

Device Modeling Report

COMPONENTS: CAPACITOR/ CERAMIC
PART NUMBER: ECKATS152ME
MANUFACTURER: PANASONIC
REMARK: TA=25C



Bee Technologies Inc.

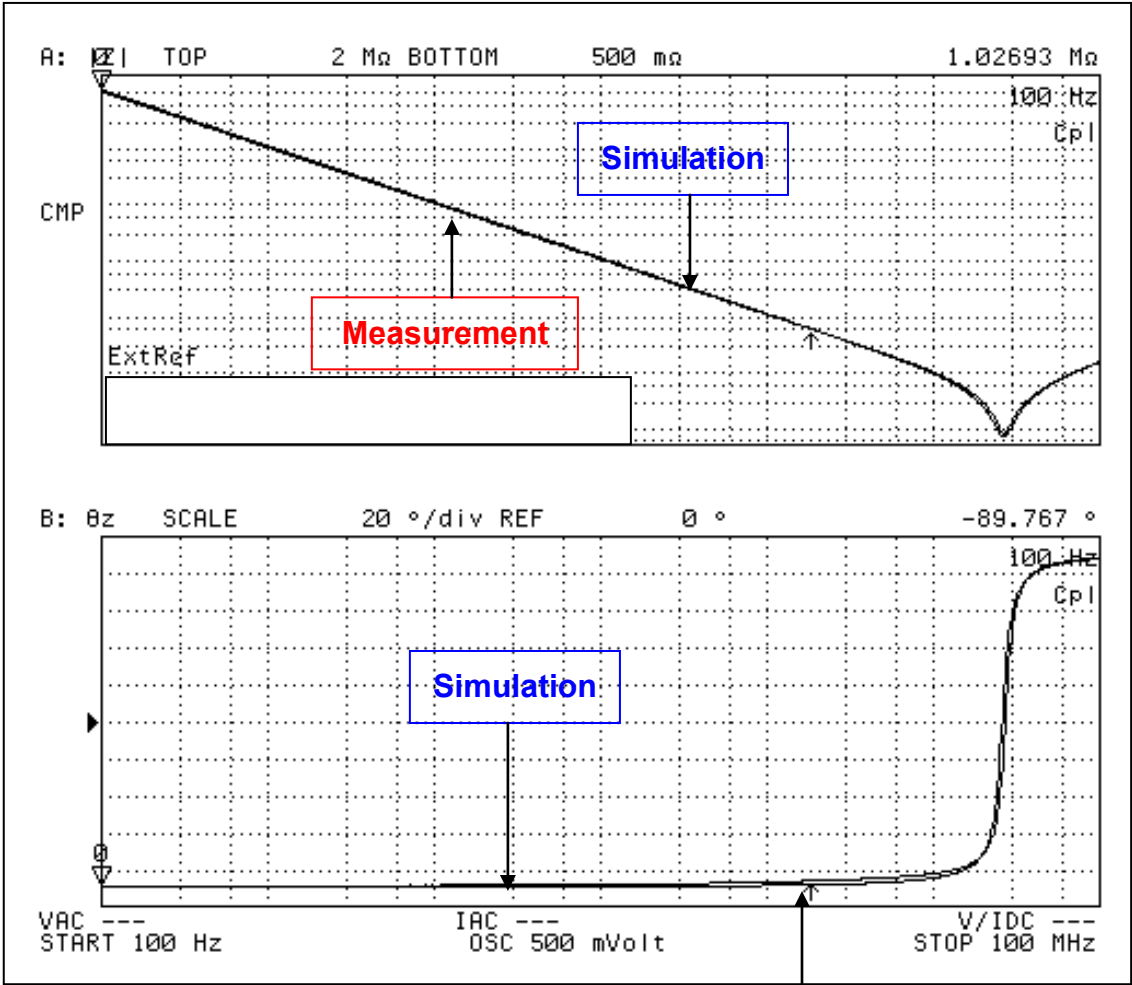
Theory: Auto Balancing Bridge Method

Optimization of Simulation

Range of adjustment Frequency:100Hz to100M(Hz)
Frequency vs. |Z| and Frequency vs. θ_z Characteristic

