

Device Modeling Report

COMPONENTS: COMMON MODE CHOKE COIL
PART NUMBER: HR-24-E153
MANUFACTURER: KOURINGIKEN CO.,LTD.



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

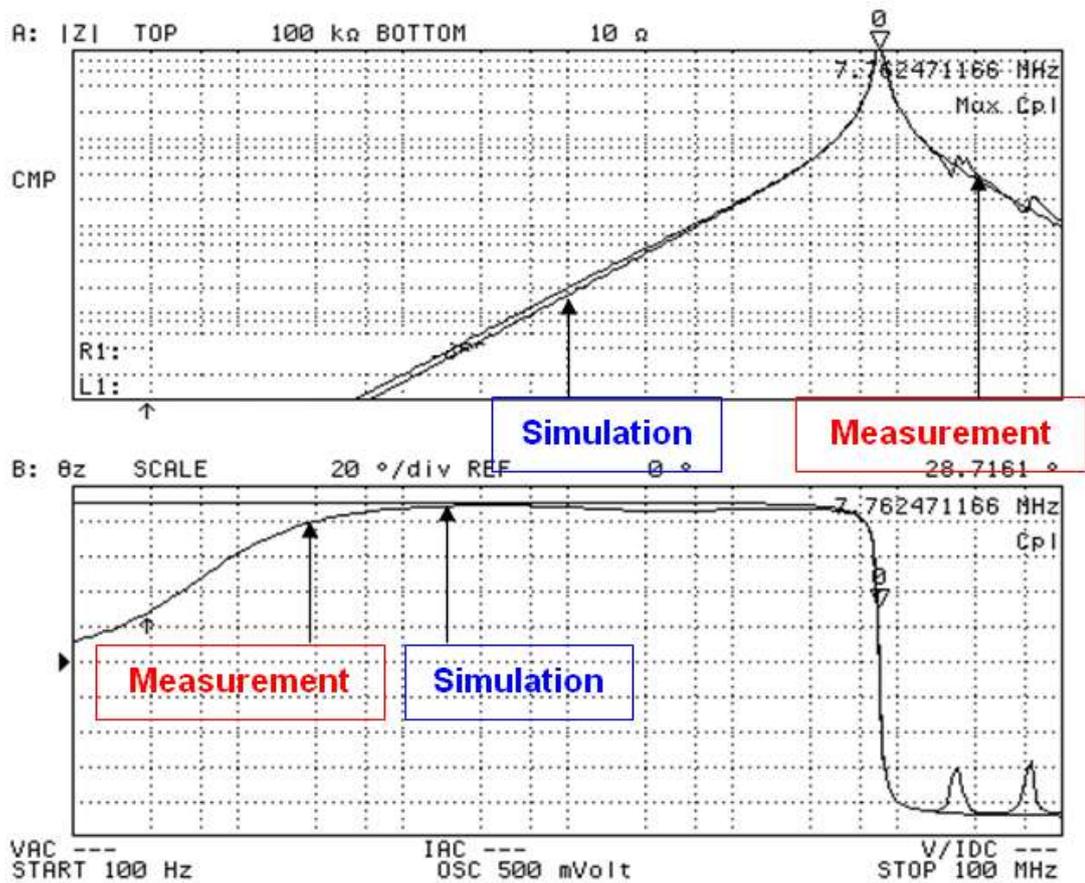
Optimization of Simulation

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

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

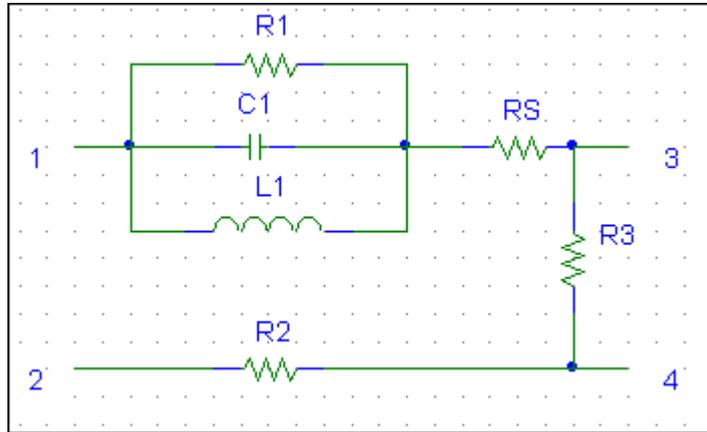
Attention)

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



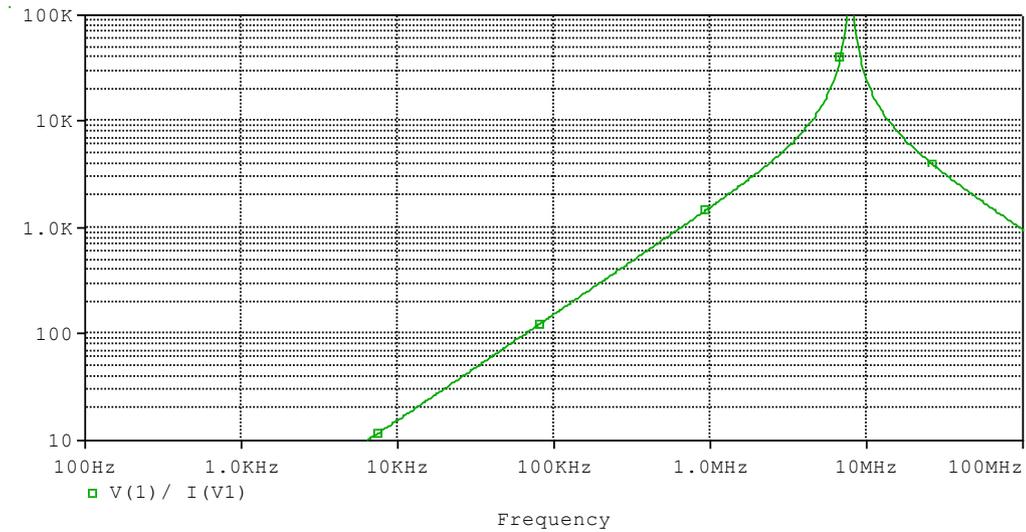
L1	
C1	
R1	

Equivalent circuit

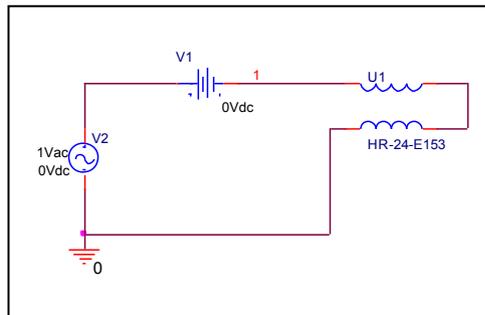


Frequency vs. |Z| Characteristic

Simulation result



Evaluation circuit



Comparison Table

Frequency (Hz)	Z (ohm): Measurement	Z (ohm): Simulation	% Error
10K	18.300	17.005	-7.077
100K	171.500	160.000	-6.706
1M	1565.000	1569.900	0.313
10M	24900.000	24585.000	-1.265
100M	1005.000	958.939	-4.583

	F _{SRF} (Hz): Measurement	F _{SRF} (Hz): Simulation	% Error
	7.762	7.943	2.330