

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: UUG1A103MRR1MS
MANUFACTURER: Nichicon
REMARK: TA=80C



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

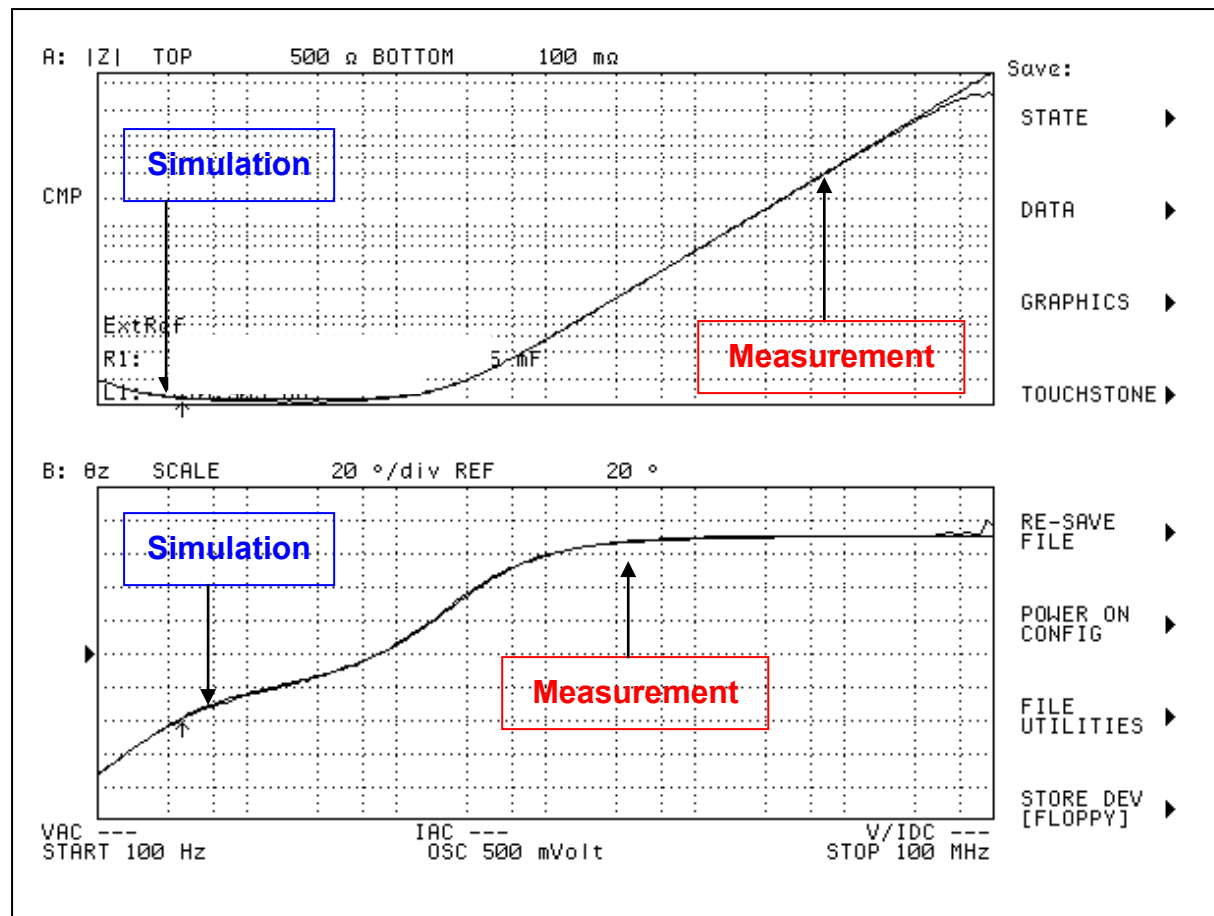
Optimization of Simulation

Range of adjustment Frequency:100 Hz to100M(Hz)

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

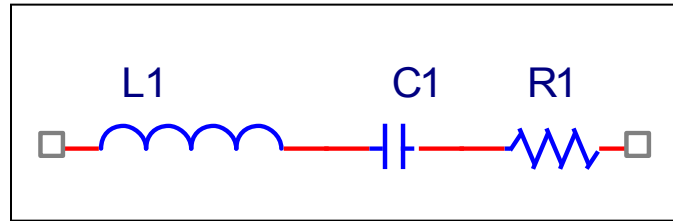
Attention)

