

# Device Modeling Report

COMPONENTS : CHOKE COIL  
PART NUMBER : 8RHB  
VALUE : 330 uH  
CURRENT MAX : 0.54 A  
MANUFACTURER : TOKO



Bee Technologies Inc.

## Theory: Auto Balancing Bridge Method

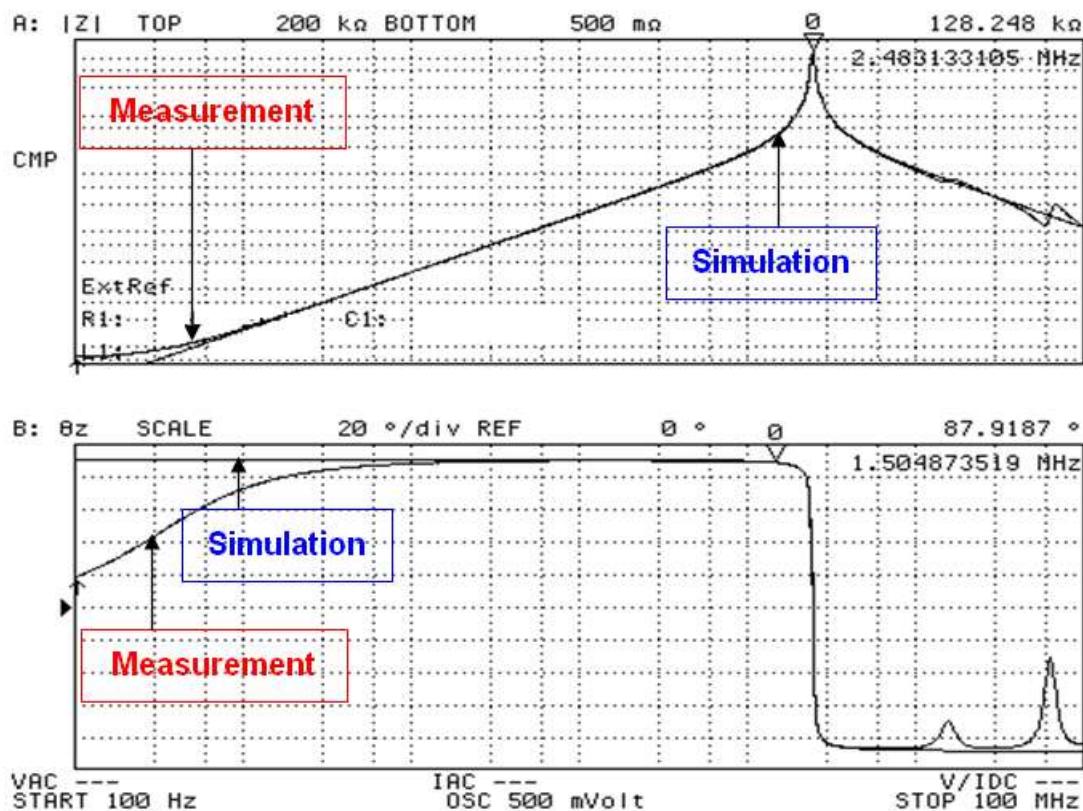
### Optimization of Simulation

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

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

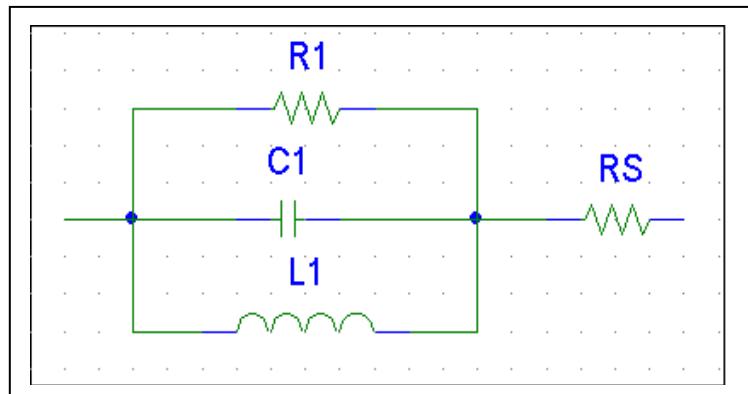
Attention)

