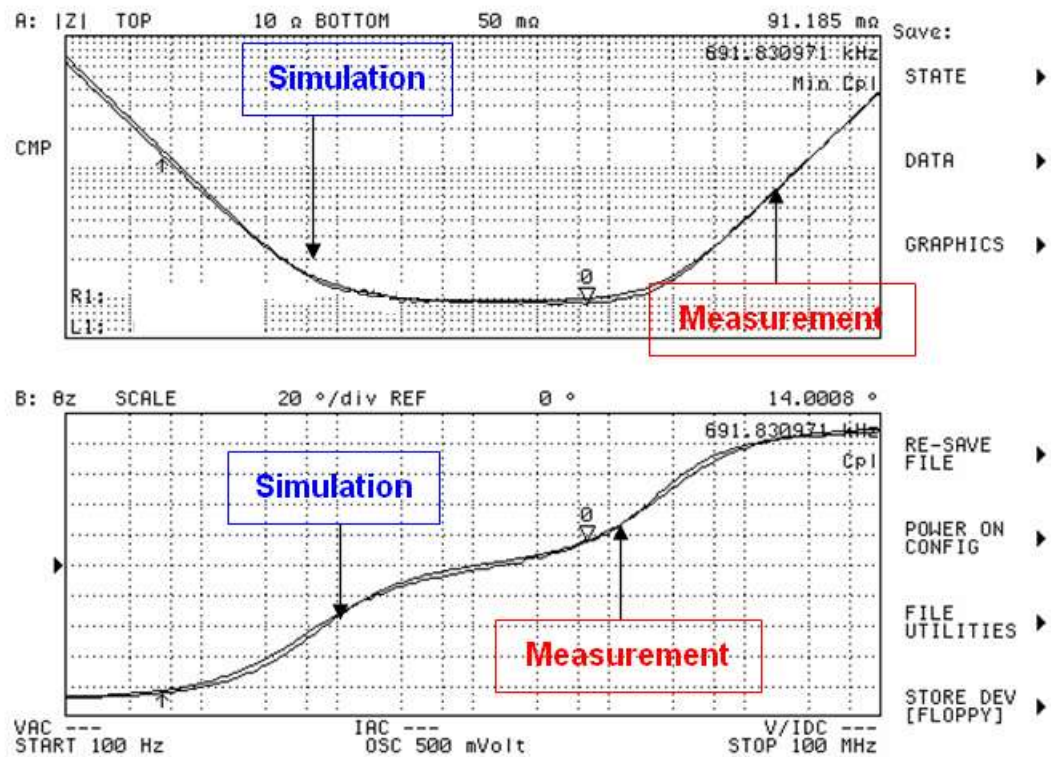
Optimization of Simulation

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

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

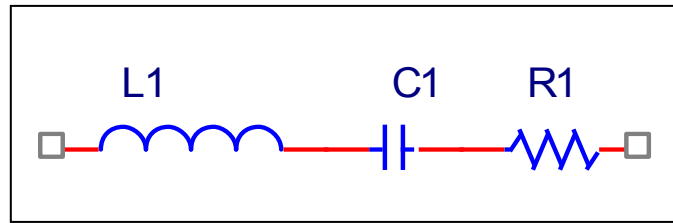
Attention)

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



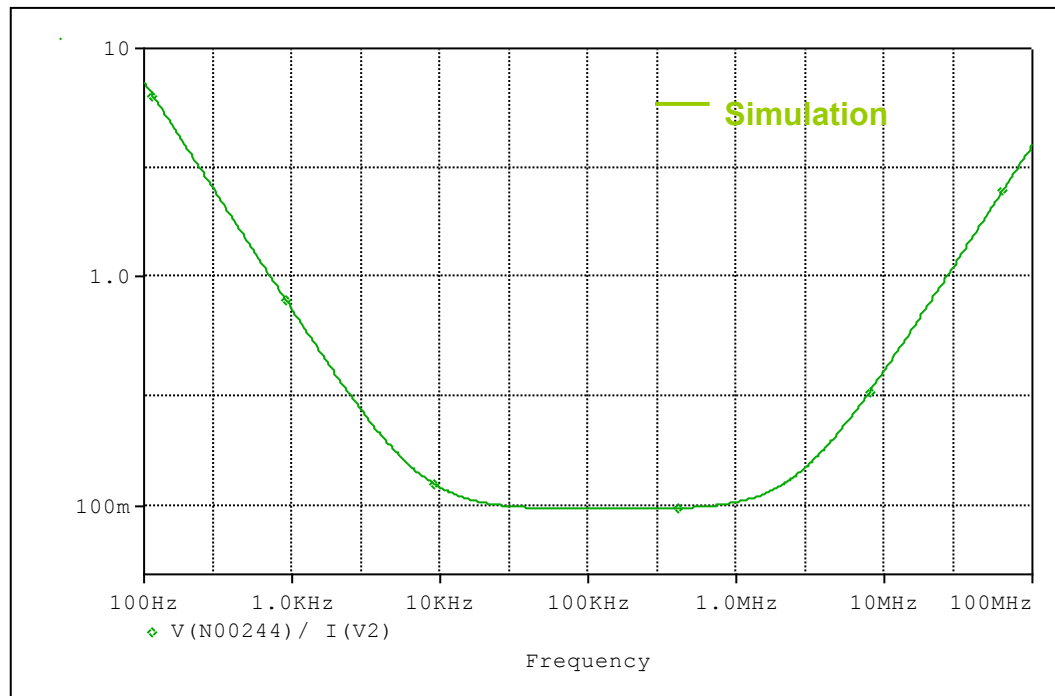
L1	
C1	
R1	

Equivalent circuit

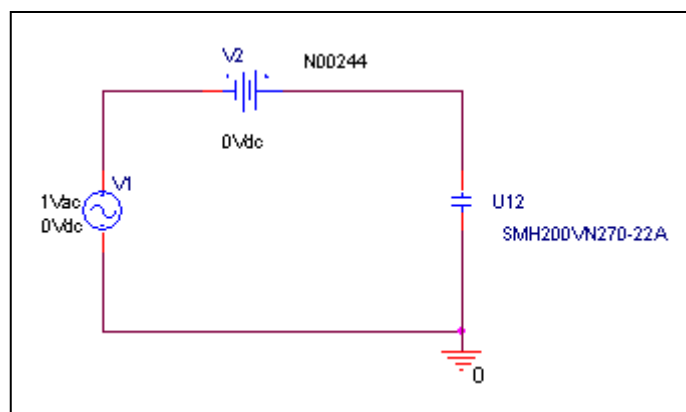


Frequency vs. |Z| Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	7.2035	7.1348	-0.9537
1K	718.426m	715.298m	-0.4354
10K	120.1234m	119.848m	-0.2293
100K	98.726m	96.638m	-2.1149
1M	105.248m	103.465m	-1.6941
10M	390.126m	392.980m	0.7316
89M	3.70214	3.7837	2.2031