

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: GPR Series
MANUFACTURER: NATAI
THERMAL: Ta= 40C (degree)



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

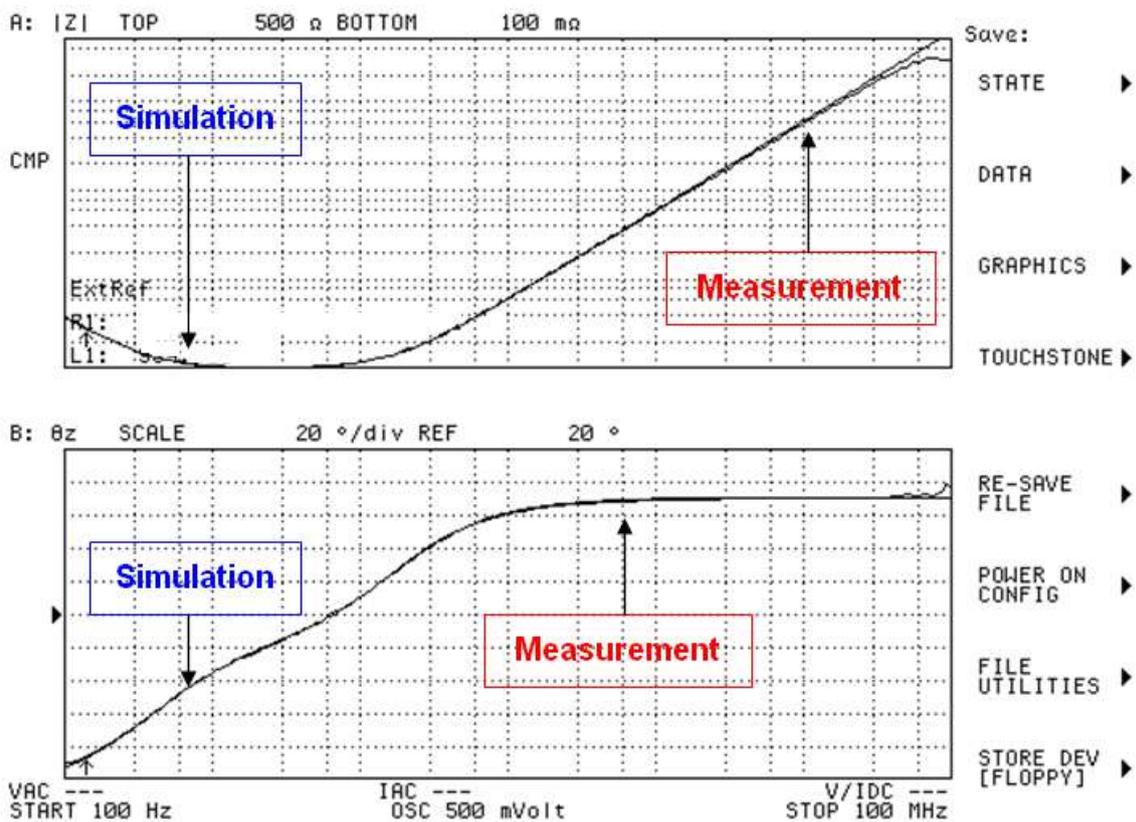
Optimization of Simulation

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

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

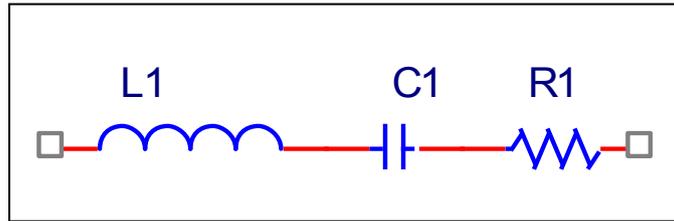
Attention)

