Device Modeling Report

COMPONENTS: CAPACITOR/CERAMIC
PART NUMBER: DE1B3KX681KA5B
MANUFACTURER: MURATA
REMARK: TA=40C

Bee Technologies Inc.

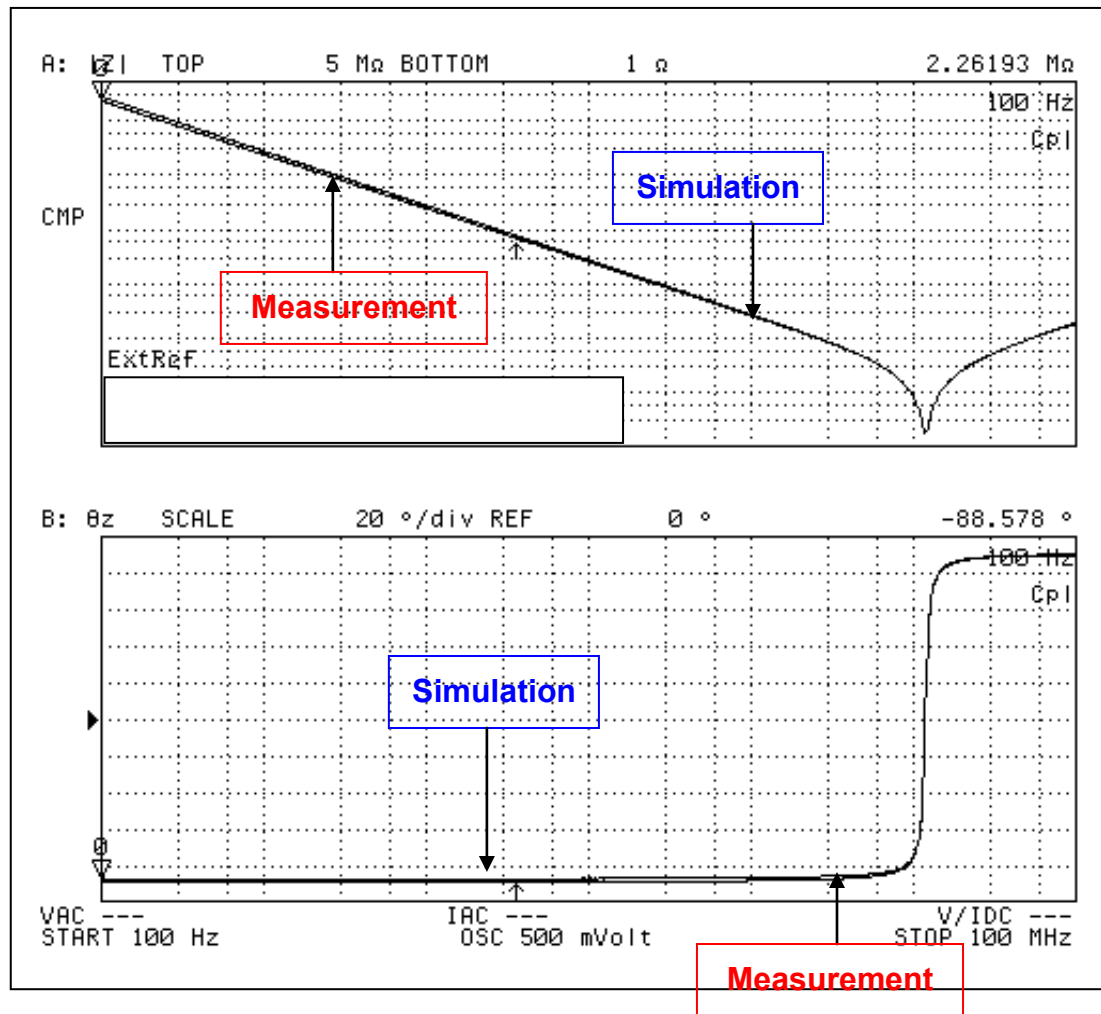**Theory: Auto Balancing Bridge Method**

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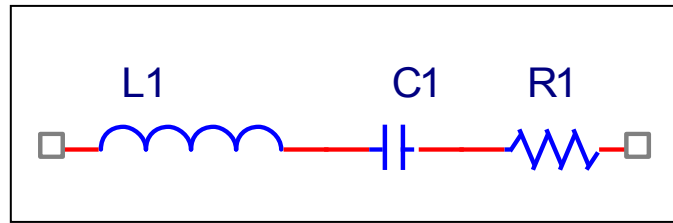Frequency vs.|Z| and Frequency vs. θz Characteristic

