

# **Device Modeling Report**

COMPONENTS:MAGNETIC CORE  
PART NUMBER:4B1  
MANUFACTURER:FERROXCUBE



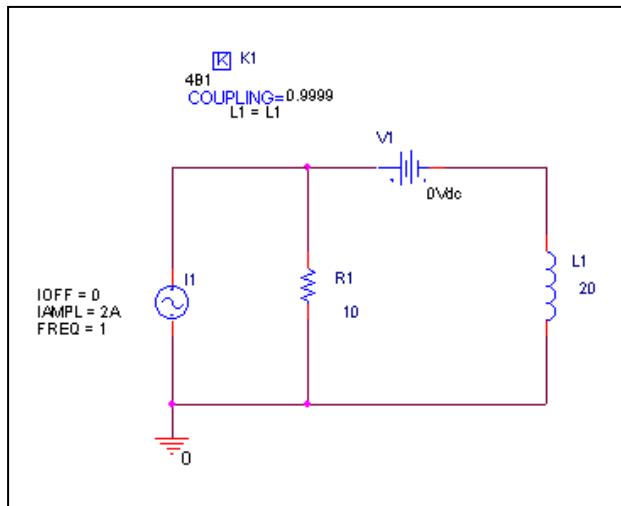
**Bee Technologies Inc.**

## MAGNETIC CORE

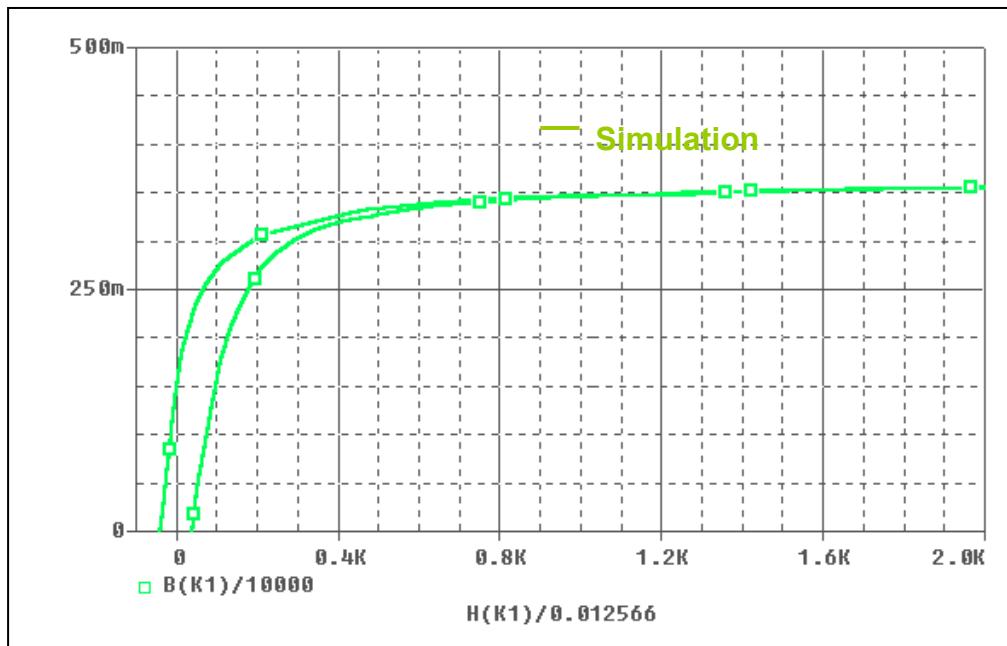
Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

## Hysteresis Curve Characteristics

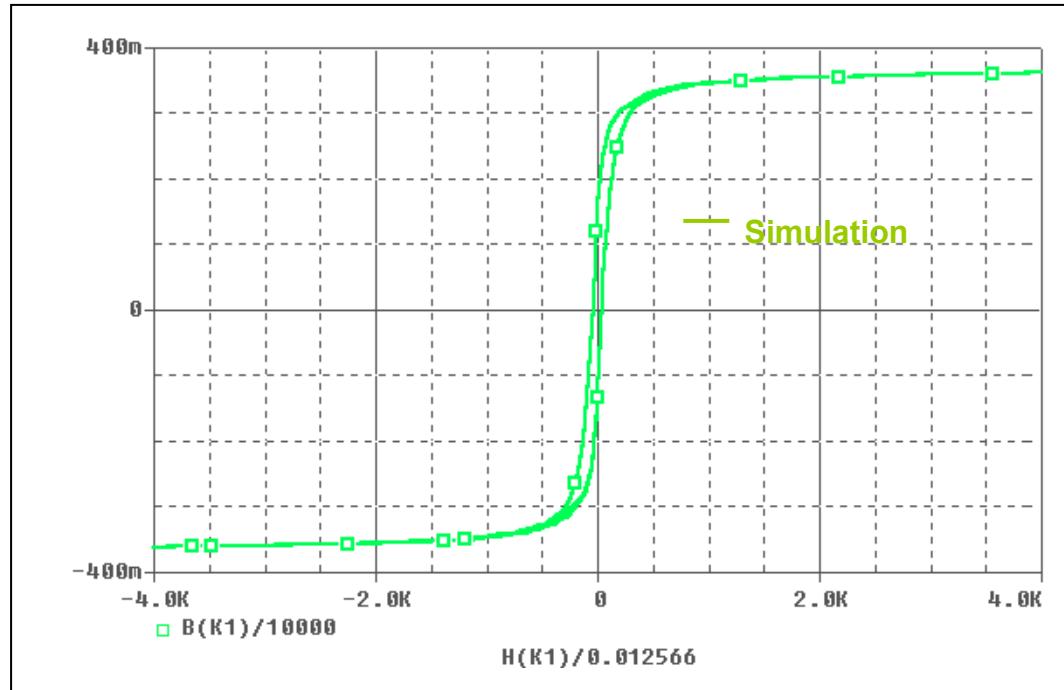
### Evaluation Circuit



### Simulation result



**Simulation result**



**Comparison Table**

H(A/m)	B(mT) Measurement	B(mT) Simulation	%Error
200	300	303.72	1.240
360	325	320.897	1.262
520	335	333.566	0.428
680	345	339.854	1.492
840	350	343.708	1.798
1200	350	349.418	0.166
1400	350	351.38	0.394
1600	350	352.927	0.836
2000	350	355.315	1.519
520	310	328.703	6.033
680	330	336.547	1.984
840	335	341.747	2.014
1200	350	348.259	0.497
1400	350	352.326	0.665
1600	350	352.326	0.665
2000	350	354.944	1.413