Device Modeling Report

COMPONENTS: CAPACITOR/ CERAMIC
PART NUMBER: ECKATS102ME
MANUFACTURER: PANASONIC
REMARK: TA=25C

Bee Technologies Inc.
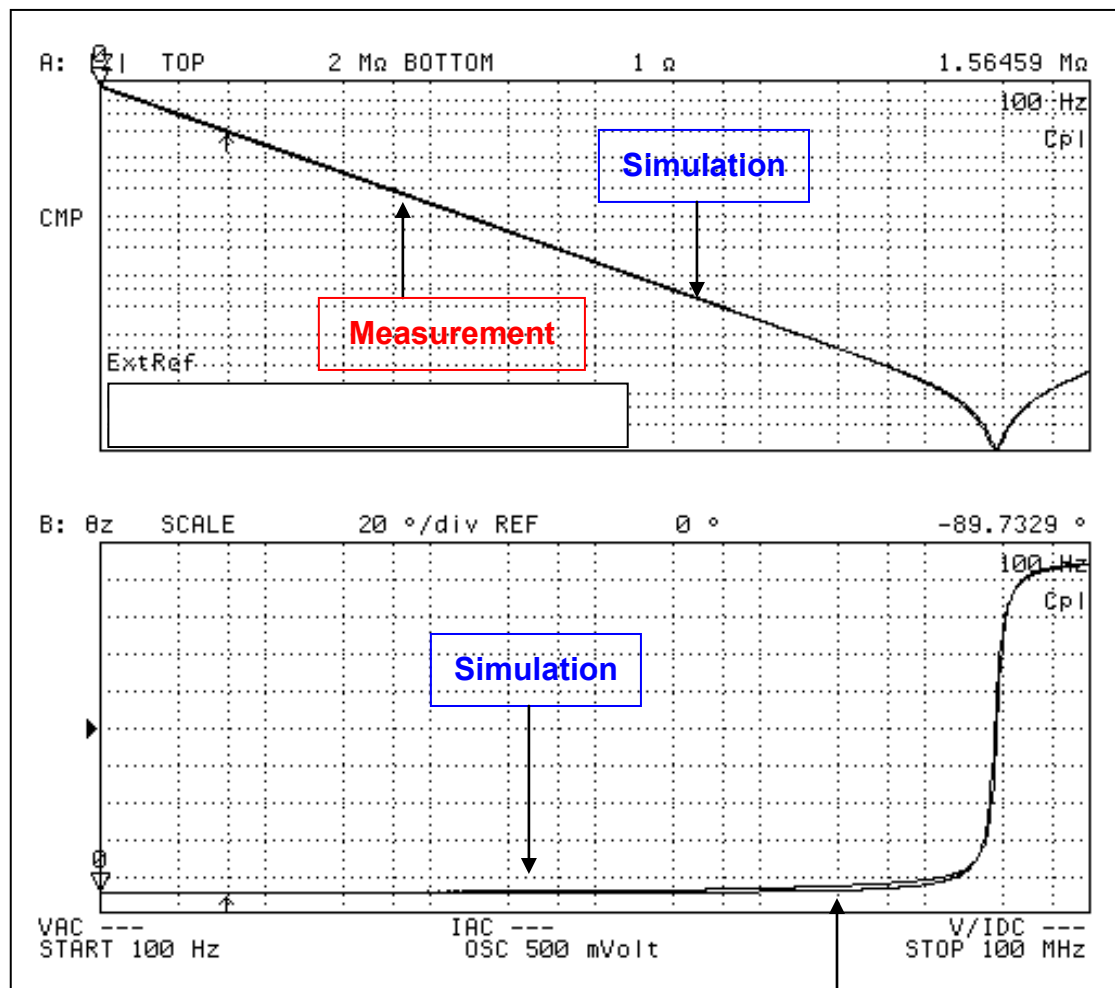
Theory: Auto Balancing Bridge Method

Optimization of Simulation

Range of adjustment Frequency:100Hz to100M(Hz)

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

Attention)

