

Device Modeling Report

COMPONENTS: CAPACITOR/Electrolytic
PART NUMBER: TC04RKME25VB-10M F5.0
MANUFACTURER=Nippon Chemi-con Corporation



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

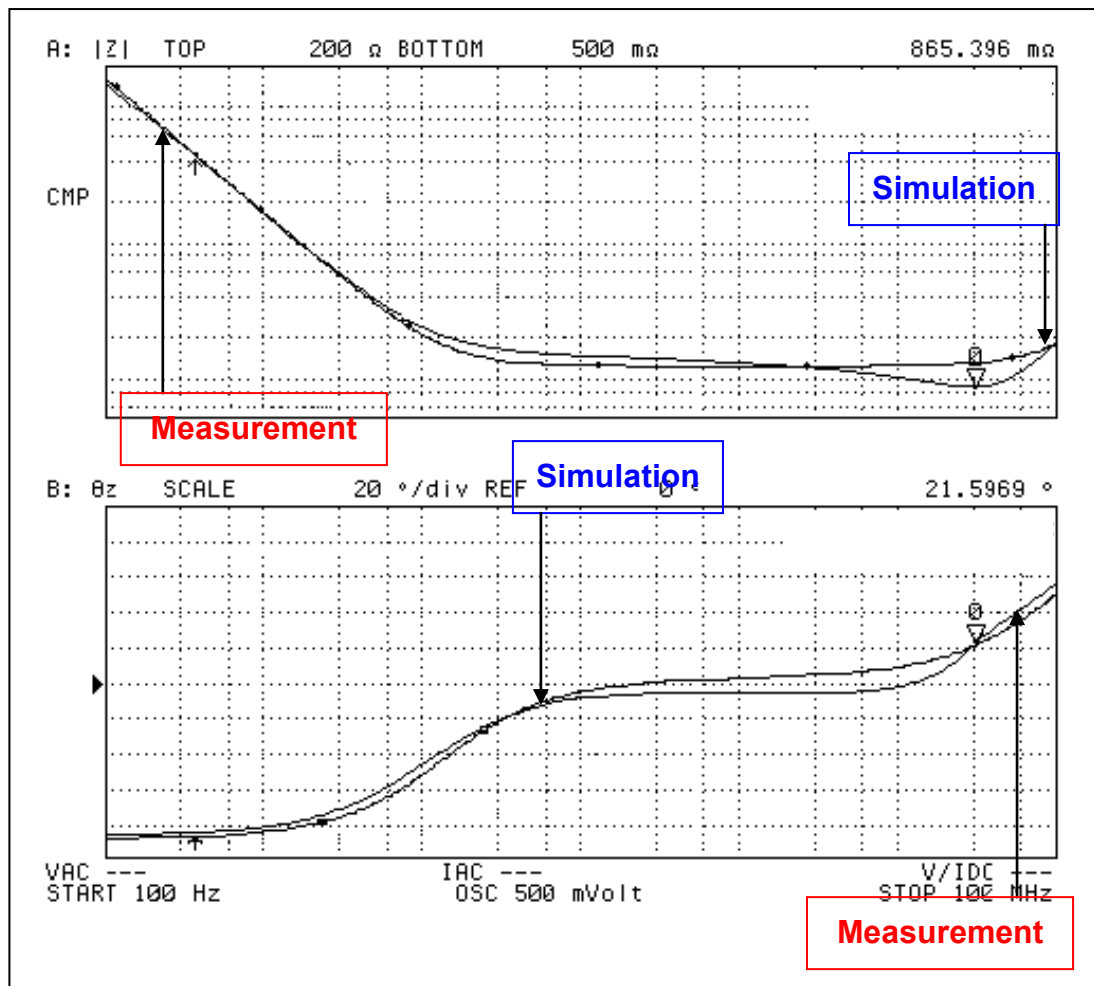
Optimization of Simulation

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

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

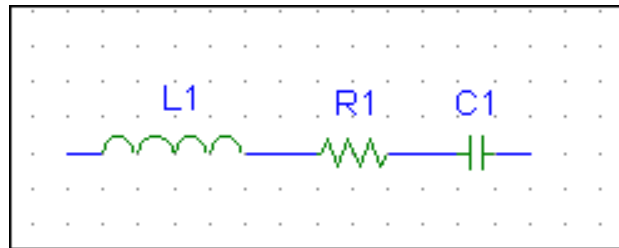
Attention)

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



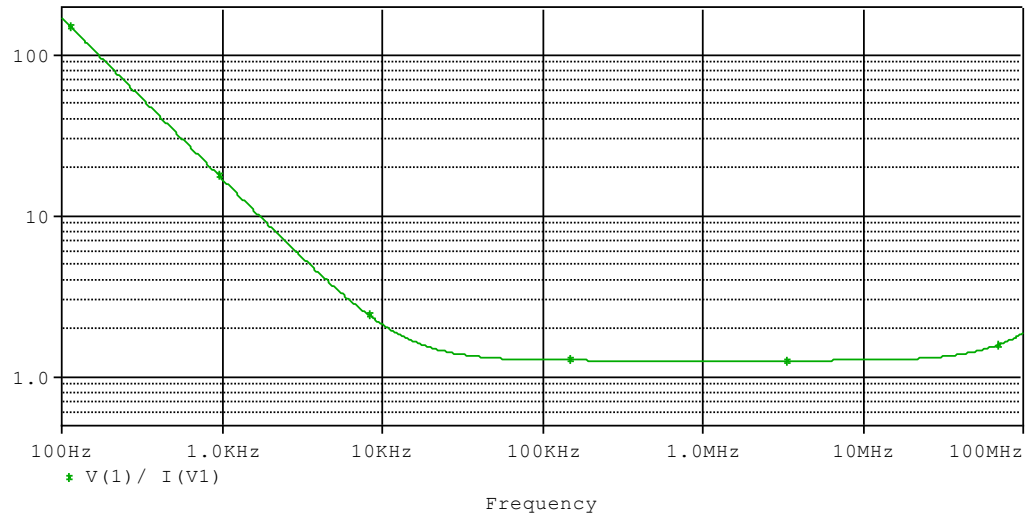
L1	
C1	
R1	

Equivalent circuit

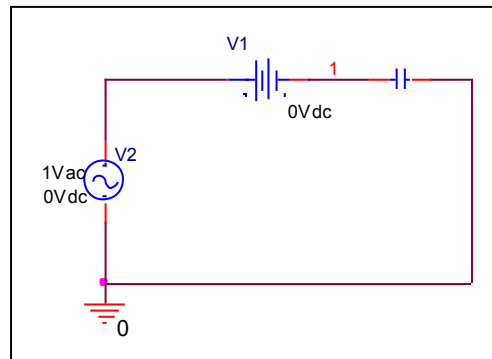


Frequency vs. IZI Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	169.300	171.139	1.086
1K	16.970	16.942	-0.165
10K	2.190	2.131	-2.694
100K	1.355	1.281	-5.461
1M	1.295	1.270	-1.931
10M	1.190	1.277	7.345
100M	1.890	1.872	-0.931