

Device Modeling Report

COMPONENTS : CHOKE COIL
PART NUMBER : 8RHB
VALUE : 470 μ H
CURRENT MAX : 0.47 A
MANUFACTURER : TOKO



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

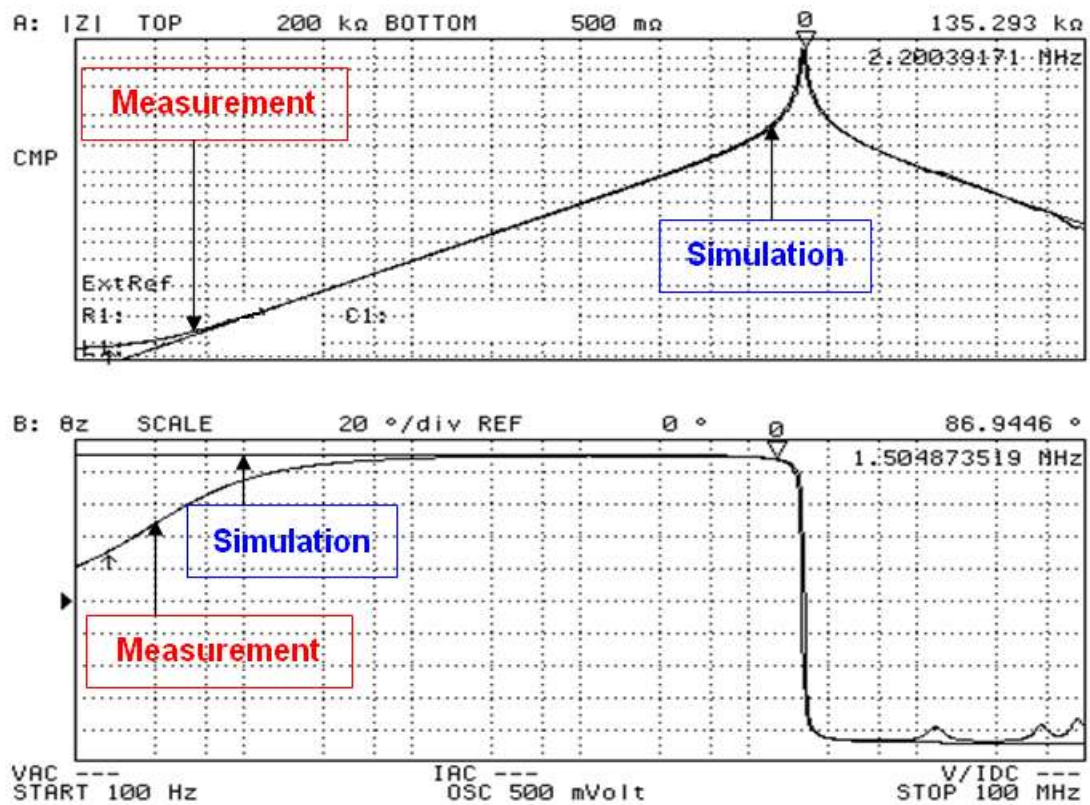
Optimization of Simulation

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

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

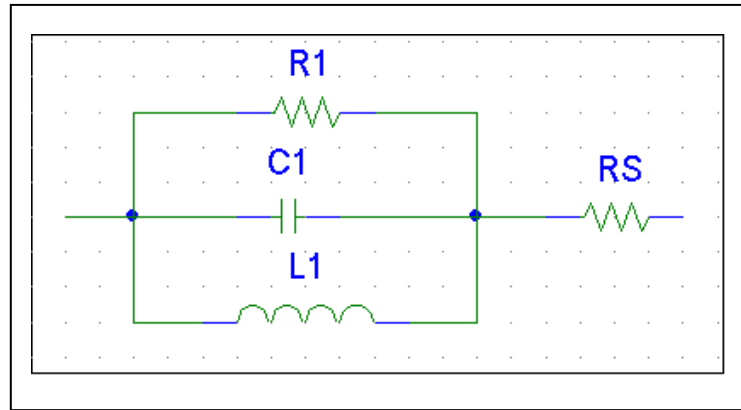
Attention)

