Device Modeling Report

COMPONENTS: CAPACITOR/ CERAMIC
PART NUMBER: ECKATS221MB
MANUFACTURER: PANASONIC
REMARK: TA=80C

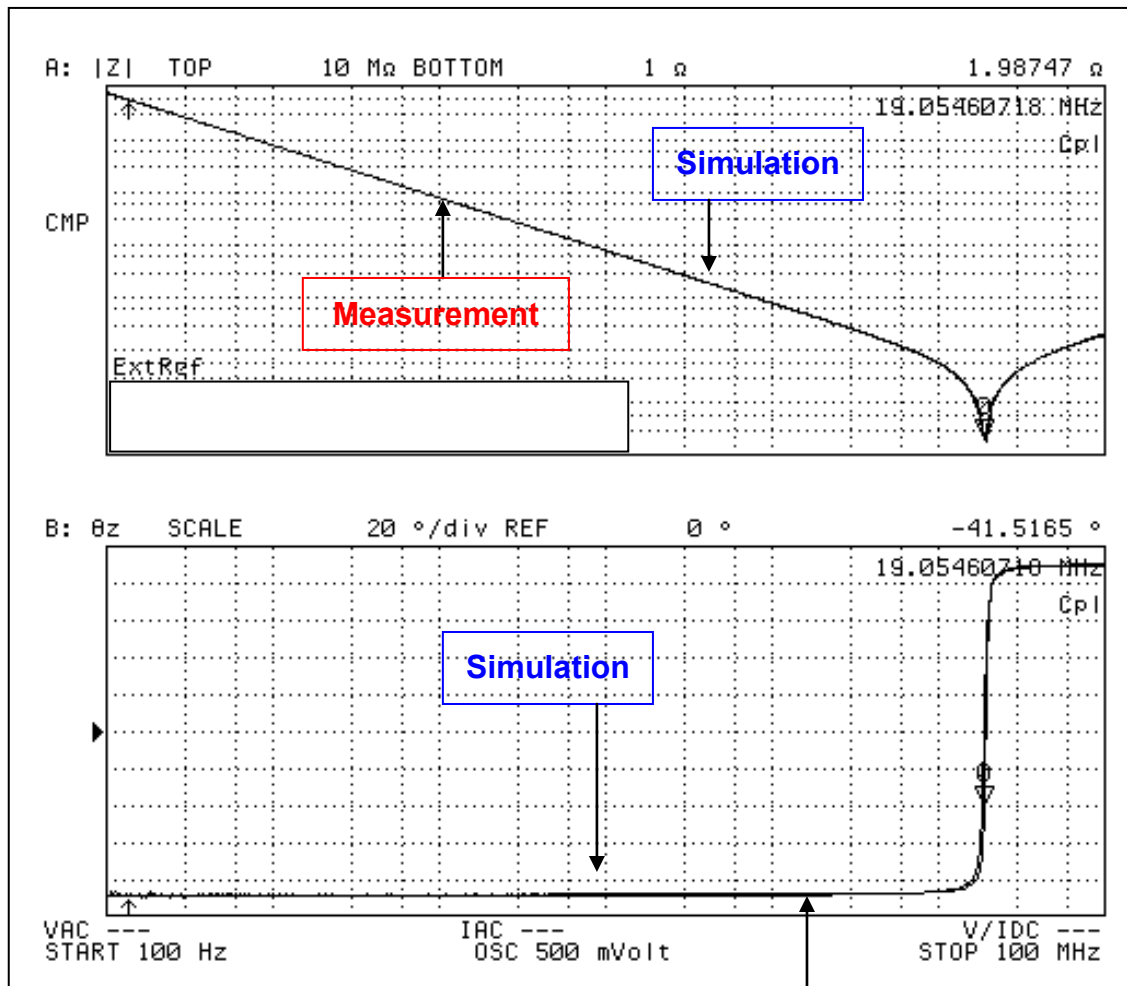**Bee Technologies Inc.**

Theory: Auto Balancing Bridge Method

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

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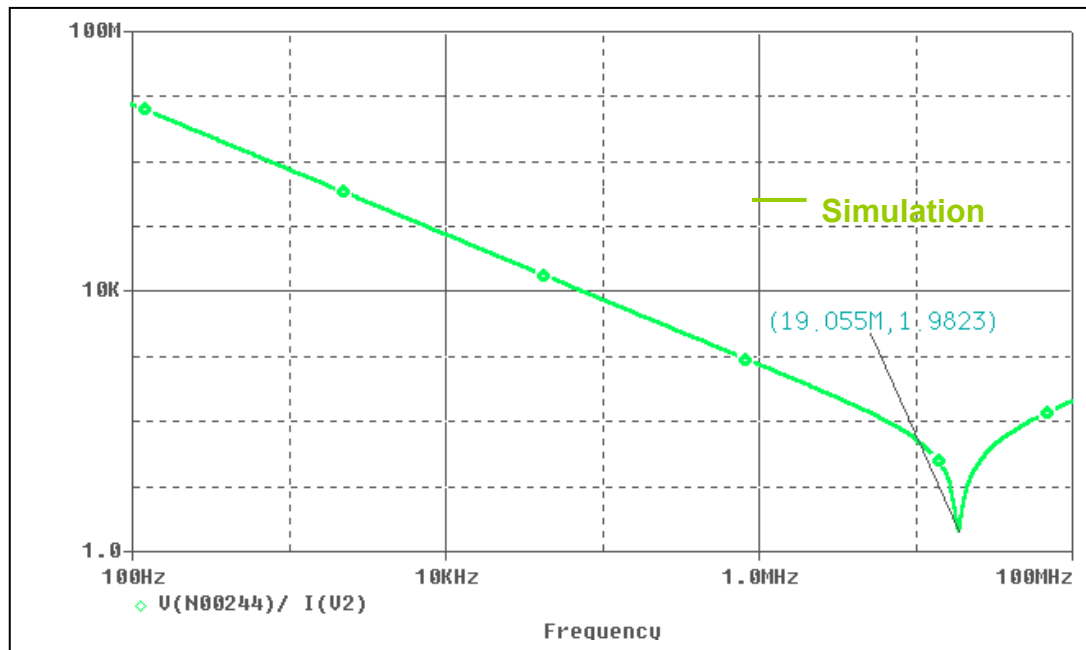*Please use SPICE MODEL within the range from 100Hz to 100M(Hz)*

L1	
C1	
R1	

Equivalent circuit

