

Device Modeling Report

COMPONENTS : CHOKE COIL
PART NUMBER : 8RHB
VALUE : 220 μ H
CURRENT MAX : 0.51 A
MANUFACTURER : TOKO



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

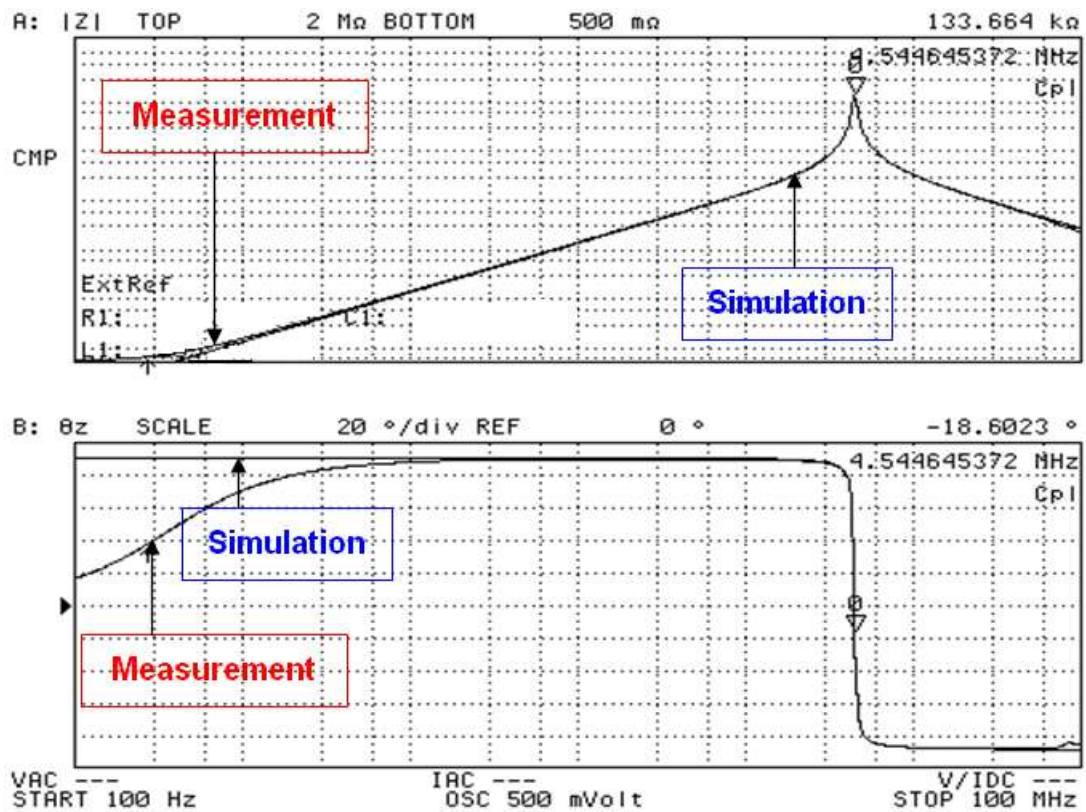
Optimization of Simulation

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

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

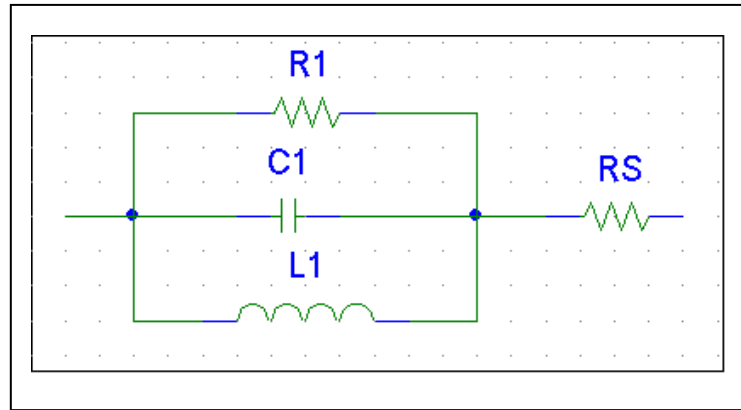
Attention)