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



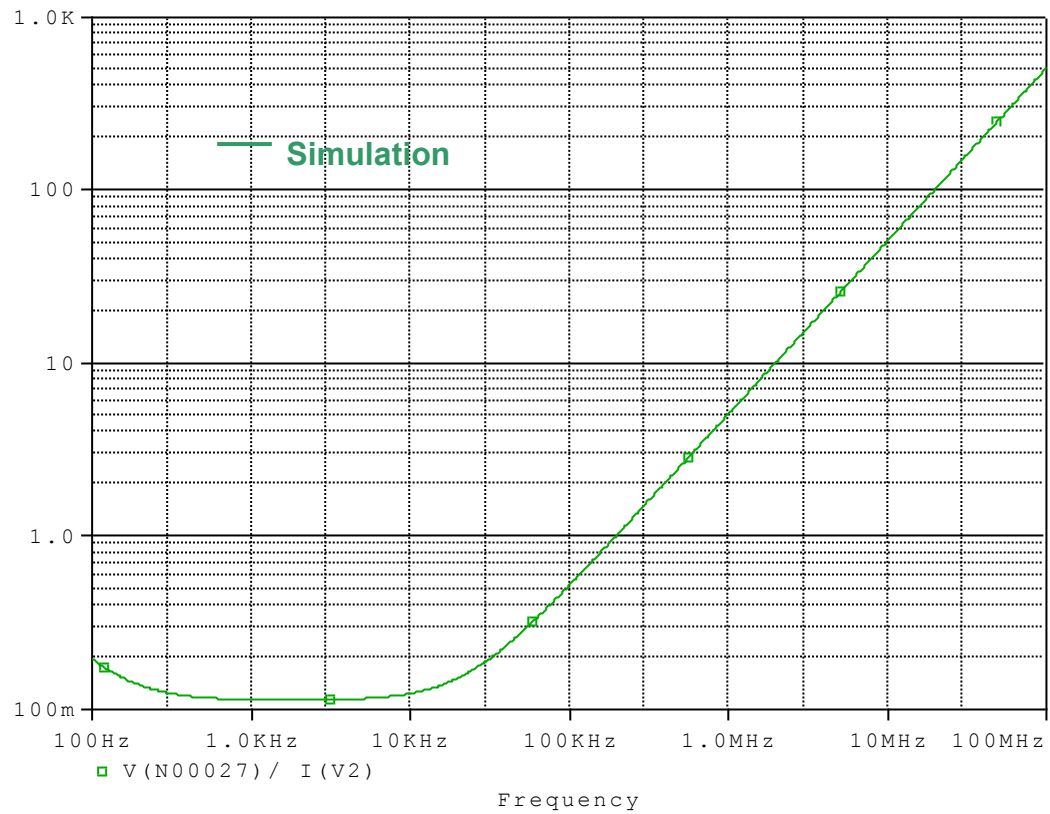
	Measurement	
R1		
C1		
L1		

Equivalent circuit

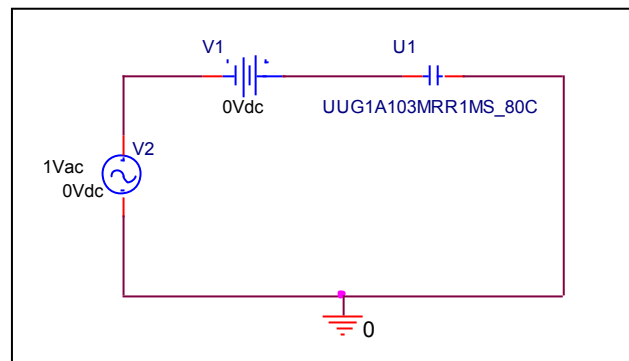


Frequency vs. |Z| Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (Ω)		% Error
	Measurement	Simulation	
100	192.918	195.897	1.544
1K	105.756	113.977	7.774
10K	115.773	123.719	6.864
100K	526.948	521.828	- 0.972
1M	5.298	5.296	- 0.041
10M	50.573	50.951	0.747