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



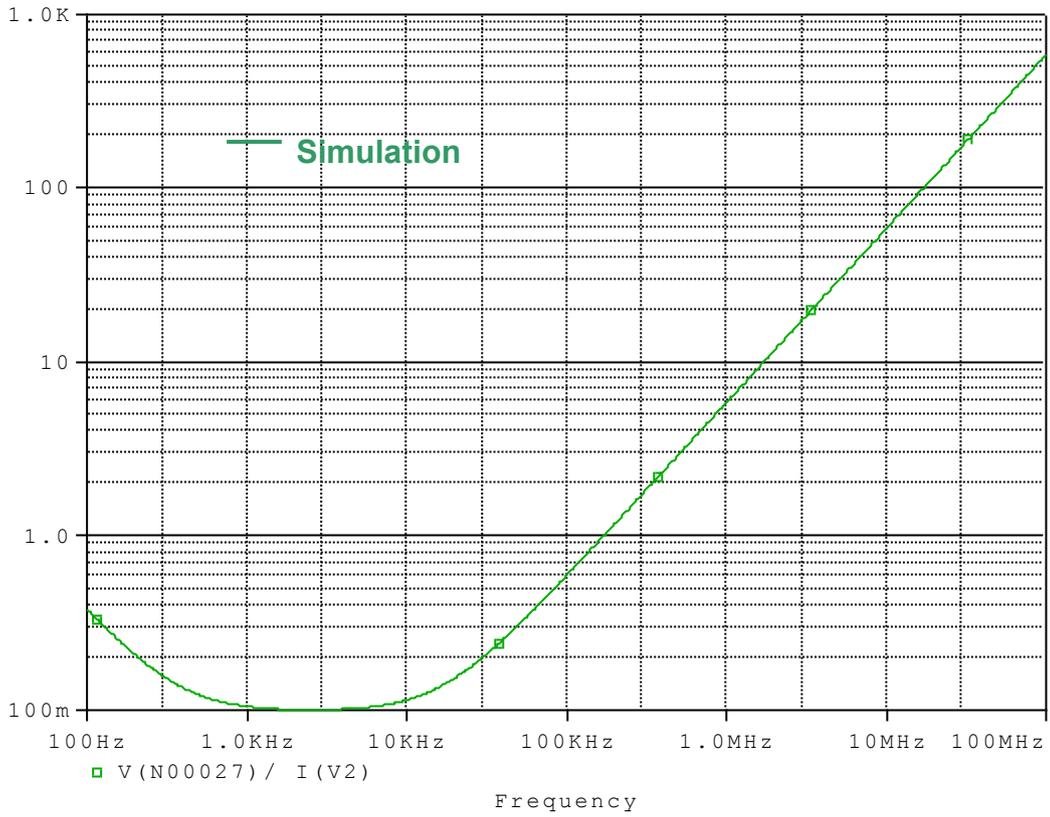
	Measurement	
R1		
C1		
L1		

Equivalent circuit

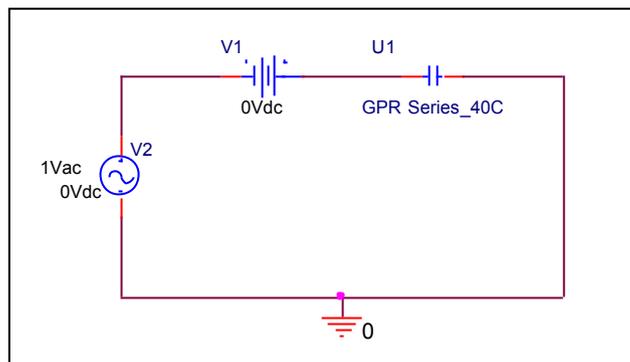


Frequency vs. IZI Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	Z (Ω)		% Error
	Measurement	Simulation	
100	376.832m	380.333m	0.929
1K	102.423m	105.018m	2.534
10K	114.348m	114.646m	0.261
100K	5.833	5.870	0.621
1M	5.866	5.870	0.054
10M	56.028	58.688	4.747