

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: ECEAOJKG221
MANUFACTURER: Panasonic
THERMAL: Ta= 80C (degree)



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

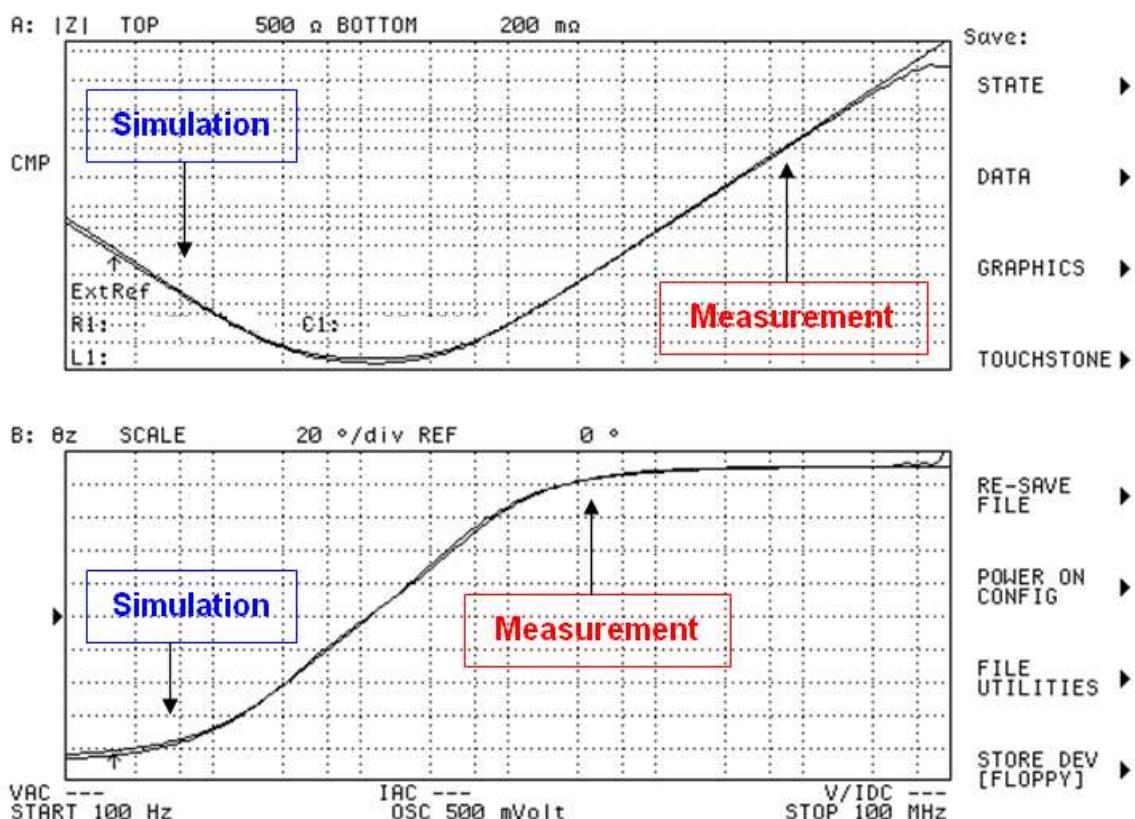
Optimization of Simulation

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

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

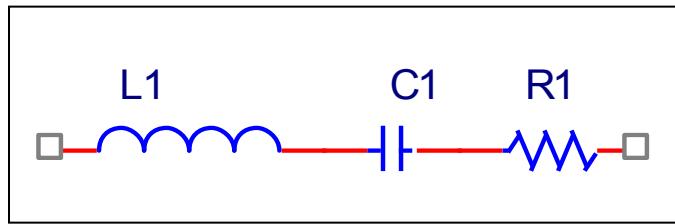
Attention)