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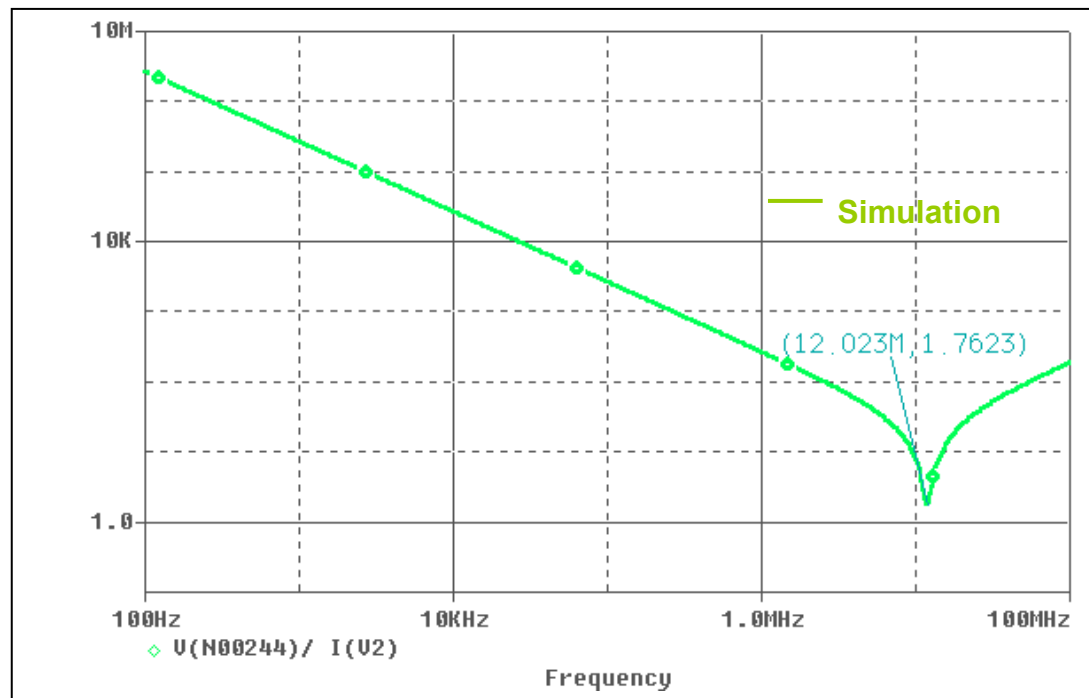*Please use SPICE MODEL within the range from 100Hz to 100M(Hz)*

L1	
C1	
R1	

L1   C1   R1

Frequency vs. IZI Characteristic

Circuit Simulation result

Graph axes: vertical axis from 1.0 to 10M, horizontal axis Frequency from 100Hz to 100MHz.

Legend: Simulation

(12.023M, 1.7623)

◇ V(N00244)/ I(V2)

Frequency

Evaluation Circuit

V2
N00244
0Vdc

V1
1Vac
0Vdc

U6
DE1B3KX681KA5B_40

0
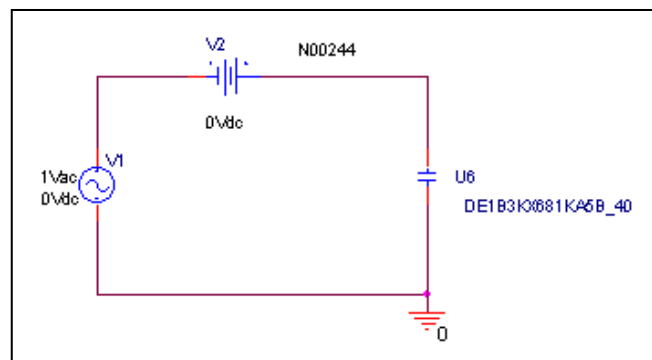
Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	2.27555M	2.6796M	17.7561
1K	230.674K	267.961K	16.1644
10K	23.7076K	26.796K	13.0270
100K	2.45059K	2.679K	9.3369
1M	254.251	266.092	4.6572
10M	8.28175	8.031	3.0289
100M	175.15	184.779	5.4976

	Measurement	Simulation	%Error
FSRF(Hz)	11.9536M	12.023M	0.5806
IZI (ohm)	1.74393	1.7623	1.0534