

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: 200MXP100MK2229
MANUFACTURER: Rubycon
THERMAL: Ta= 25C (degree)



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

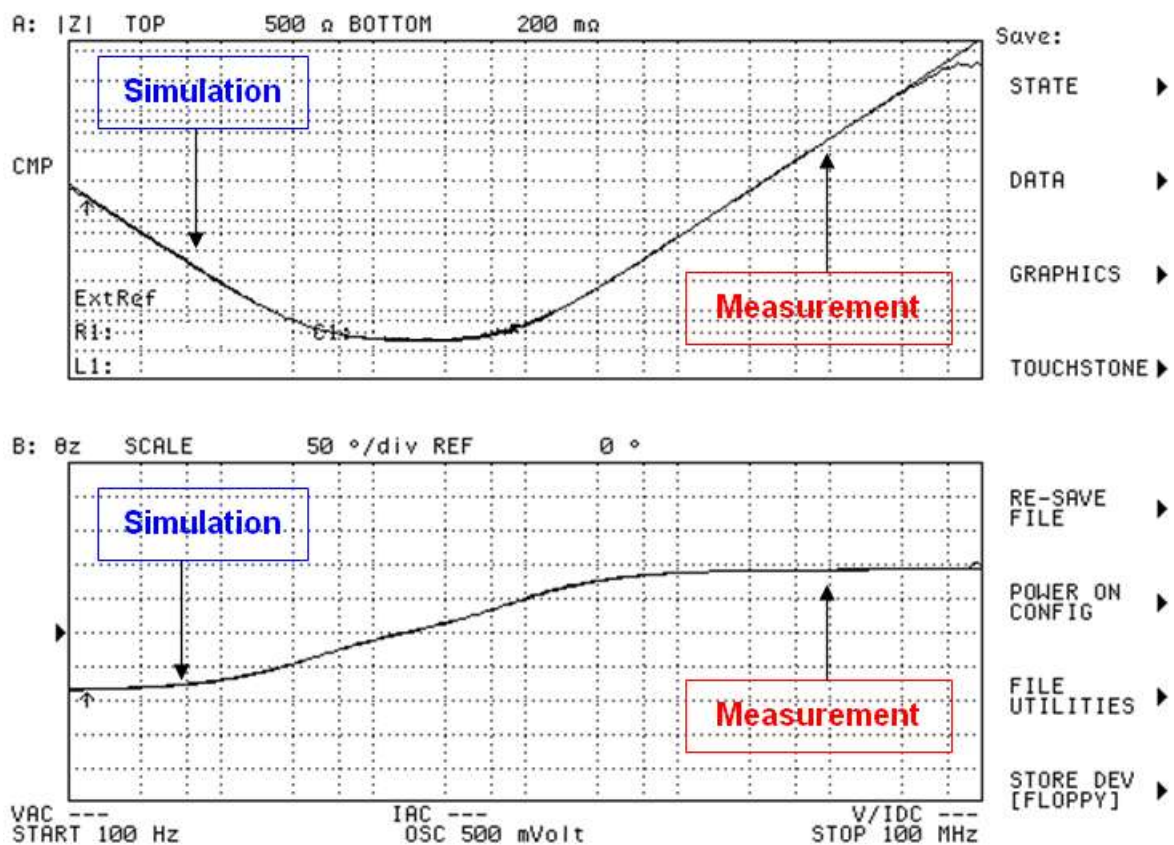
Optimization of Simulation

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

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

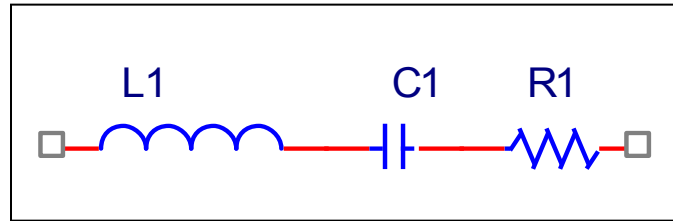
Attention)

