

Device Modeling Report

COMPONENTS: CAPACITOR/CERAMIC
PART NUMBER: ECKATS332ME
MANUFACTURER: PANASONIC
REMARK: TA=80C



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

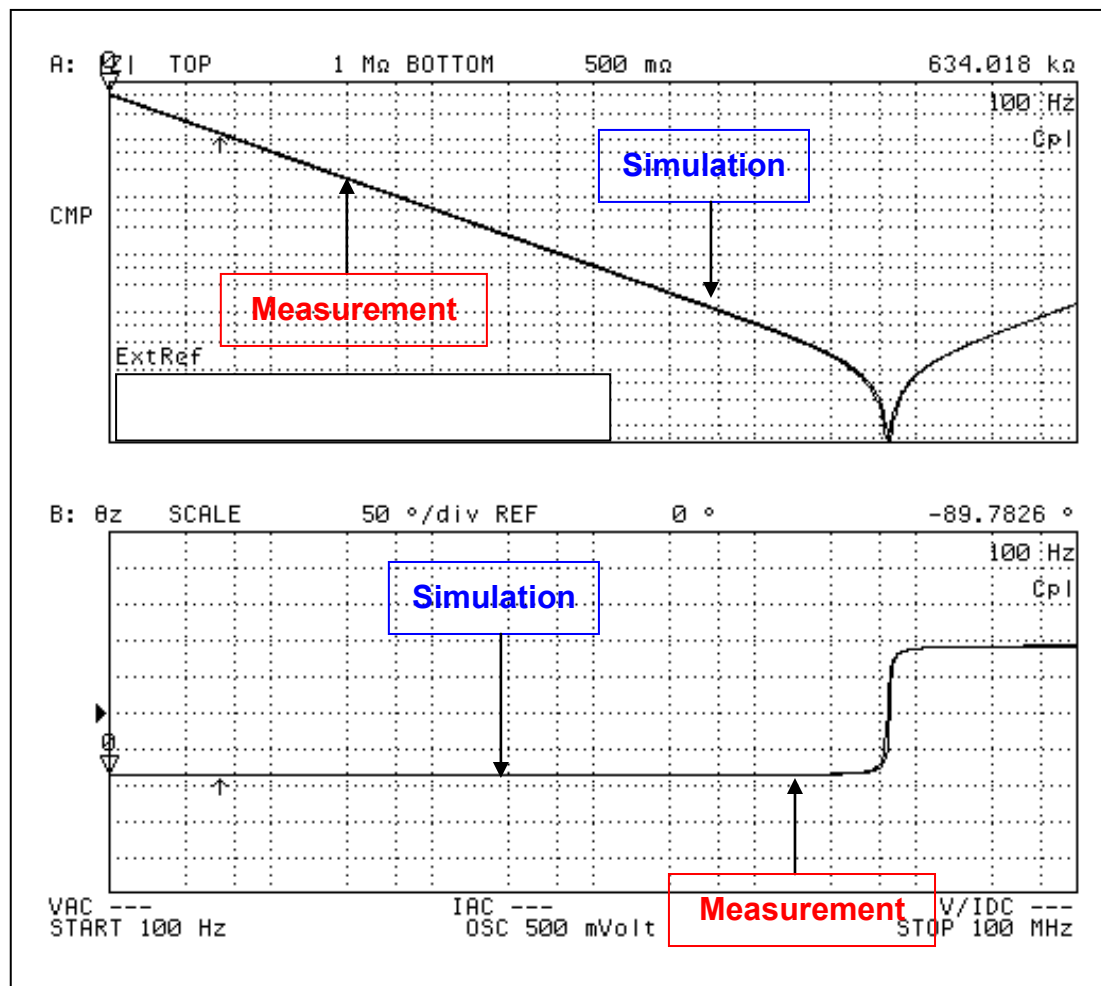
Optimization of Simulation

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

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

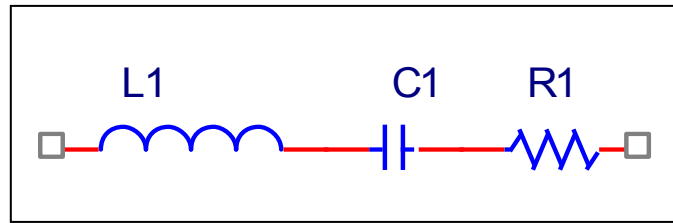
Attention)

