

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: ECEA0JKG101
MANUFACTURER: Panasonic
THERMAL: Ta= 25C (degree)



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

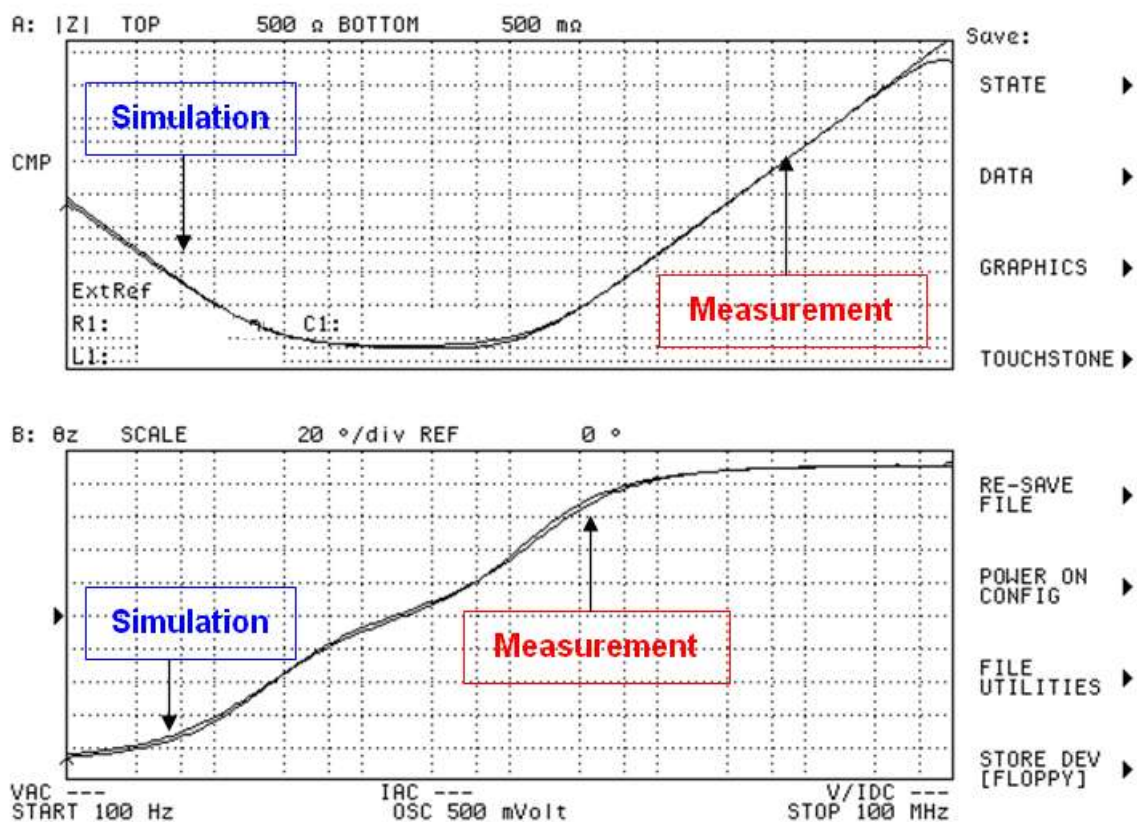
Optimization of Simulation

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

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

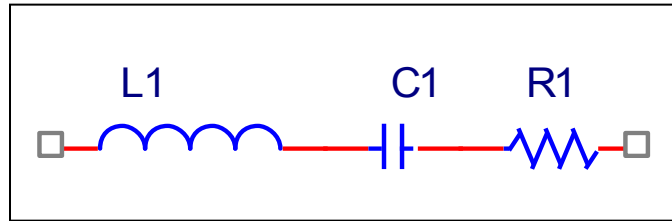
Attention)

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



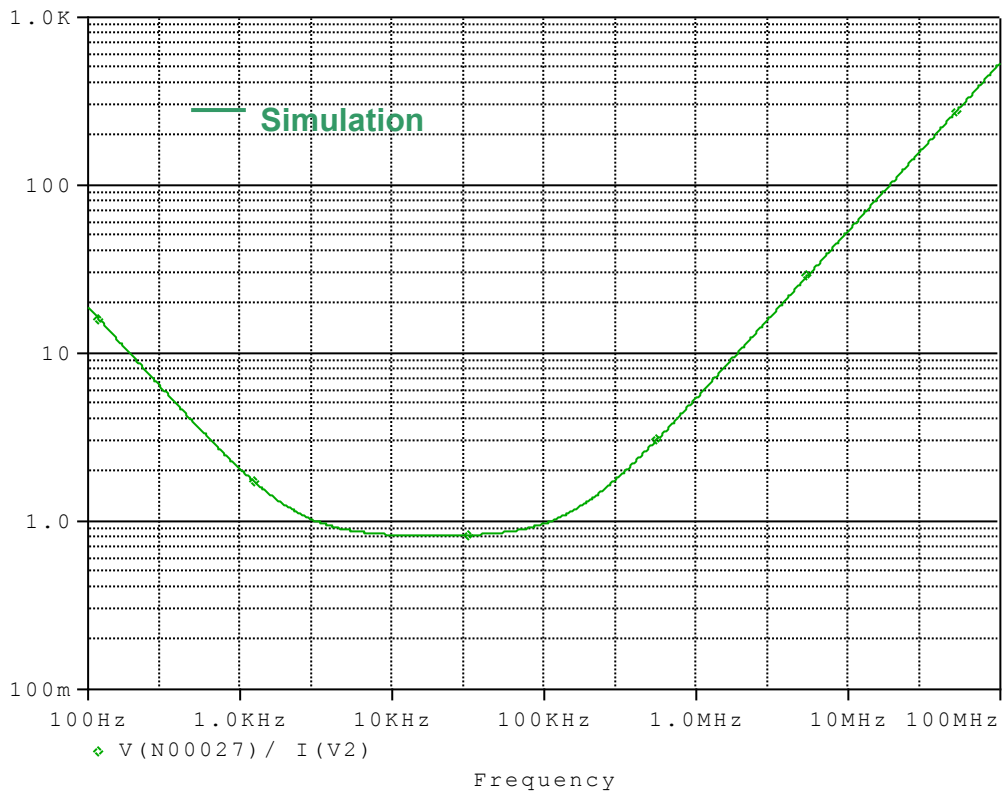
	Measurement	
R1		
C1		
L1		

Equivalent circuit

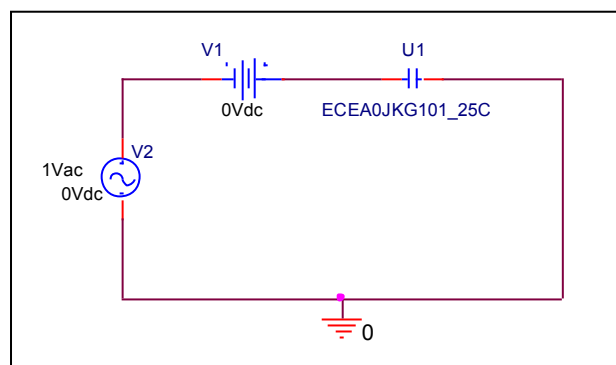


Frequency vs. IZI Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (Ω)		% Error
	Measurement	Simulation	
100	17.200	18.828	9.466
1K	1.939	2.048	5.579
10K	821.087m	832.030m	1.333
100K	895.547m	970.772m	8.400
1M	5.784	5.423	- 6.229
10M	55.277	53.063	- 4.006