

Device Modeling Report

COMPONENTS : CHOKE COIL
PART NUMBER : 8RHB
VALUE : 47 μ H
CURRENT MAX : 1.2 A
MANUFACTURER : TOKO



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

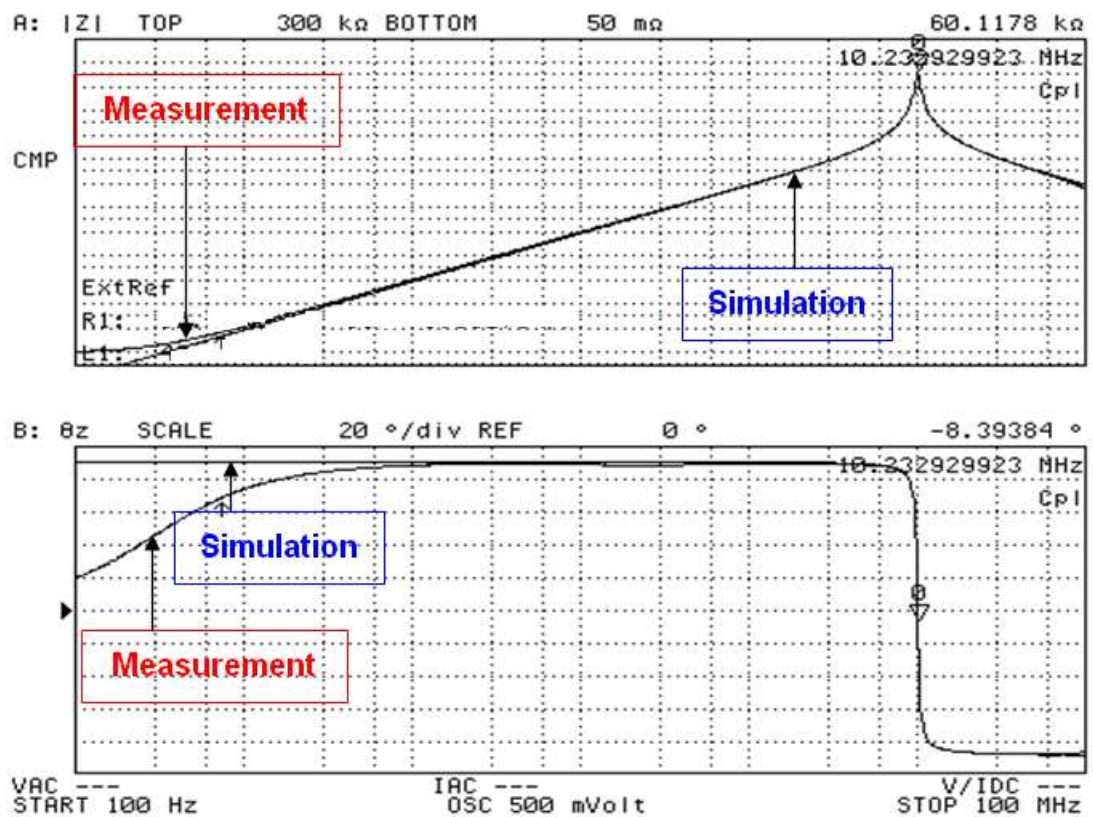
Optimization of Simulation

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

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

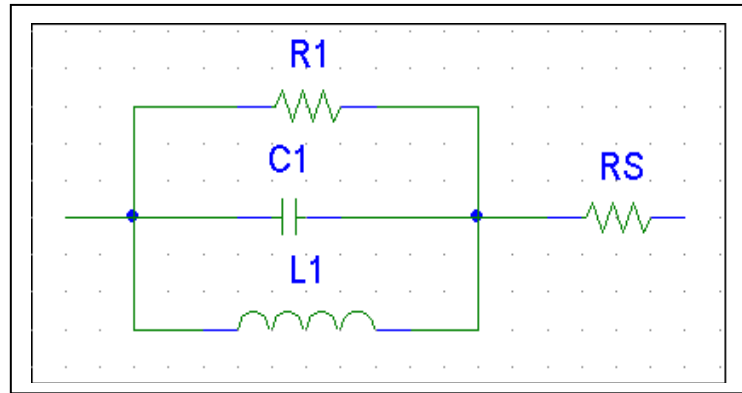
Attention)