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



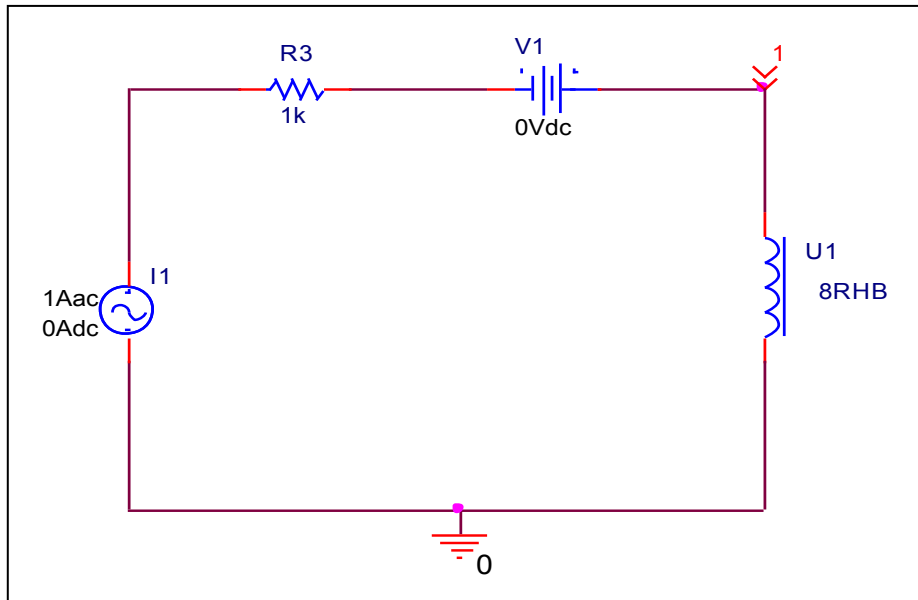
L1	
C1	
R1	

Equivalent circuit

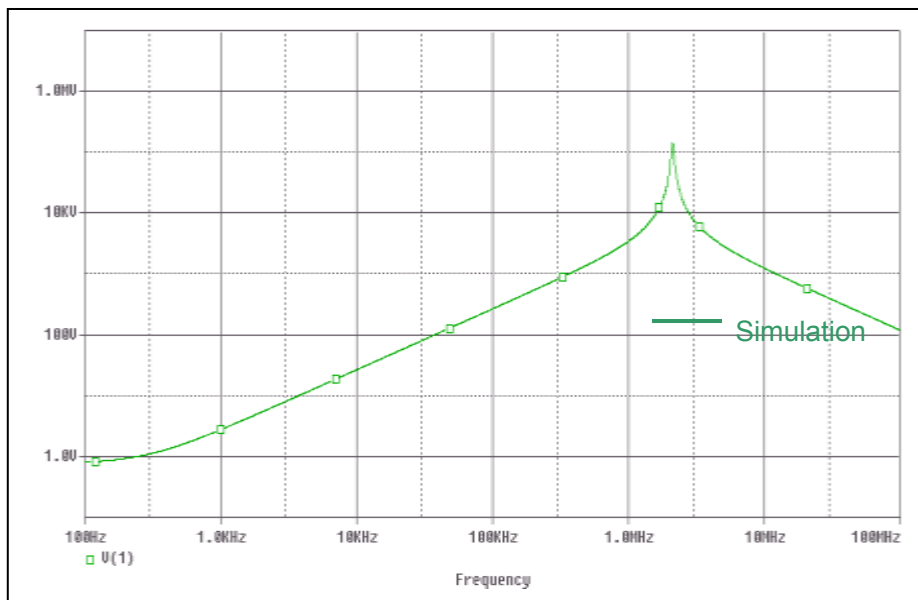


Frequency vs. $|Z|$ Characteristic

Evaluation circuit



Simulation result



Comparison Table

Frequency (Hz)	Z (ohm) : Measurement	Z (ohm) : Simulation	% Error
100	802.085 m	804.913 m	-0.353
1K	2.78297	2.7643	0.671
10K	26.1401	26.590	-1.721
100K	255.495	266.379	-4.260
10M	1.19374 k	1.2393 k	-3.817

	Measurement	Simulation	% Error
F_{SRF} (Hz)	2.20 M	2.1115 M	4.023
 Z (ohm), at F_{SRF}	138.161 k	139.980 k	-1.317