

# Device Modeling Report

COMPONENTS:MAGNETIC CORE  
PART NUMBER:3E27  
MANUFACTURER:FERROXCUBE



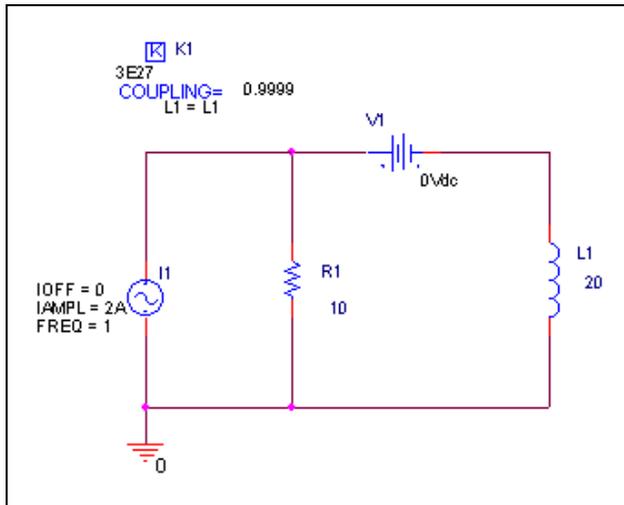
**Bee Technologies Inc.**

## MAGNETIC CORE

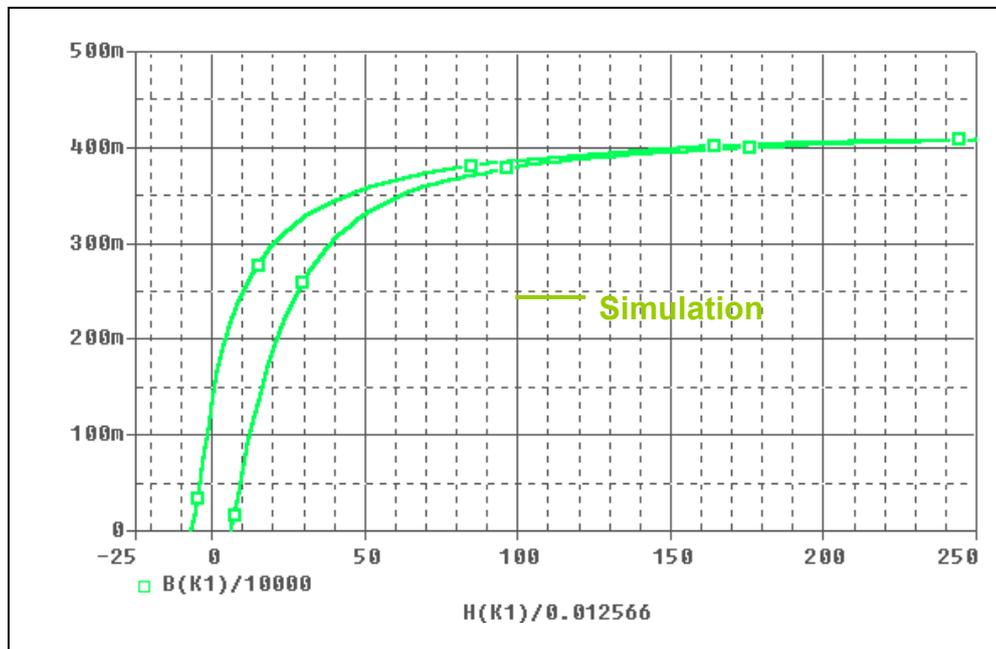
Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

# Hysteresis Curve Characteristics

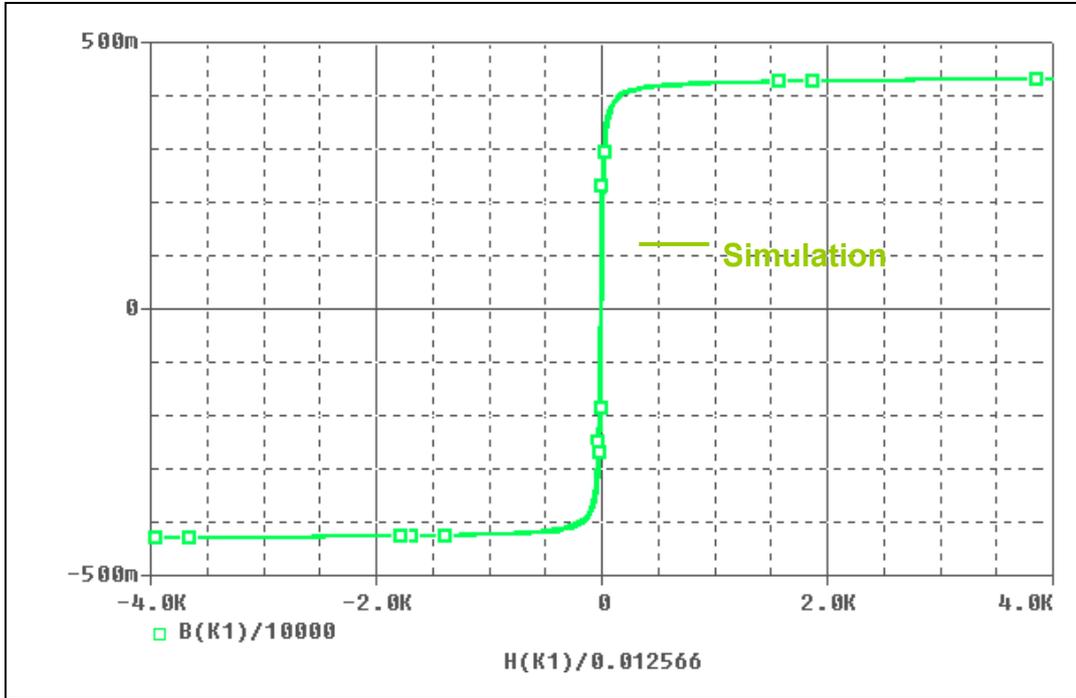
## Evaluation Circuit



## Simulation result



Simulation result



Comparison Table

H(A/m)	B(mT) Measurement	B(mT) Simulation	%Error
25	310	312.592	0.836
50	360	356.035	1.101
75	377	375.021	0.525
100	390	384.637	1.375
125	398	391.482	1.638
150	400	398.178	0.456
175	400	401.77	0.442
200	402	404.818	0.701
225	403	406.689	0.915
250	405	407.827	0.698
50	345	329.681	4.440
75	358	363.353	1.495
100	380	379.442	0.147
125	395	388.94	1.534
150	400	395.244	1.189
175	400	399.957	0.011
200	402	403.063	0.264
225	403	405.868	0.712
250	405	407.878	0.711