

Device Modeling Report

COMPONENTS : CHOKE COIL
PART NUMBER : 8RHB
VALUE : 33 μ H
CURRENT MAX : 1.4 A
MANUFACTURER : TOKO



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

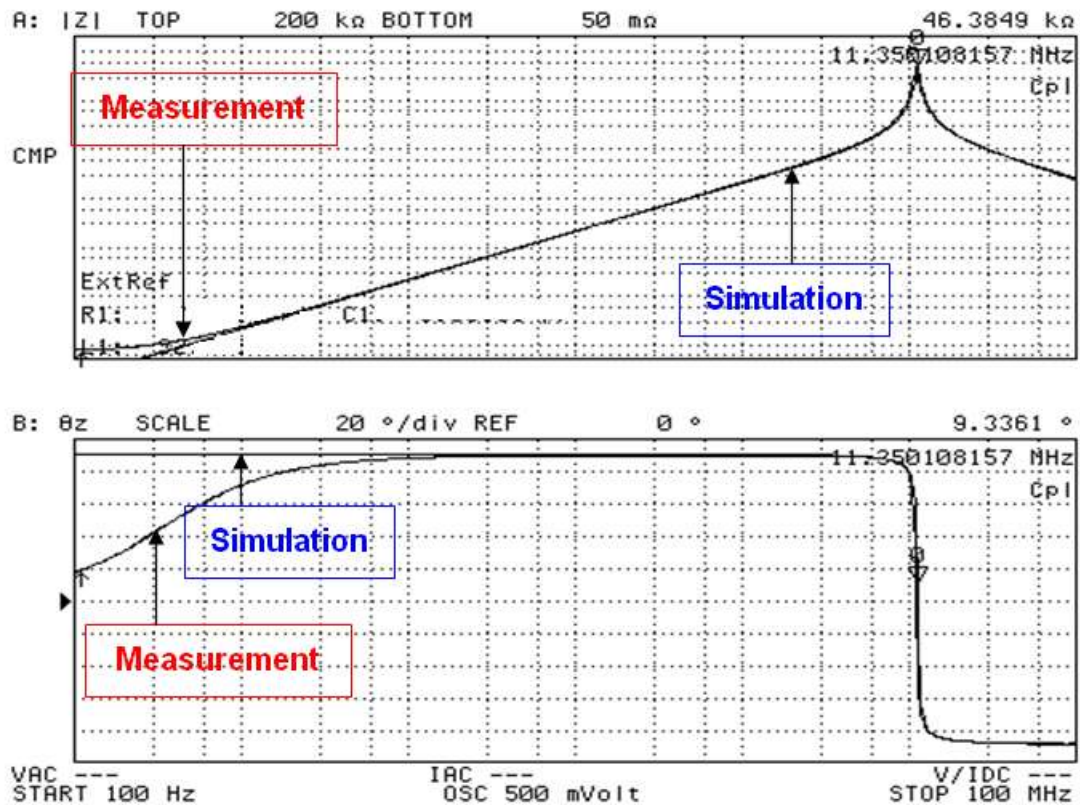
Optimization of Simulation

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

Frequency vs. $|Z|$ and Frequency vs. θ z Characteristic

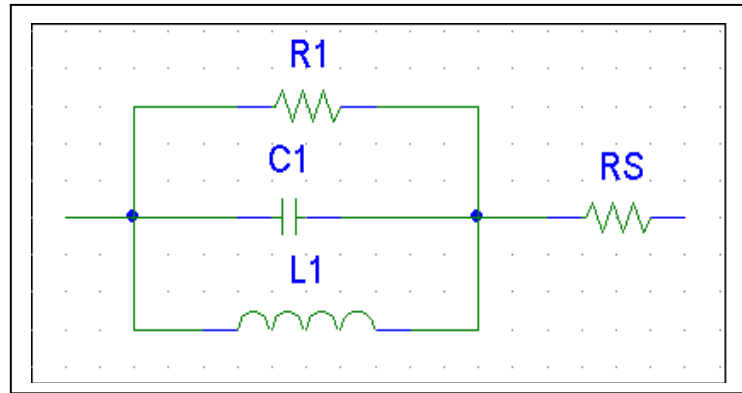
Attention)