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



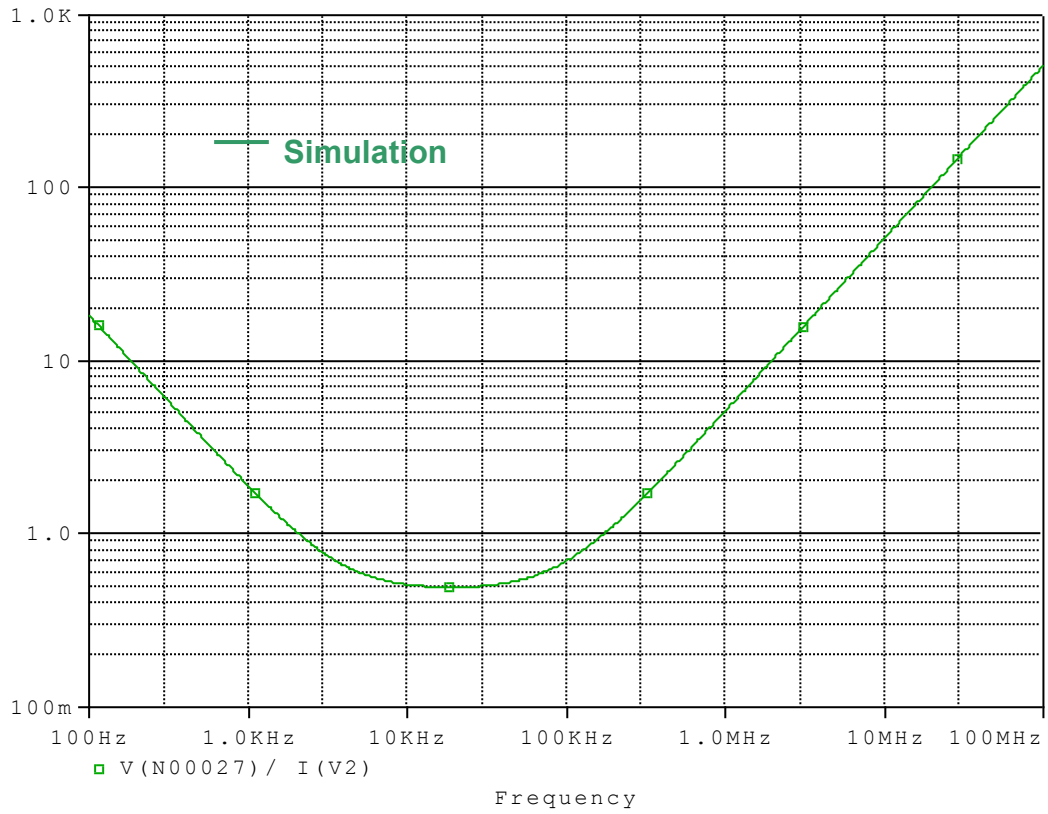
	Measurement	
R1		
C1		
L1		

Equivalent circuit

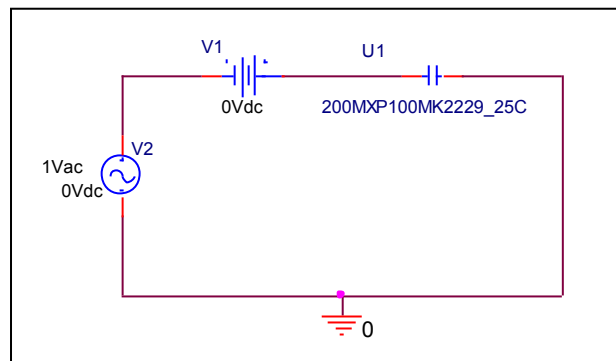


Frequency vs. IZI Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	Z (Ω)		% Error
	Measurement	Simulation	
100	17.386	18.424	5.967
1K	1.773	1.902	7.258
10K	503.122m	511.643m	1.694
100K	676.377m	699.044m	3.351
1M	5.463	5.151	- 5.714
10M	52.637	51.292	- 2.555