

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: GPR Series
MANUFACTURER: NATAI
THERMAL: Ta= 80C (degree)



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

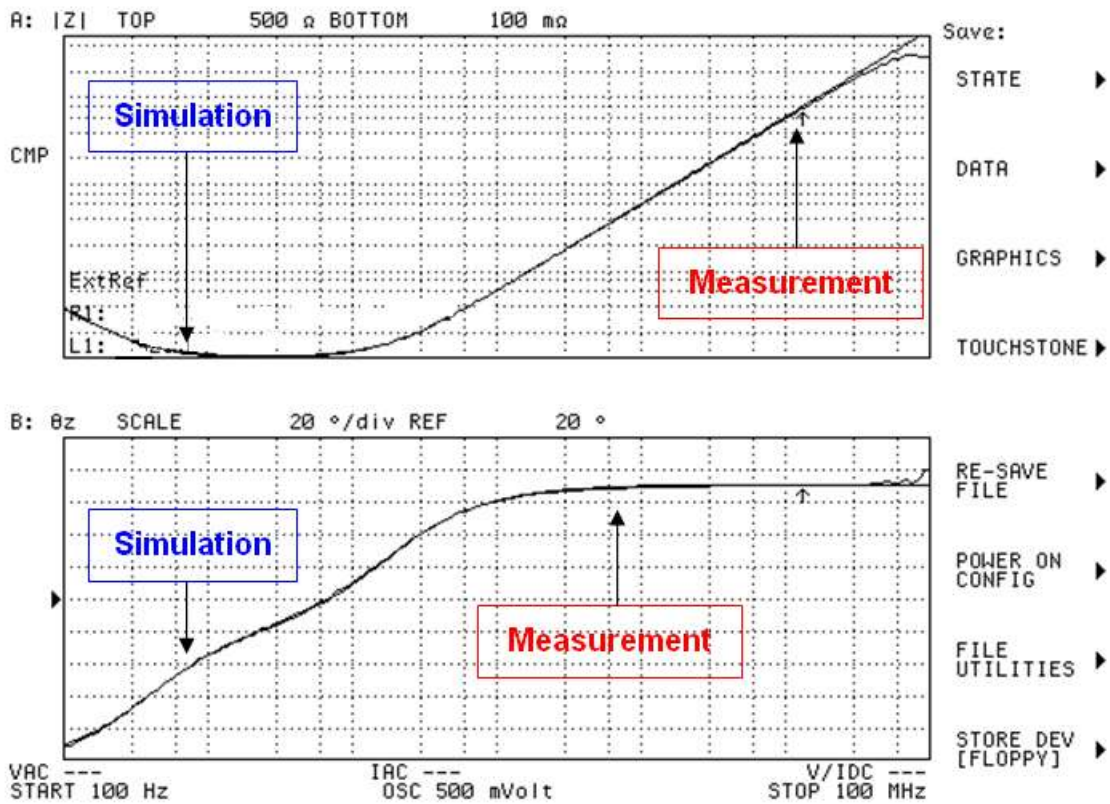
Optimization of Simulation

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

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

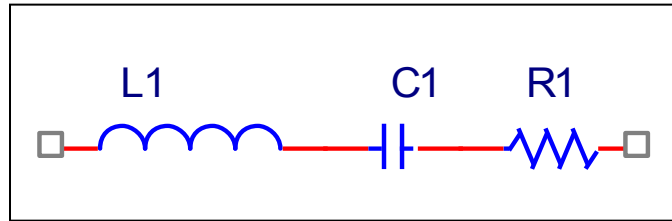
Attention)

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



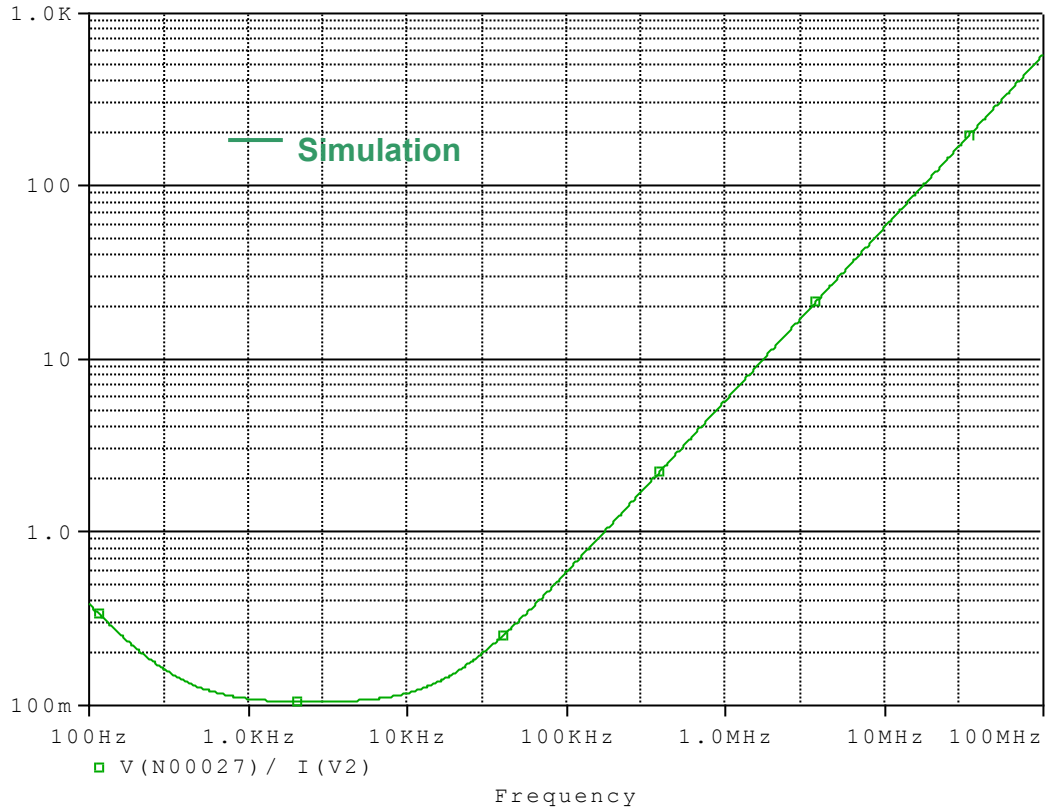
	Measurement	
R1		
C1		
L1		

Equivalent circuit

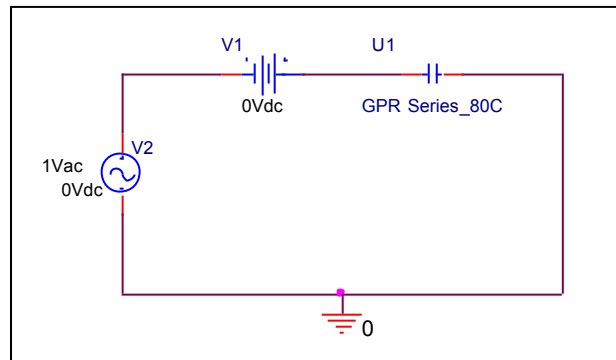


Frequency vs. IZI Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	Z (Ω)		% Error
	Measurement	Simulation	
100	371.442	385.263	3.721
1K	104.502	109.342	4.632
10K	116.863	117.926	0.909
100K	585.314	587.768	0.419
1M	5.881	5.788	- 1.575
10M	56.156	57.873	3.058