

# Device Modeling Report

COMPONENTS: CAPACITOR/ ELECTROLYTIC  
PART NUMBER: LXZ25VB220MH12  
MANUFACTURER: Nippon Chemi-Con Corporation  
THERMAL: Ta= 60C (degree)



Bee Technologies Inc.

## Theory: Auto Balancing Bridge Method

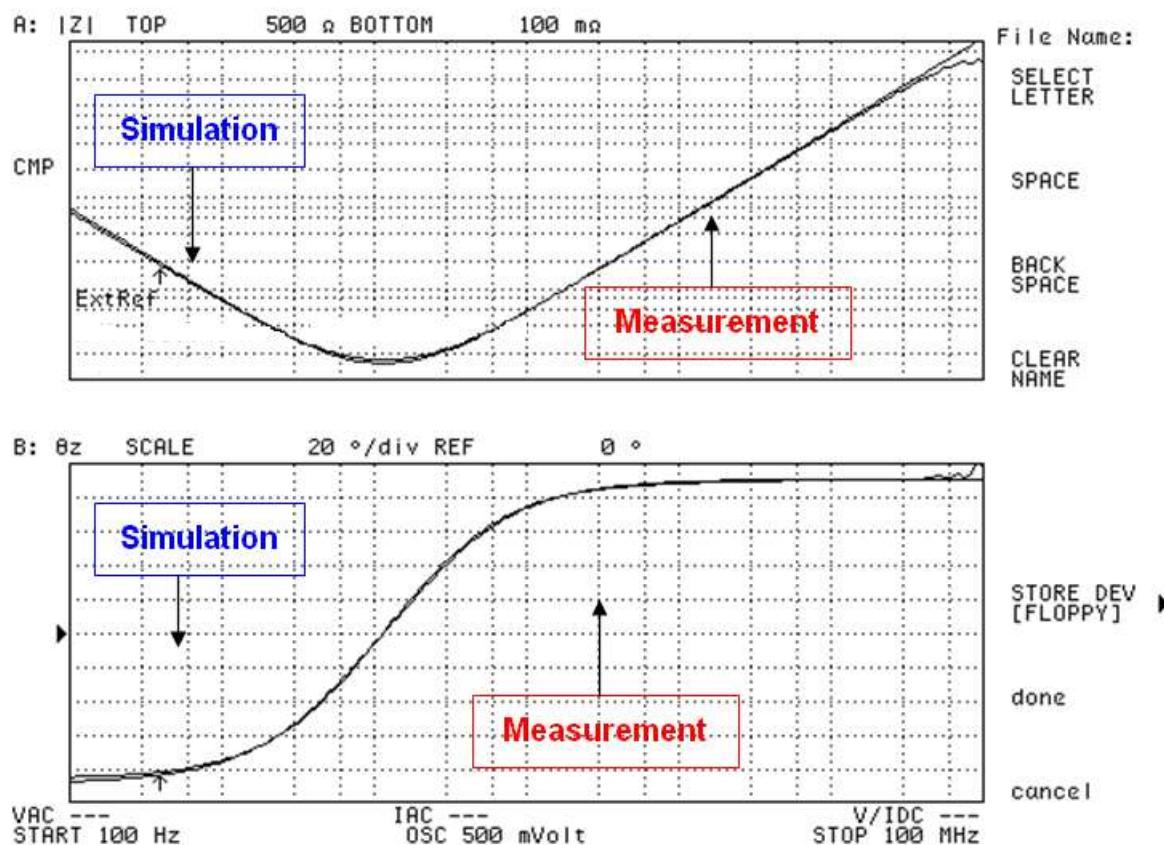
### Optimization of Simulation

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

Frequency vs. |Z| and Frequency vs.  $\theta_z$  Characteristic

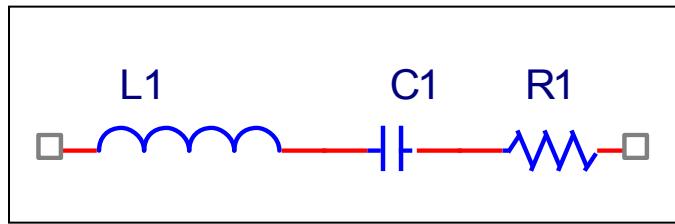
Attention)