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



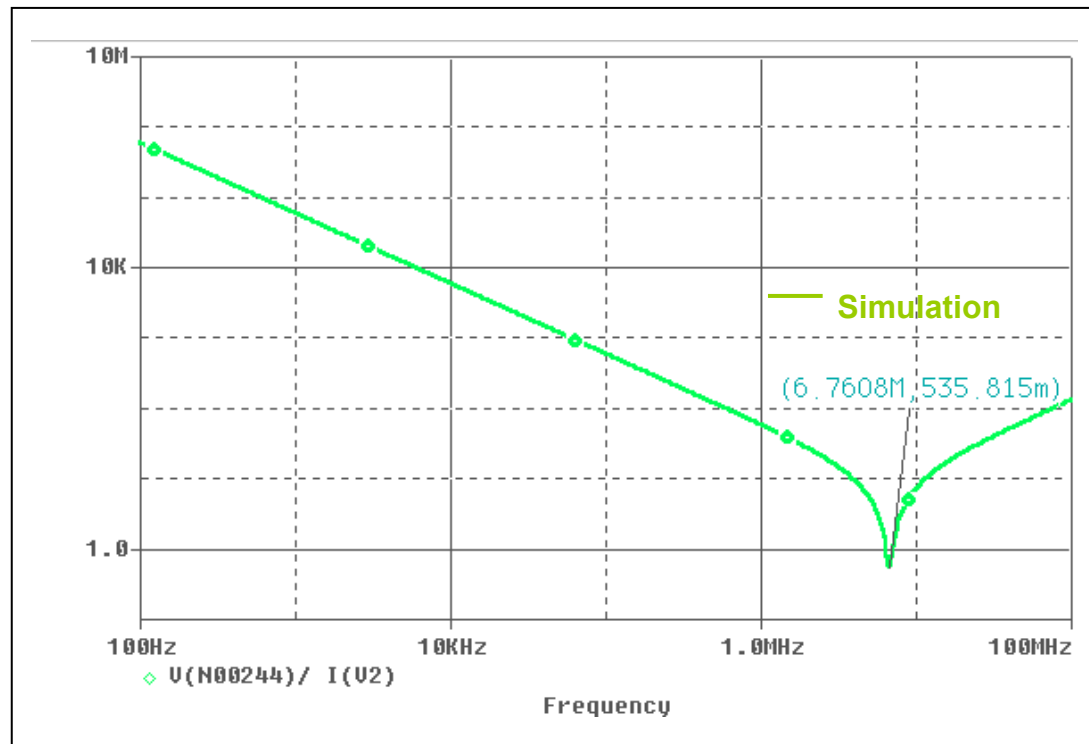
L1	
C1	
R1	

Equivalent circuit

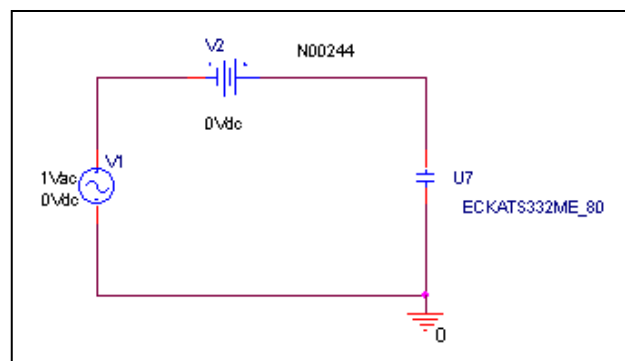


Frequency vs. |Z| Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	640.398K	599.781K	6.3425
1K	64.4947K	59.978K	7.0032
10K	6.4729K	5.9978K	7.3398
100K	649.132	599.65	7.6228
1M	63.9174	58.666	8.2159
10M	6.64022	7.1705	7.9859
100M	129.454	130.885	1.1054

	Measurement	Simulation	%Error
FSRF(Hz)	6.878599M	6.7608M	1.7125
IZI (ohm)	534.986m	535.815m	0.1550