Attention)

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



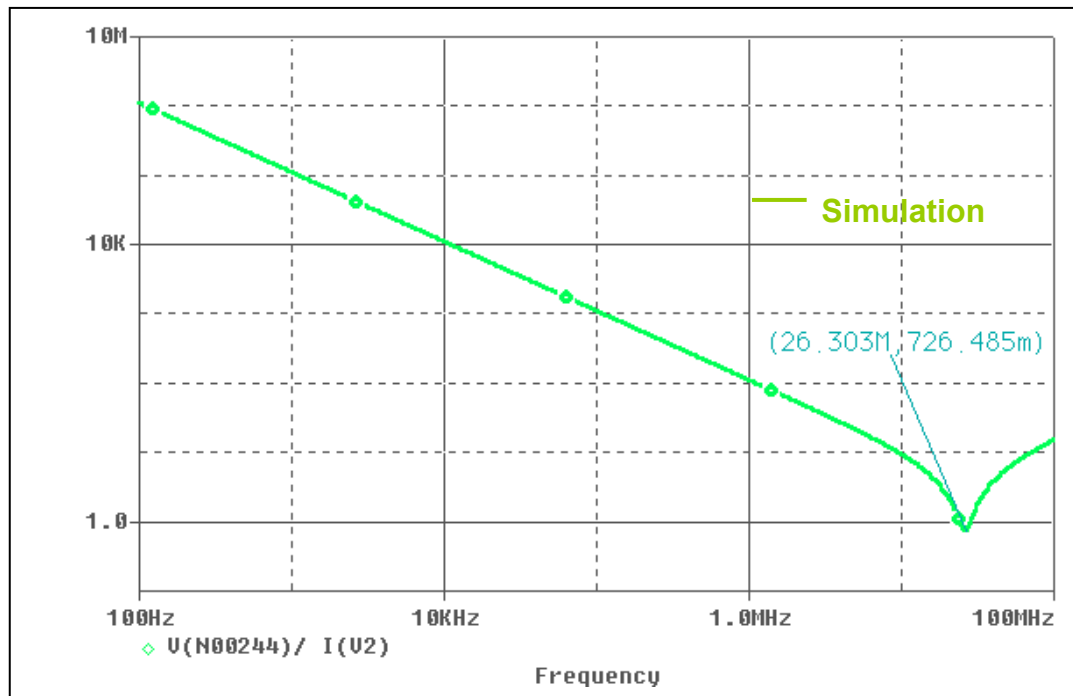
L1	
C1	
R1	

Equivalent circuit

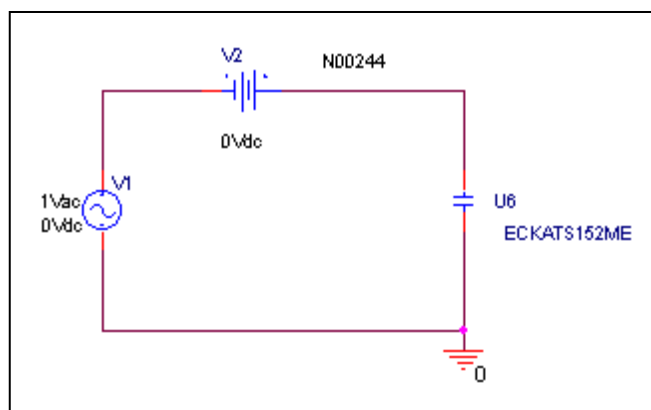


Frequency vs. |Z| Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	1.02693M	1.1060M	7.6996
1K	102.983K	110.603K	7.3993
10K	10.3624K	11.060K	6.7320
100K	1.0462K	1.1060K	5.7159
1M	107.673	110.445	2.5745
10M	10.0794	9.4900	5.8476
100M	14.8042	14.893	0.5998

	Measurement	Simulation	%Error
FSRF(Hz)	27.384M	26.303M	3.9476
IZI (ohm)	733.66m	726.485m	0.9780