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



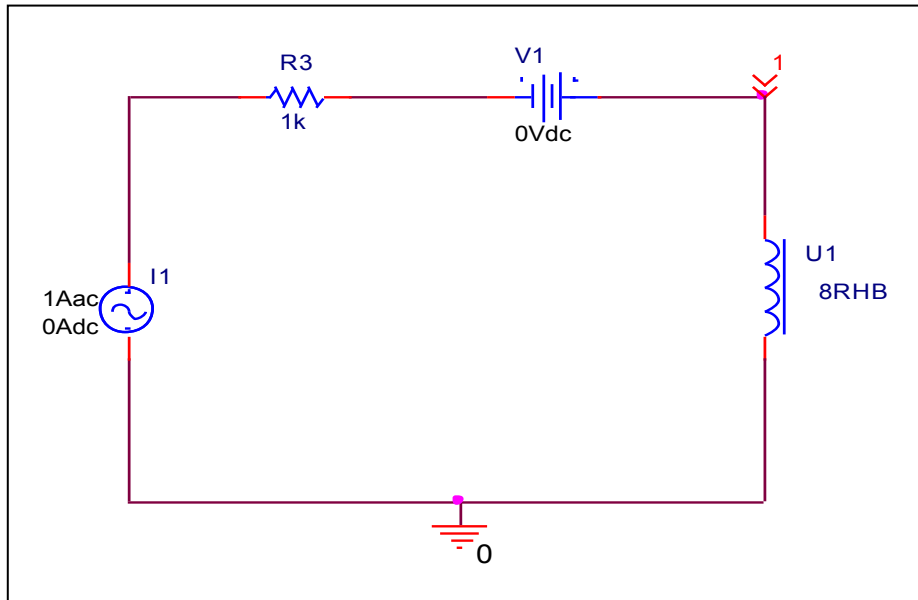
L1	
C1	
R1	

Equivalent circuit

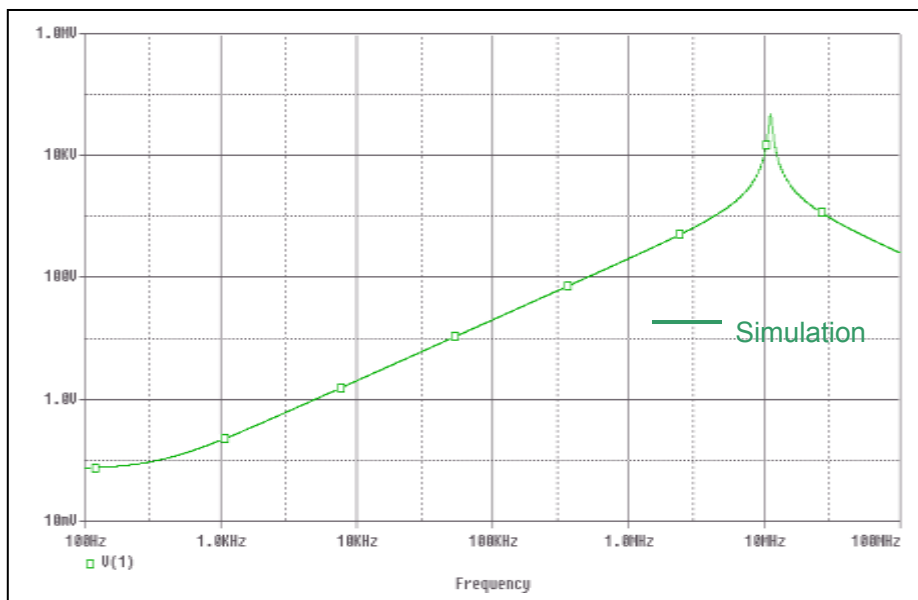


Frequency vs. $|Z|$ Characteristic

Evaluation circuit



Simulation result



Comparison Table

Frequency (Hz)	Z (ohm) : Measurement	Z (ohm) : Simulation	% Error
100	75.6297 m	74.378 m	1.655
1K	224.11 m	213.758 m	4.619
10K	2.07584	2.0154	2.912
100K	20.3452	20.143	0.994
1M	195.326	203.051	-3.955

	Measurement	Simulation	% Error
F_{SRF} (Hz)	11.350 M	11.122 M	2.009
 Z (ohm), at F_{SRF}	46.3849 k	47.582 k	-2.581