Device Modeling Report

COMPONENTS: CAPACITOR/ CERAMIC
PART NUMBER: ECKATS222ME
MANUFACTURER: PANASONIC
REMARK: TA=80C

Bee Technologies Inc.

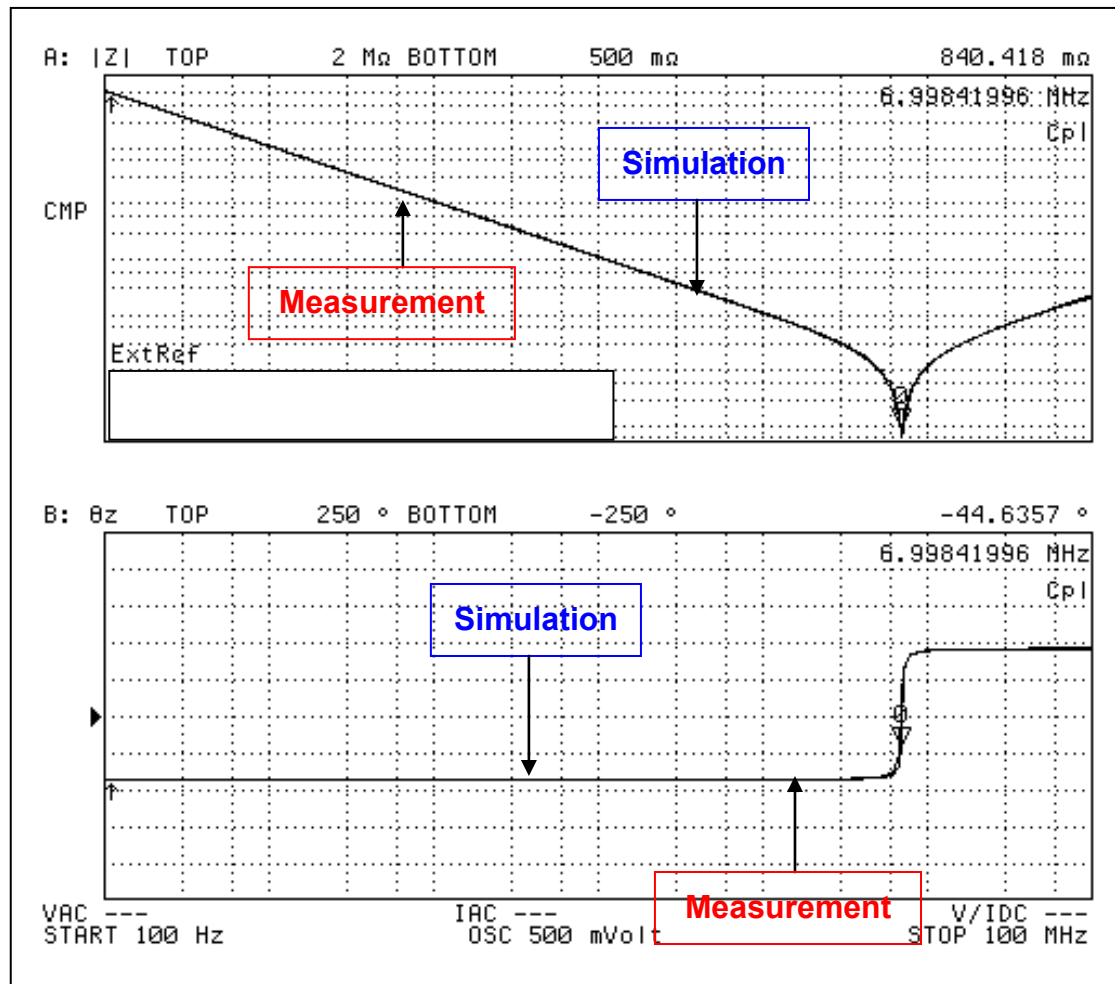**Theory: Auto Balancing Bridge Method**

Optimization of Simulation

Range of adjustment Frequency:100Hz to100M(Hz)

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

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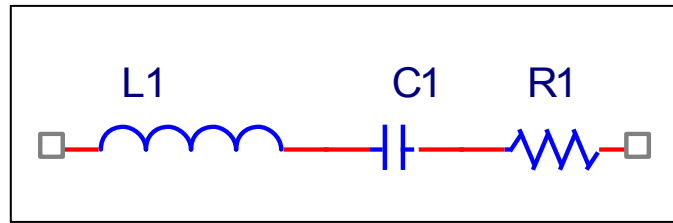
Please use SPICE MODEL within the range from 100Hz to 100M(Hz)

