

Device Modeling Report

COMPONENTS : CHOKE COIL
PART NUMBER : 8RHB
VALUE : 4.7 μ H
CURRENT MAX : 3.2 A
MANUFACTURER : TOKO



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

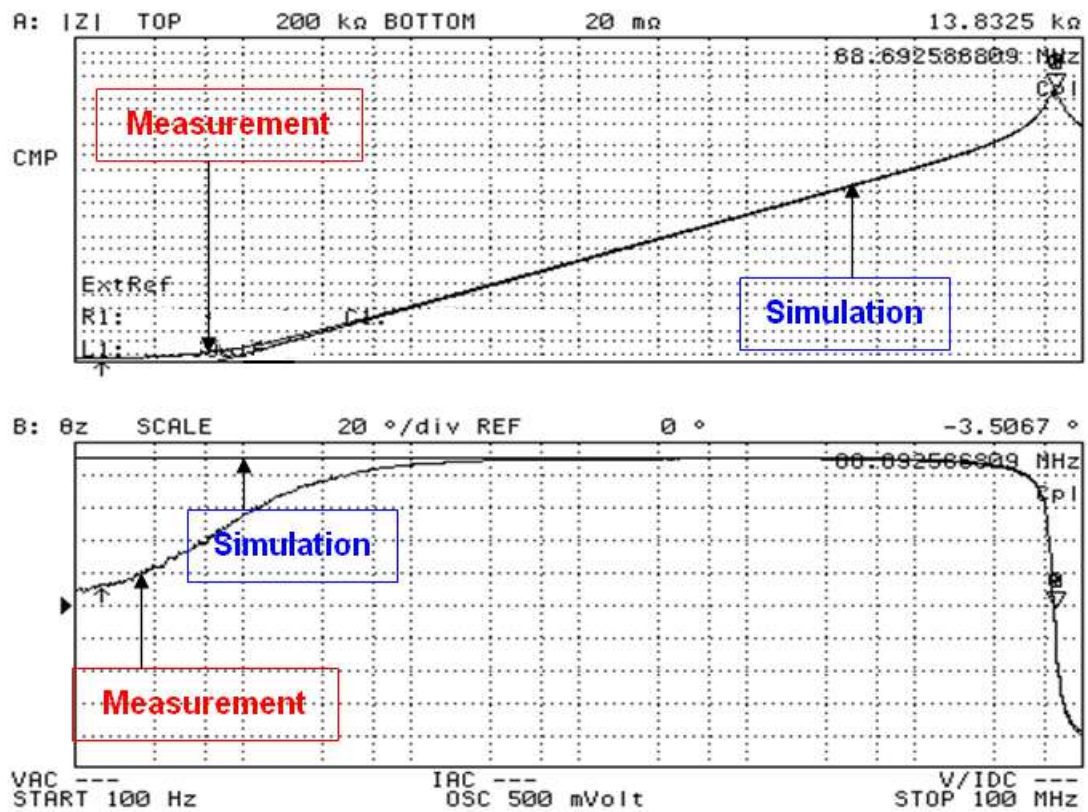
Optimization of Simulation

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

Frequency vs. $|Z|$ and Frequency vs. θ_z Characteristic

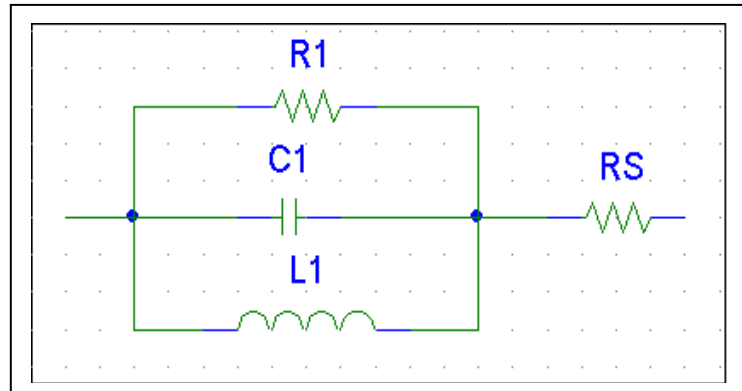
Attention)