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



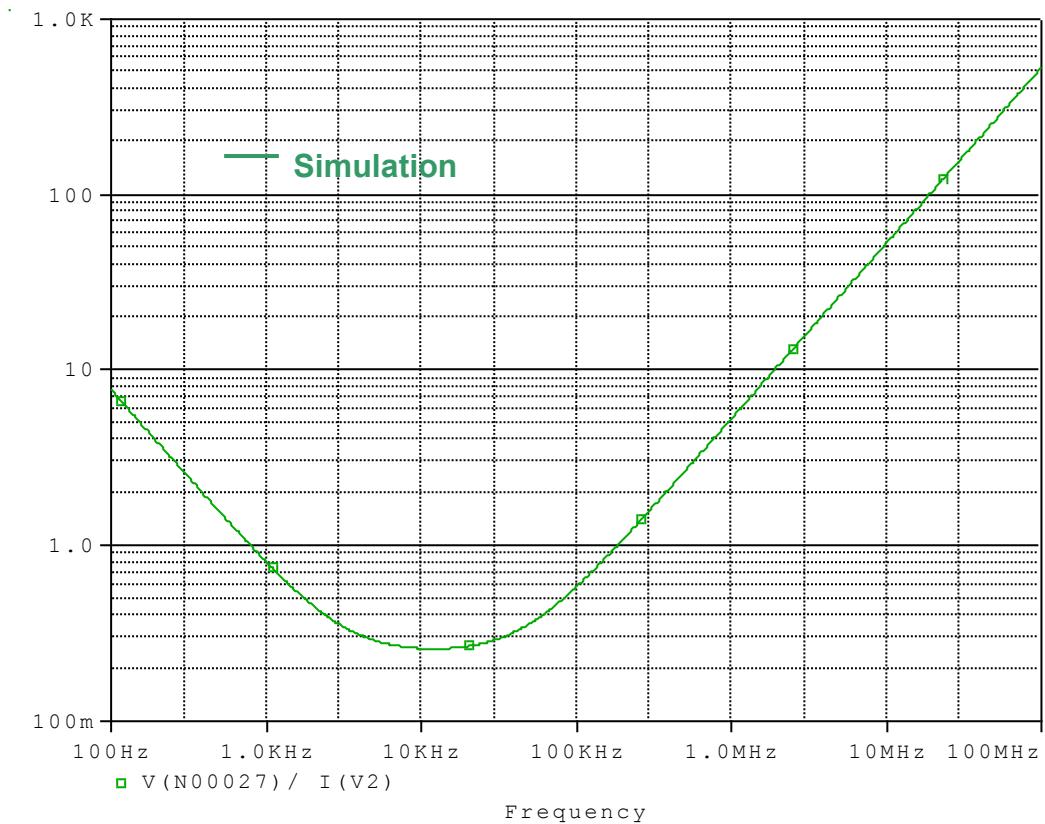
	Measurement	
R1		
C1		
L1		

Equivalent circuit

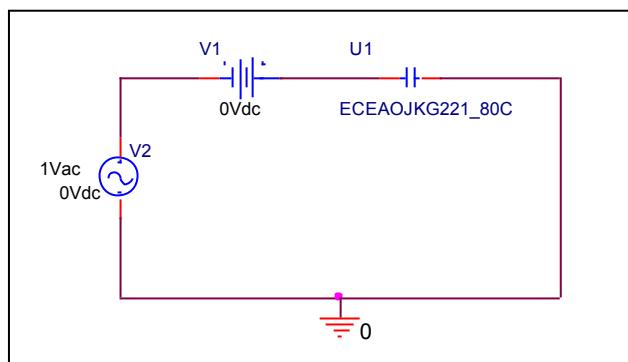


Frequency vs. IZI Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	Z (Ω)		% Error
	Measurement	Simulation	
100	6.639	7.733	16.479
1K	721.911m	810.476m	12.268
10K	223.224m	259.926m	16.442
100K	566.552m	581.449m	2.629
1M	5.361	5.290	- 1.332
10M	51.062	52.843	3.487