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



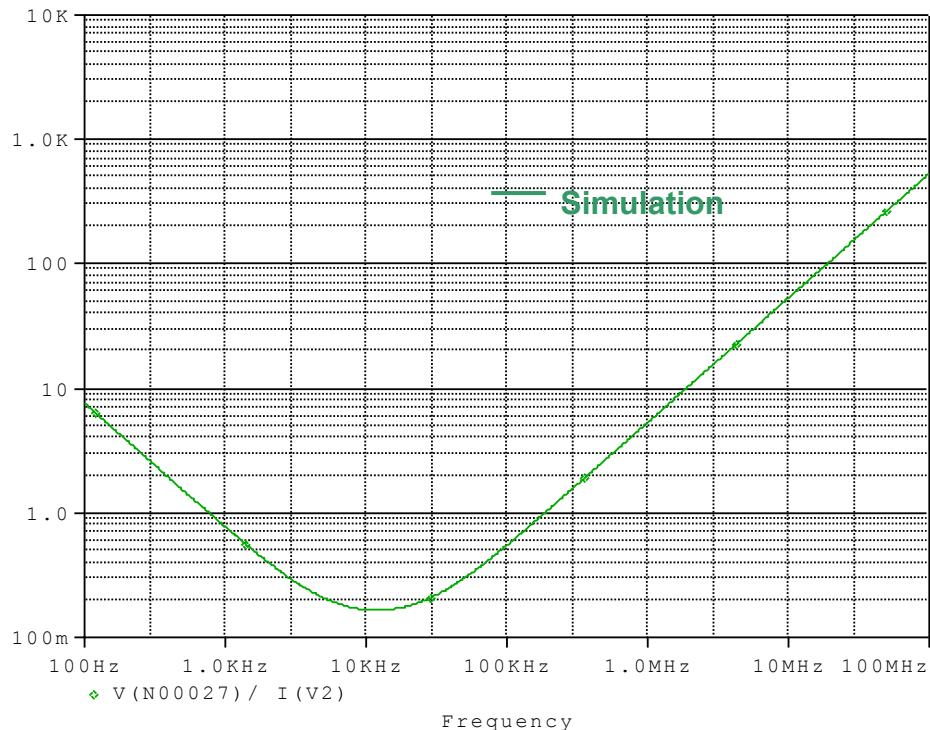
	Measurement	
R1		
C1		
L1		

## Equivalent circuit

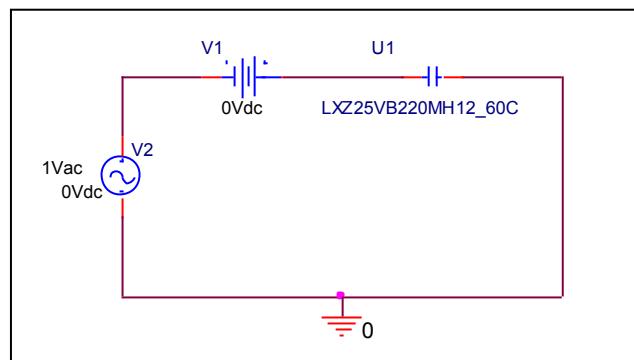


## Frequency vs. IZI Characteristic

### Circuit Simulation result



### Evaluation Circuit



Simulation result

Frequency (Hz)	Z  ( $\Omega$ )		% Error
	Measurement	Simulation	
100	6.758	7.603	12.509
1K	708.690	772.792	9.045
10K	150.096	166.980	11.249
100K	545.557	551.287	1.050
1M	5.441	5.337	- 1.920
10M	51.915	53.348	2.760