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



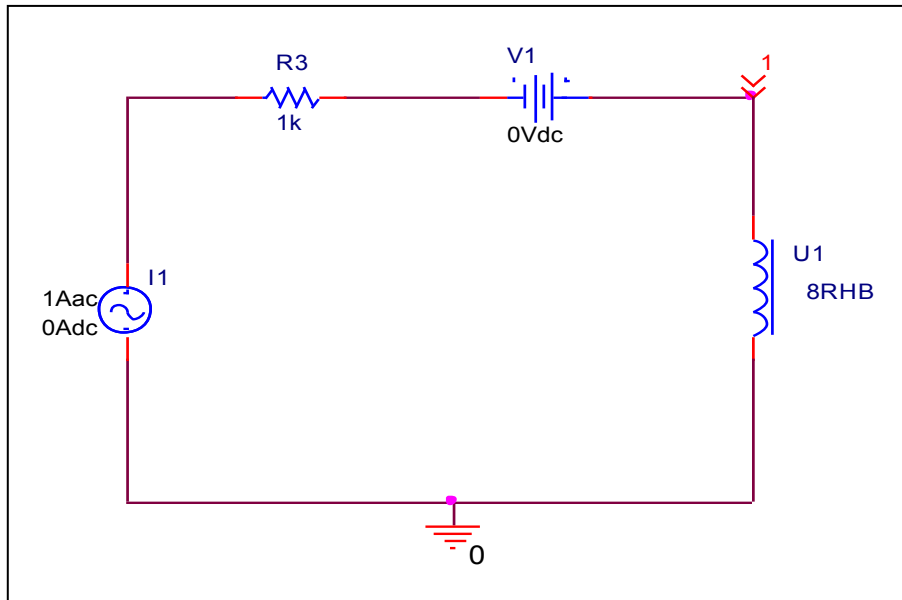
L1	
C1	
R1	

Equivalent circuit

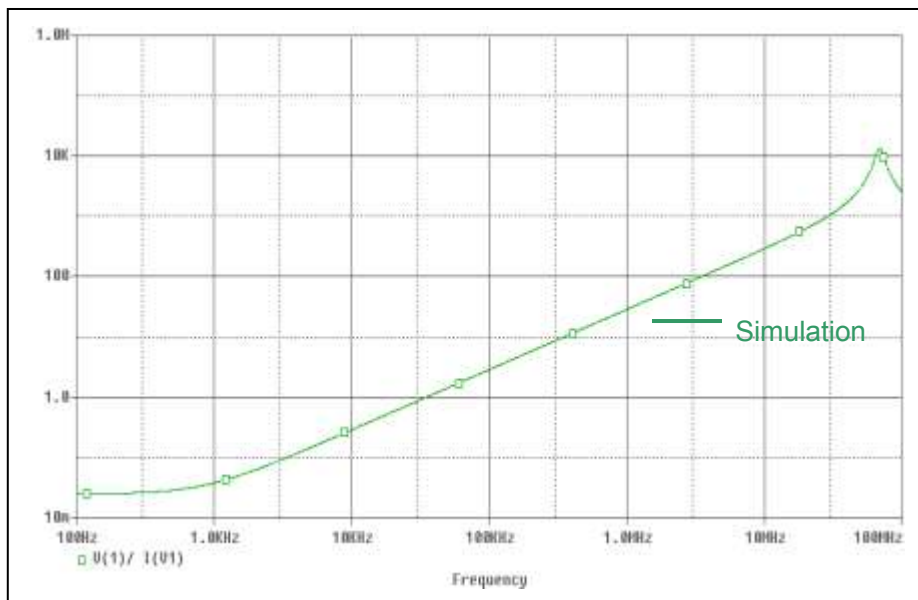


Frequency vs. $|Z|$ Characteristic

Evaluation circuit



Simulation result



Comparison Table

Frequency (Hz)	$ Z (\text{ohm})$: Measurement	$ Z (\text{ohm})$: Simulation	% Error
1K	39.4547 m	38.068 m	3.515
1M	30.4296	28.847	5.201
10M	306.562	294.646	3.887
100M	2.41766 k	2.4858 k	-2.818

	Measurement	Simulation	% Error
F_{SRF} (Hz)	68.693 M	68.424 M	0.392
Z (ohm), at F_{SRF}	13.8104 k	13.438 k	2.697