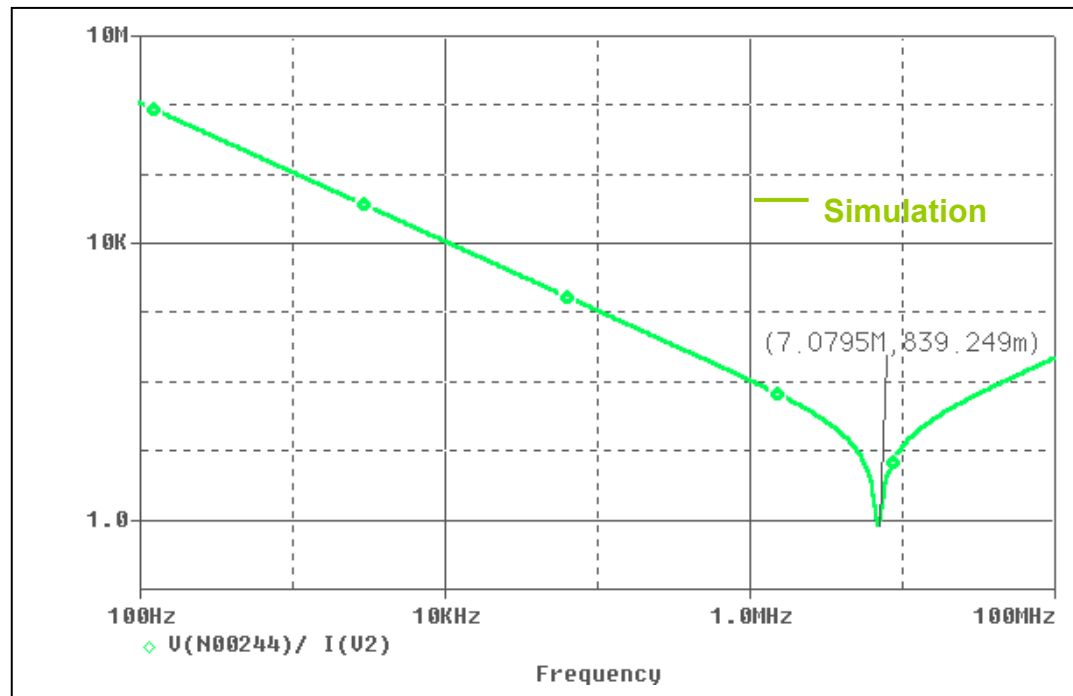| L1	
C1	
R1	

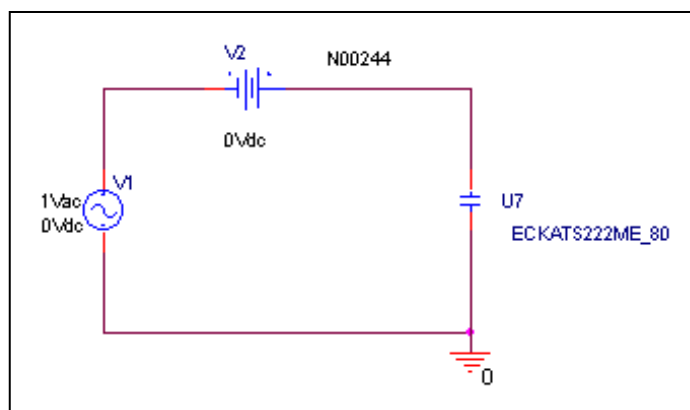Equivalent circuit

L1   C1   R1

Frequency vs. IZI Characteristic

Circuit Simulation result

Evaluation Circuit

Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	1.09265M	1.0651M	2.5214
1K	109.275K	106.509K	2.5312
10K	10.964K	10.651K	2.8548
100K	1.09934K	1.0649K	3.1328
1M	108.213	104.341	3.5781
10M	10.666	11.094	4.0128
100M	190.97	216.117	13.1680

	Measurement	Simulation	%Error
FSRF(Hz)	6.998M	7.0795M	1.1646
IZI (ohm)	840.418	839.249	0.1391