

# **Device Modeling Report**

COMPONENTS:MAGNETIC CORE  
PART NUMBER:3C90  
MANUFACTURER:FERROXCUBE



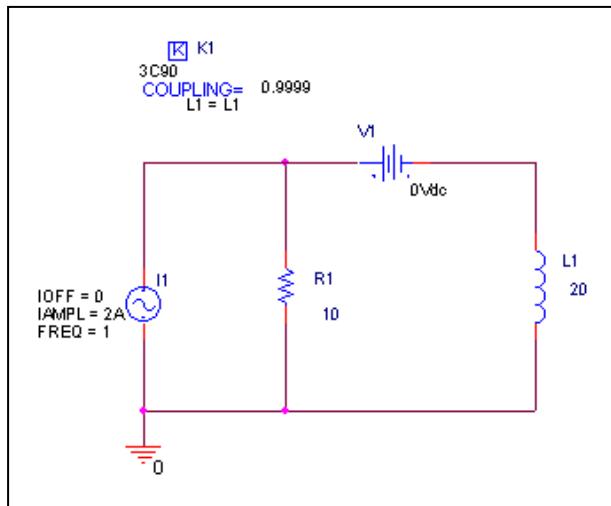
**Bee Technologies Inc.**

## MAGNETIC CORE

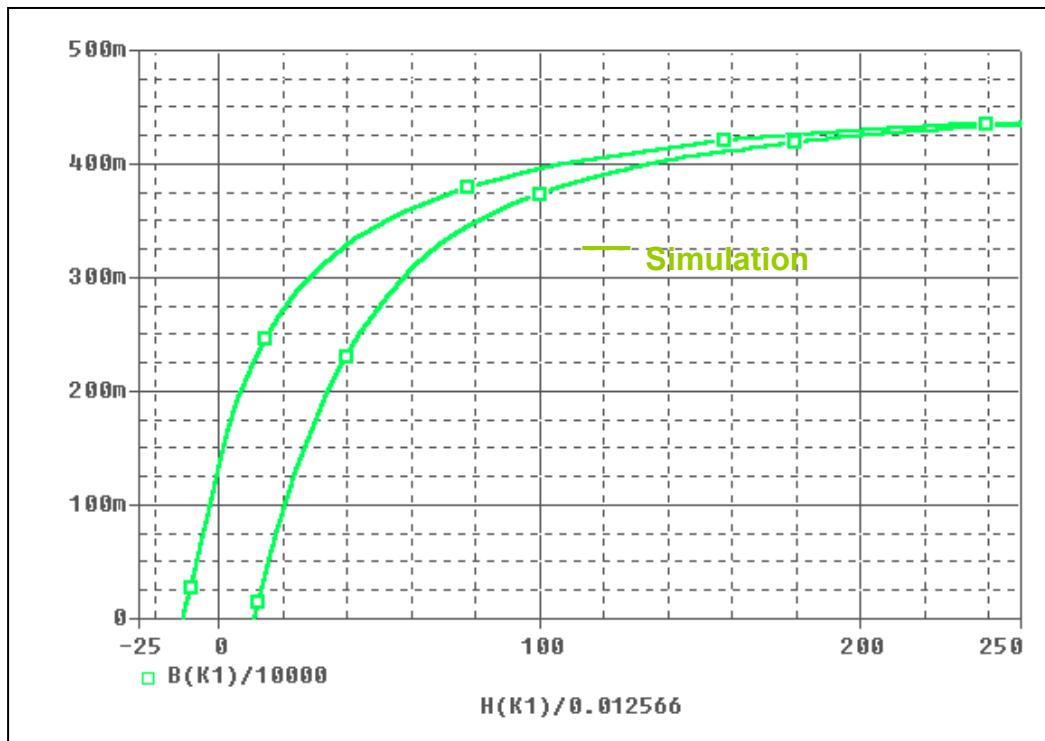
Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

# Hysteresis Curve Characteristics

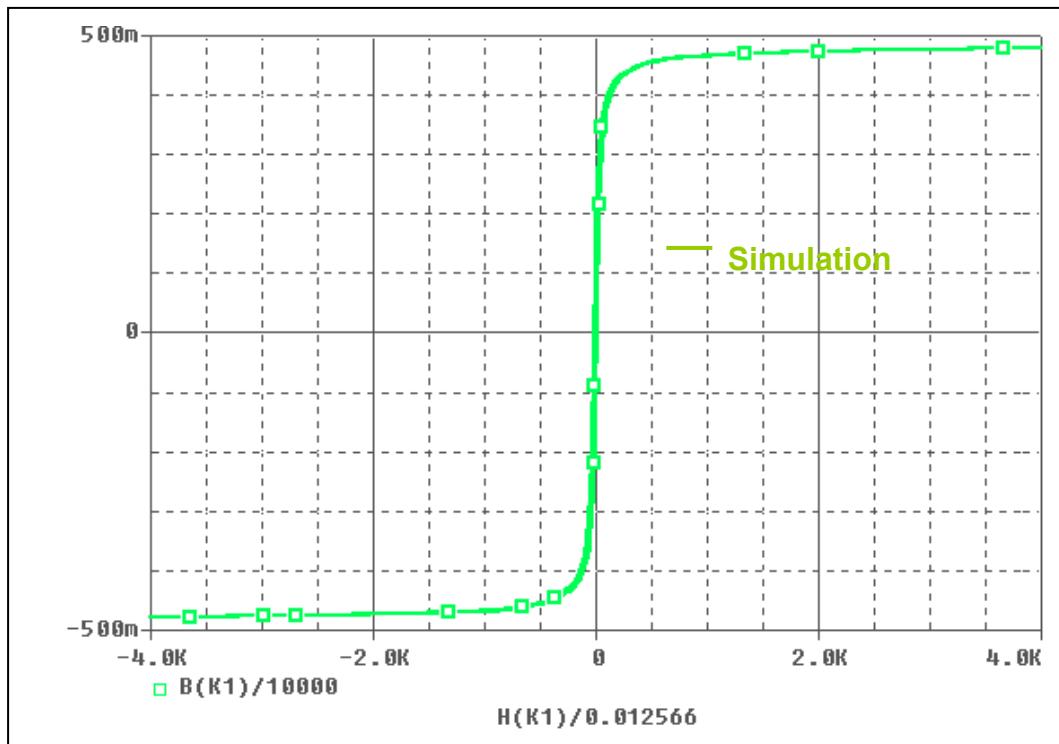
## Evaluation Circuit



## Simulation result



## Simulation result



**Comparison Table**

H(A/m)	B(mT) Measurement	B(mT) Simulation	%Error
25	280	289.724	3.473
50	350	345.465	1.296
75	390	376.909	3.357
100	400	394.993	1.252
125	415	406.63	2.017
150	420	416.854	0.749
175	425	423.821	0.277
200	427	429.368	0.555
225	427	434.344	1.720
250	427	436.473	2.219
75	350	340.531	2.705
100	385	373.762	2.919
125	400	394.194	1.452
150	415	407.252	1.867
175	425	416.72	1.948
200	427	423.93	0.719
225	427	429.934	0.687