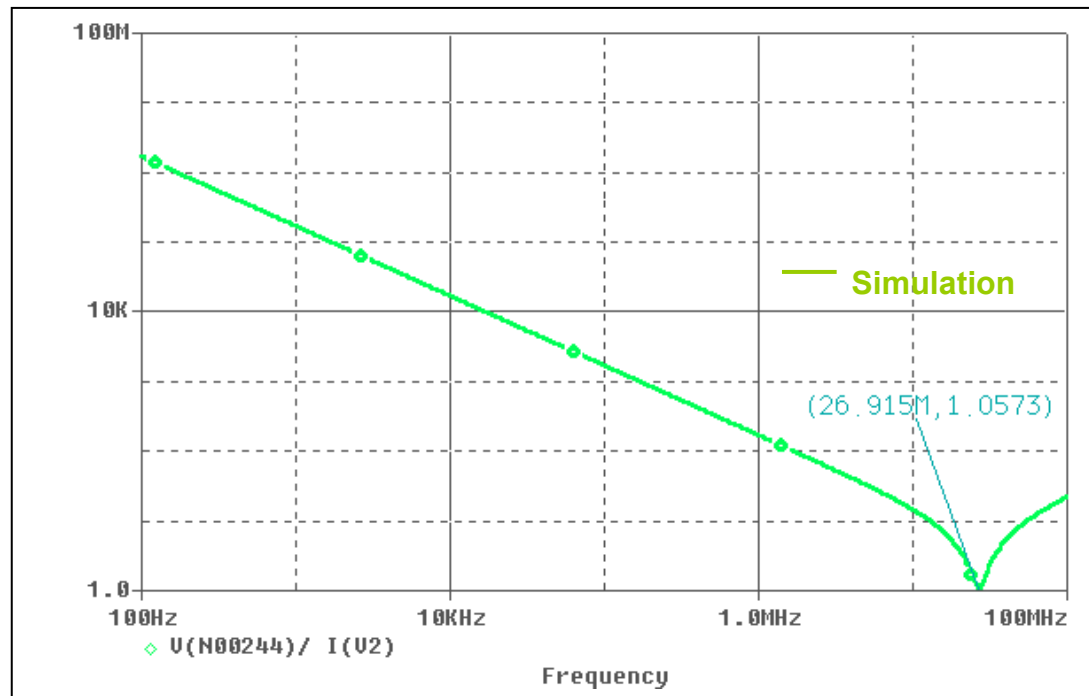*Please use SPICE MODEL within the range from 100Hz to 100M(Hz)*

L1	
C1	
R1	

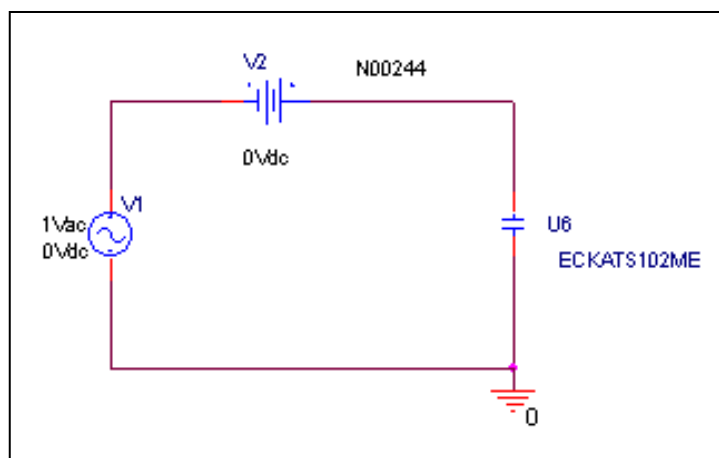Equivalent circuit

L1   C1   R1

Frequency vs. IZI Characteristic

Circuit Simulation result

Evaluation Circuit

Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	1.56263M	1.6979M	8.6566
1K	157.335K	169.788K	7.9150
10K	15.8072K	16.9790K	7.4131
100K	1.59859K	1.6979K	6.2123
1M	164.435	169.559	3.1161
10M	15.4646	14.691	5.0024
100M	22.0671	21.588	2.1711

	Measurement	Simulation	%Error
FSRF(Hz)	27.86M	26.915M	3.3920
IZI (ohm)	1.0585	1.0573	0.1134