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



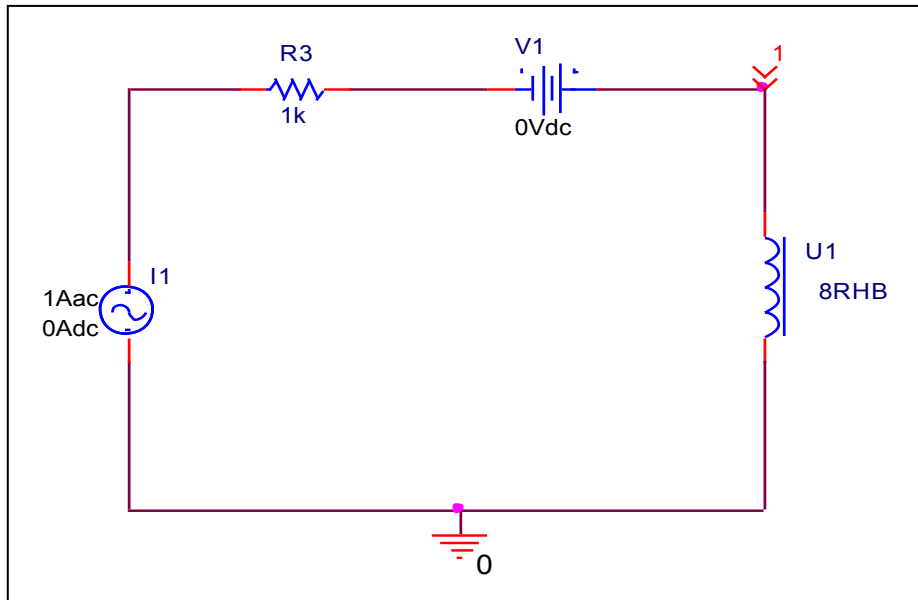
L1	
C1	
R1	

Equivalent circuit

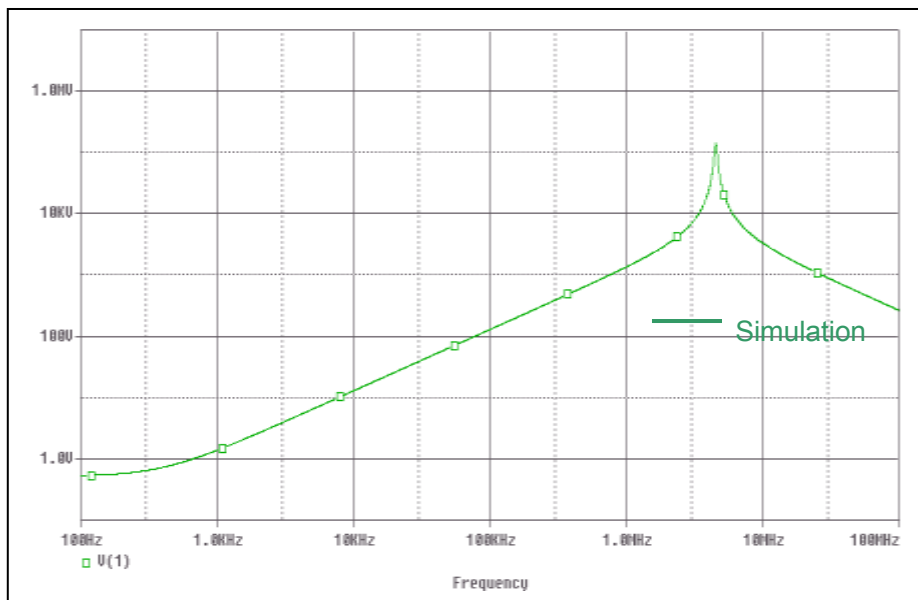


Frequency vs. $|Z|$ Characteristic

Evaluation circuit



Simulation result



Comparison Table

Frequency (Hz)	Z (ohm) : Measurement	Z (ohm) : Simulation	% Error
100	532.413 m	529.996 m	0.454
100K	134.667	128.988	4.217
1M	1.36932 k	1.3557 k	0.995
10M	3.29276 k	3.2966 k	-0.117

	Measurement	Simulation	% Error
F_{SRF} (Hz)	4.545 M	4.5101 M	0.768
 Z (ohm), at F_{SRF}	134.191 k	139.900 k	-4.254