

Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC
PART NUMBER: UUG1E332MNR1M5
MANUFACTURER: Nichicon
THERMAL: Ta= 80C (degree)



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

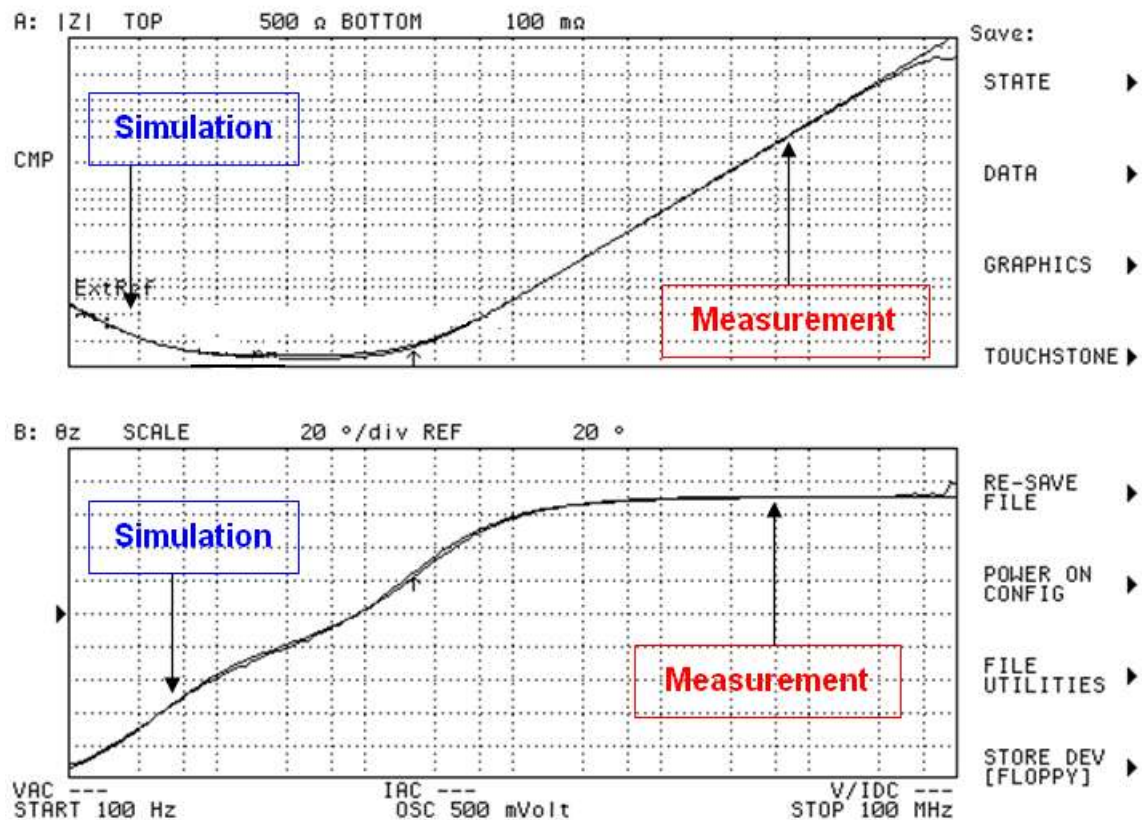
Optimization of Simulation

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

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

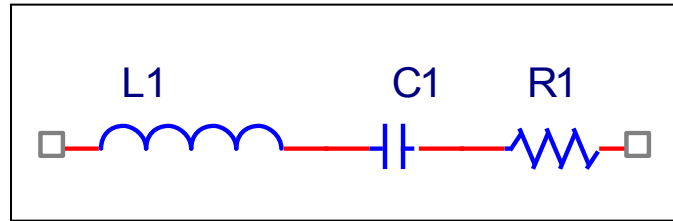
Attention)

