

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: ECEA0JKG101
MANUFACTURER: Panasonic
THERMAL: Ta= 80C (degree)



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

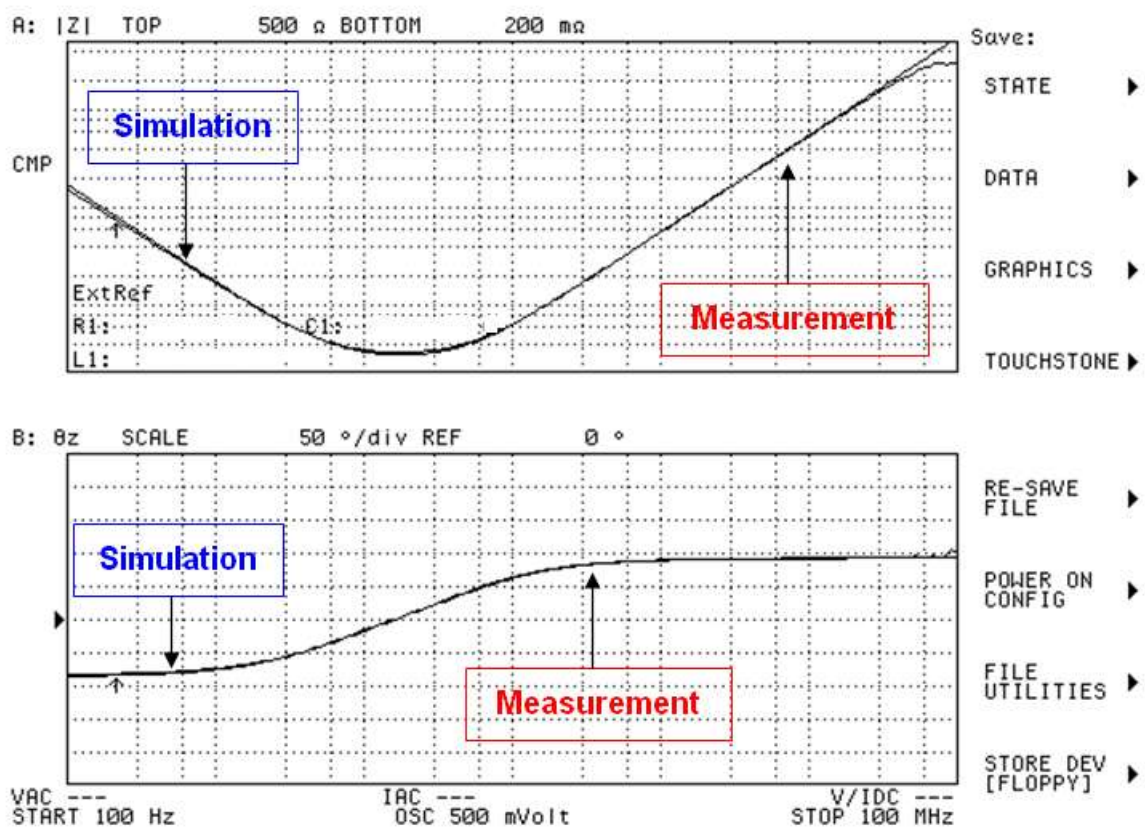
Optimization of Simulation

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

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

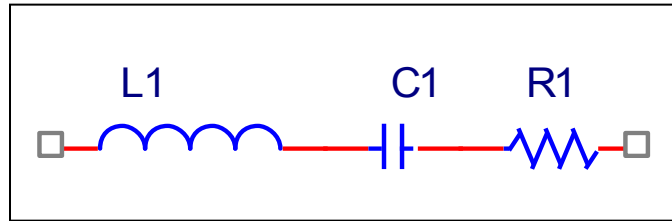
Attention)

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



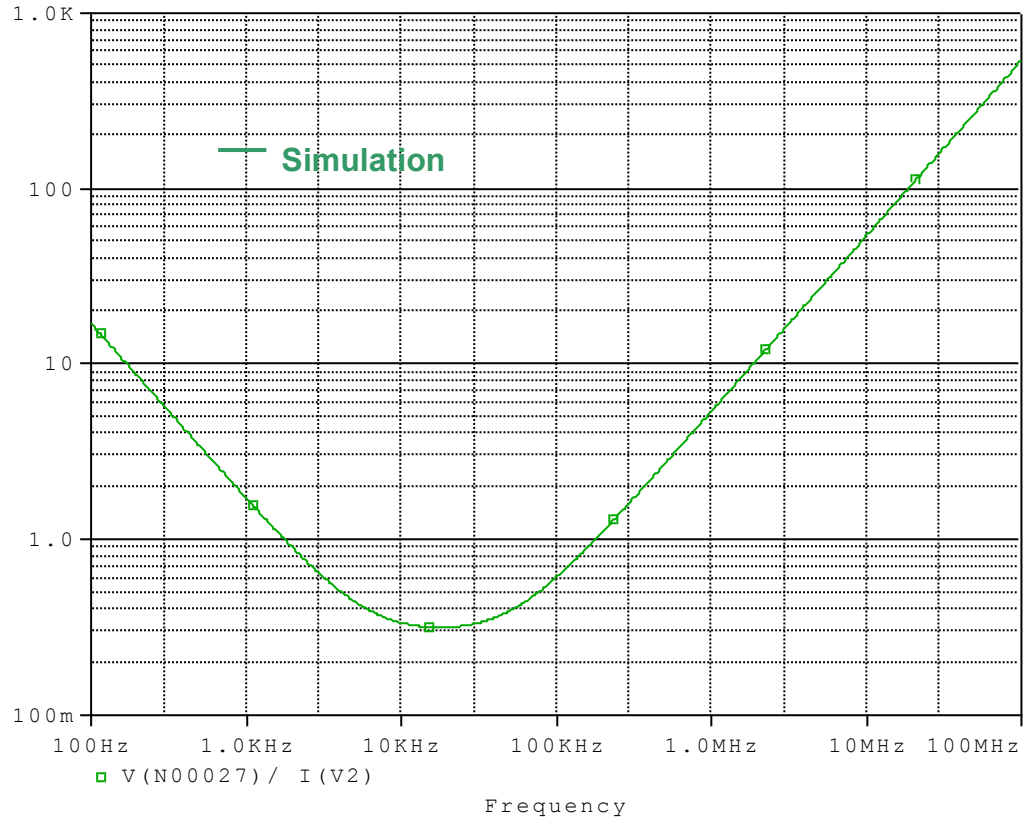
	Measurement	
R1		
C1		
L1		

Equivalent circuit

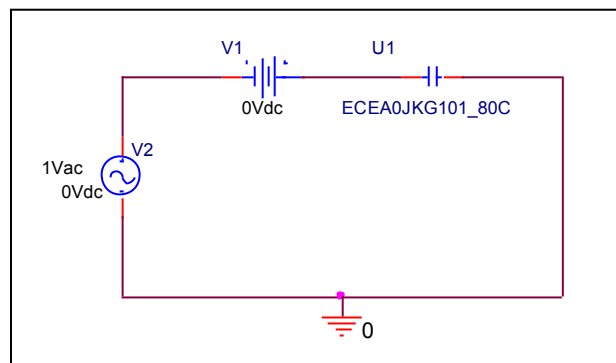


Frequency vs. IZI Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (Ω)		% Error
	Measurement	Simulation	
100	15.205	17.051	12.143
1K	1.576	1.729	9.701
10K	307.044	336.926	9.732
100K	596.172	609.431	2.224
1M	5.607	5.389	- 3.902
10M	53.521	53.811	0.541