

Device Modeling Report

COMPONENTS: CAPACITOR/CERAMIC
PART NUMBER: ECKATS332ME
MANUFACTURER: PANASONIC
REMARK: TA=60C



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

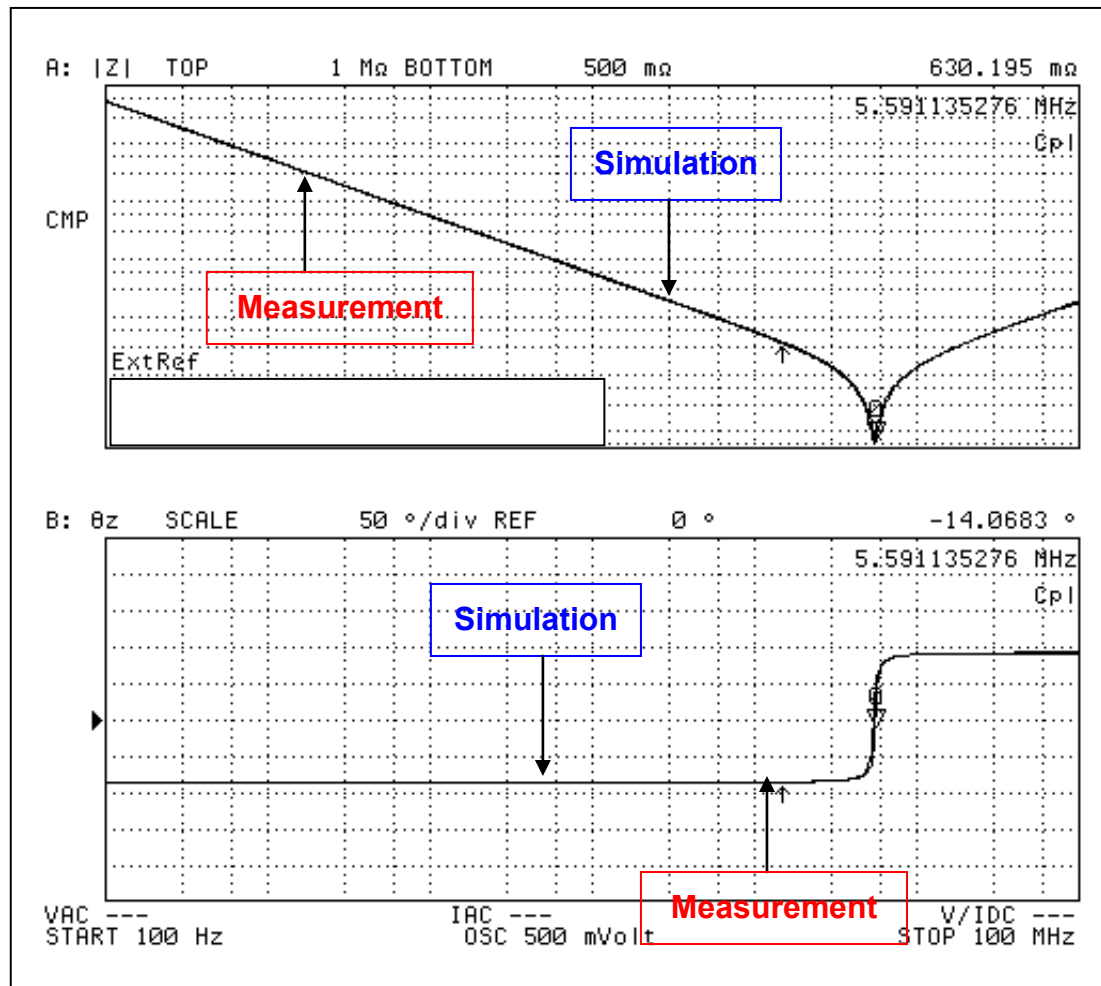
Optimization of Simulation

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)