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



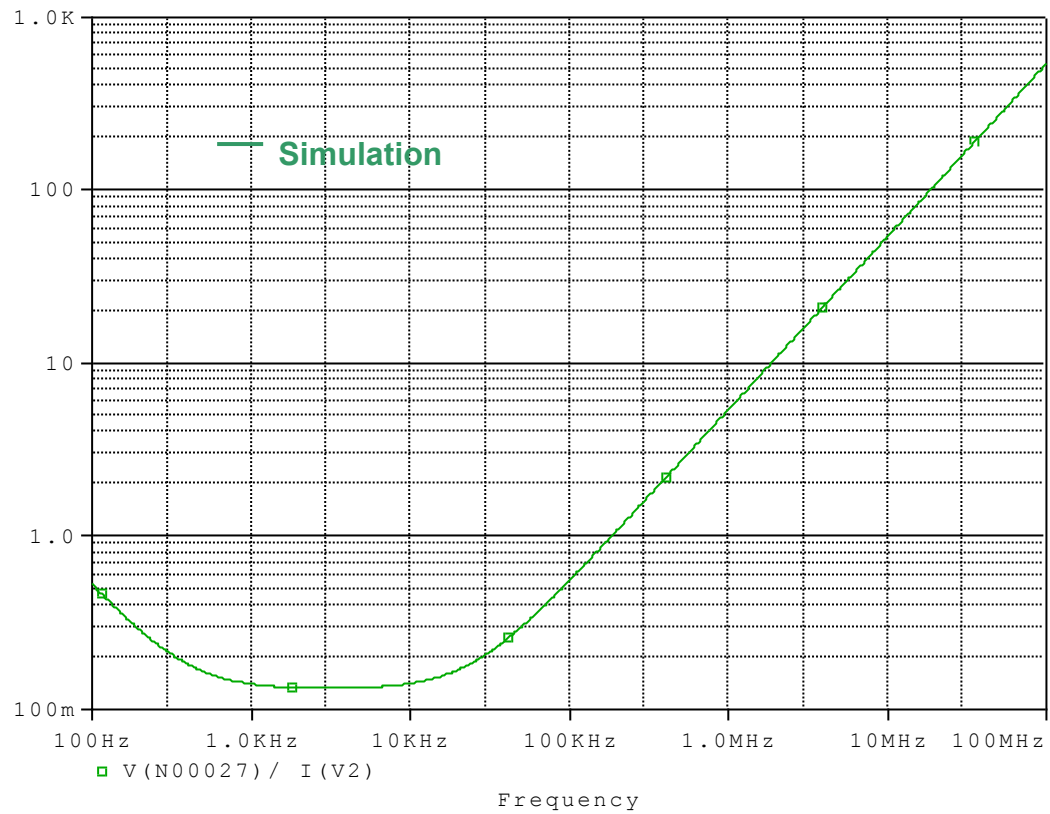
	Measurement	
R1		
C1		
L1		

Equivalent circuit

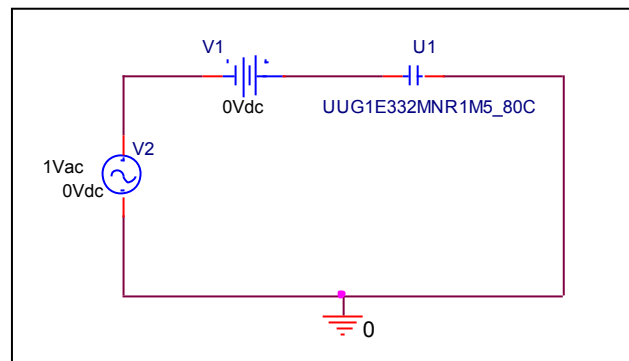


Frequency vs. |Z| Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (Ω)		% Error
	Measurement	Simulation	
100	504.566m	528.185m	4.681
1K	134.037m	140.411m	4.756
10K	130.576m	141.443m	8.323
100K	559.608m	555.312m	- 0.768
1M	5.585	5.399	- 3.334
10M	53.284	53.793	0.955