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



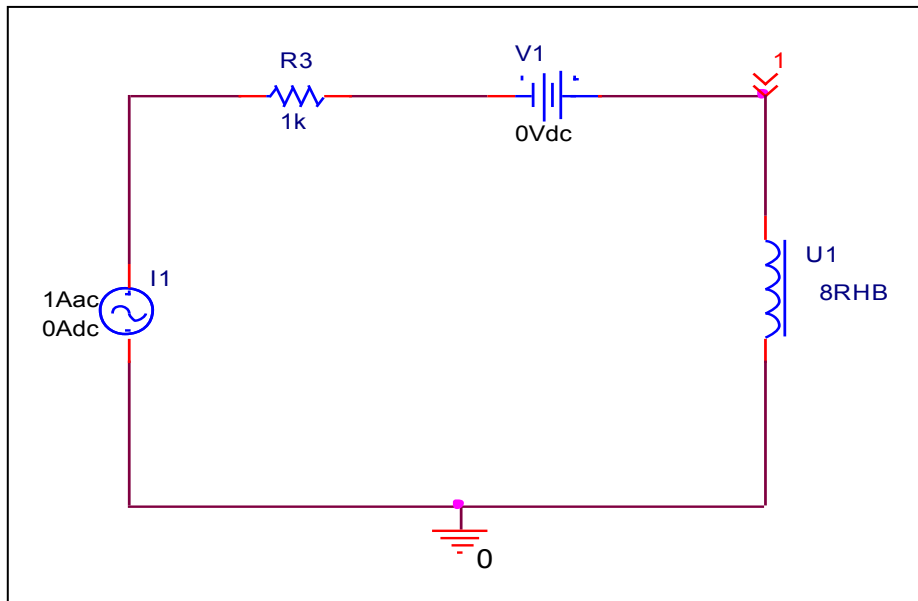
L1	
C1	
R1	

Equivalent circuit

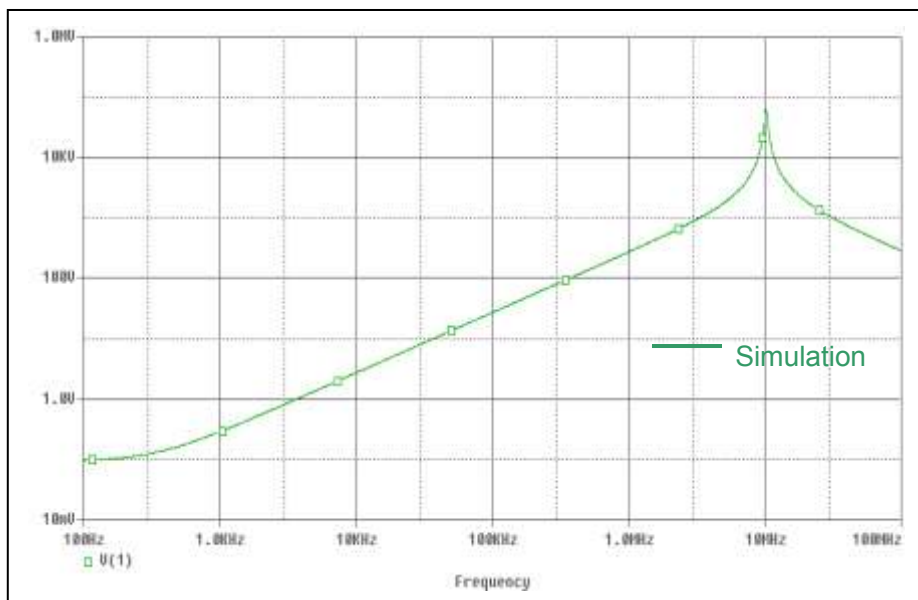


Frequency vs. $|Z|$ Characteristic

Evaluation circuit



Simulation result



Comparison Table

Frequency (Hz)	Z (ohm) : Measurement	Z (ohm) : Simulation	% Error
100	98.0468 m	96.747 m	1.326
1M	277.169	273.320	1.389
10M	46.21012 k	45.772 k	0.948

	Measurement	Simulation	% Error
F_{SRF} (Hz)	10.233 M	10.203 M	0.293
 Z (ohm), at F_{SRF}	60.1178 k	60.371 k	-0.421