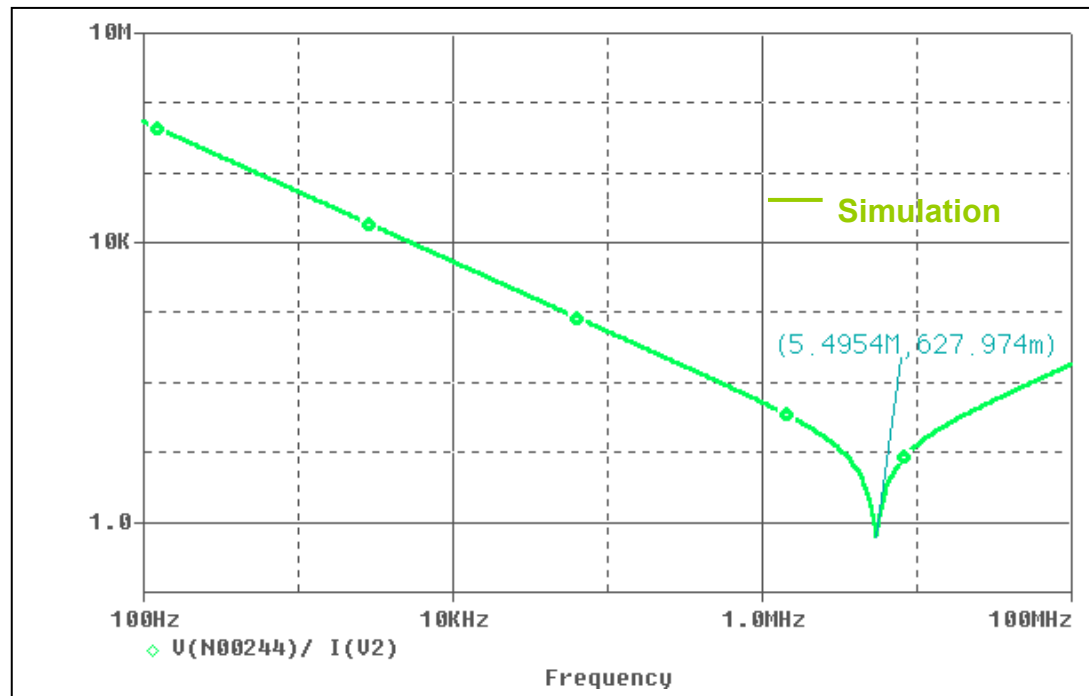
L1	
C1	
R1	

Equivalent circuit

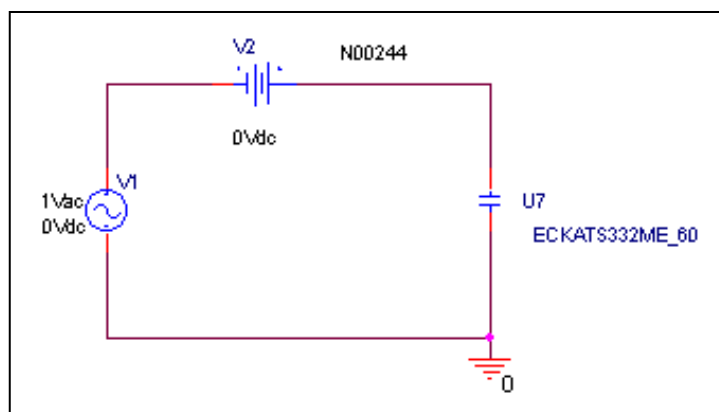


Frequency vs. |Z| Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	549.541K	536.356K	2.3993
1K	55.2772K	53.636K	2.9690
10K	5.55369K	5.3635K	3.4246
100K	558.235	536.178	3.9512
1M	54.6141	51.863	5.0373
10M	12.1772	12.421	2.0021
100M	165.61	177.151	6.9688

	Measurement	Simulation	%Error
FSRF(Hz)	5.59113M	5.4954M	1.7122
IZI (ohm)	631.291m	627.974m	0.5254