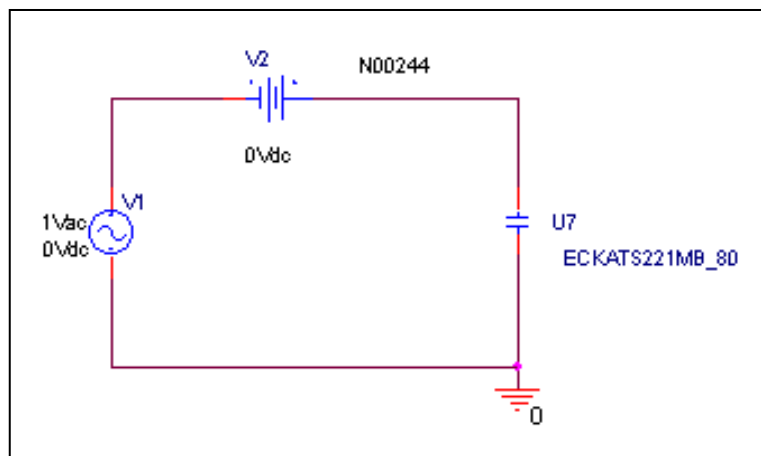|	L1		C1	R1	

Frequency vs. IZI Characteristic

Circuit Simulation result

Evaluation Circuit

Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	7.36445M	7.5568M	2.6119
1K	753.042K	746.620K	0.8528
10K	76.0978K	75.568K	0.6962
100K	7.67298K	7.4660K	2.6975
1M	774.455	753.58	2.6954
10M	57.8747	53.457	7.6332
100M	180.515	202.240	12.0350

	Measurement	Simulation	%Error
FSRF(Hz)	18.535M	19.055M	2.8055
IZI (ohm)	1.96561	1.9823	0.8491