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



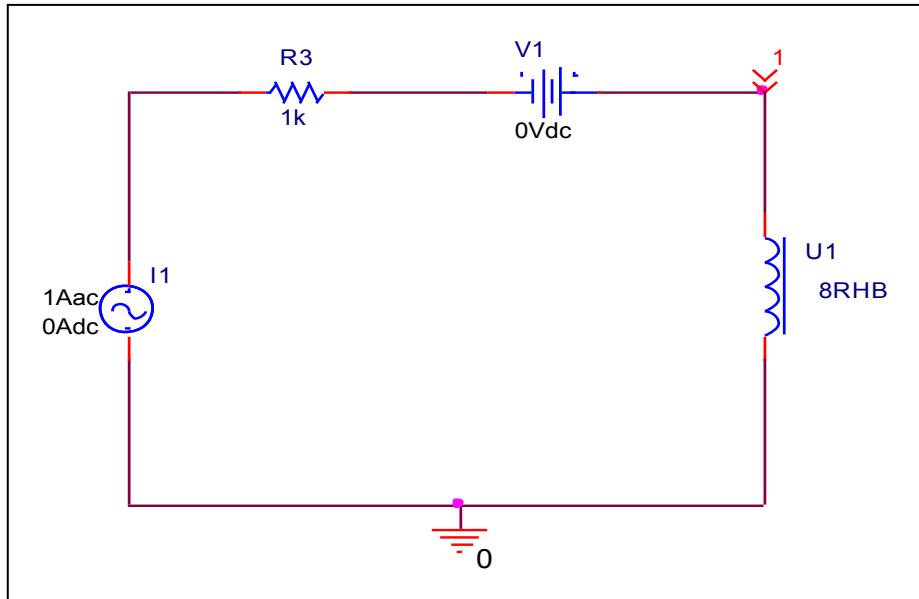
L1	
C1	
R1	

**Equivalent circuit**

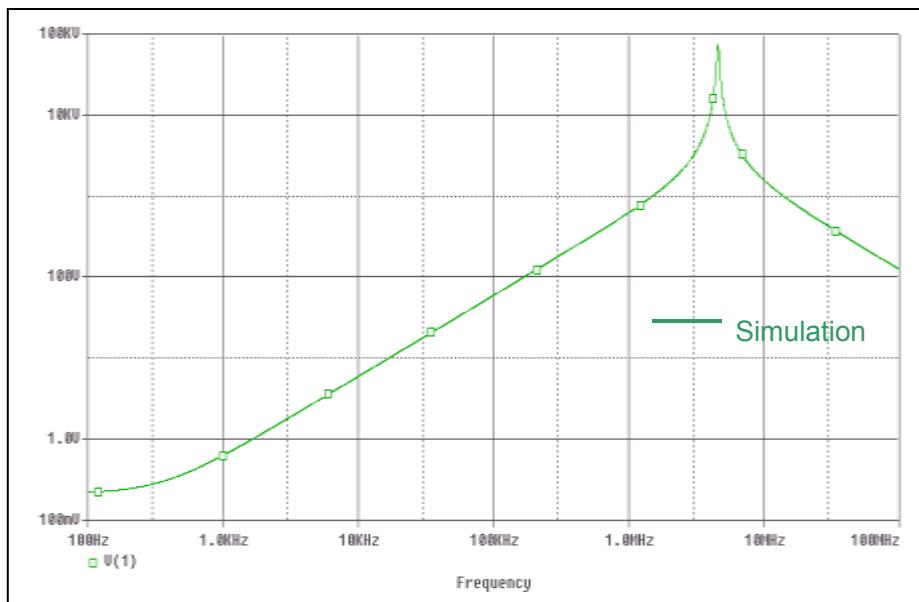


## Frequency vs. |Z| Characteristic

Evaluation circuit



Simulation result



**Comparison Table**

<b>Frequency (Hz)</b>	<b> Z (ohm) : Measurement</b>	<b> Z (ohm) : Simulation</b>	<b>% Error</b>
<b>100</b>	653.11 m	657.570 m	-0.683
<b>1K</b>	2.01818	1.9875	1.520
<b>10K</b>	18.8189	18.861	-0.224
<b>100K</b>	184.529	187.720	-1.729
<b>1M</b>	2.15372 k	2.2529 k	-4.605
<b>100M</b>	118.049	115.403	2.241

	<b>Measurement</b>	<b>Simulation</b>	<b>% Error</b>
<b>F<sub>SRF</sub>(Hz)</b>	2.483 M	2.473 M	0.403
<b> Z  (ohm), at F<sub>SRF</sub></b>	127.99 k	128.722 k	-0.572