

# **Device Modeling Report**

COMPONENTS:MAGNETIC CORE  
PART NUMBER:3E9  
MANUFACTURER:FERROXCUBE



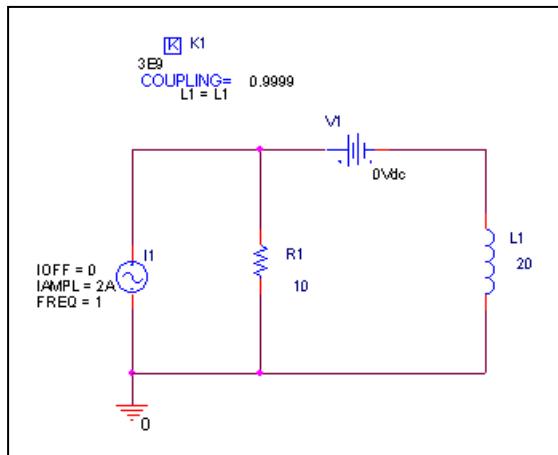
**Bee Technologies Inc.**

## MAGNETIC CORE

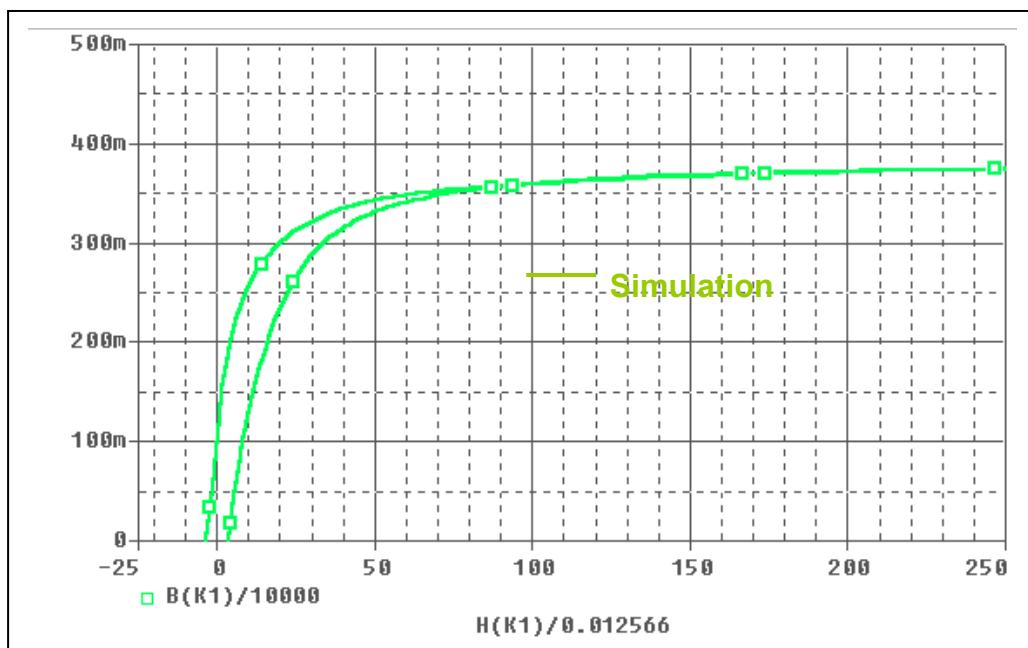
Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

## Hysteresis Curve Characteristics

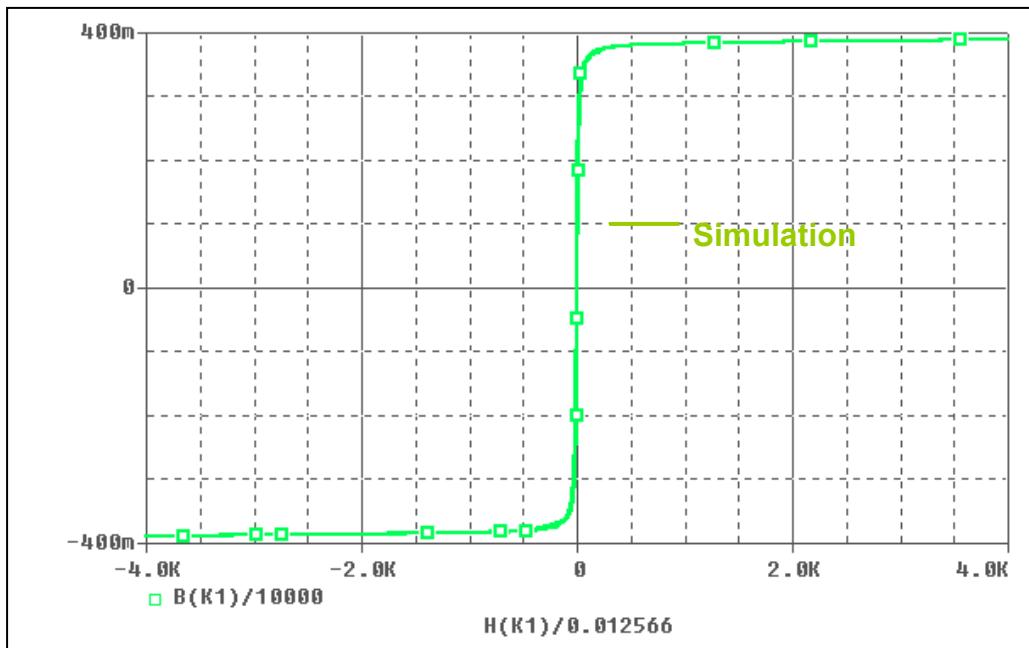
### Evaluation Circuit



### Simulation result



### Simulation result



**Comparison Table**

<b>H(A/m)</b>	<b>B(mT) Measurement</b>	<b>B(mT) Simulation</b>	<b>%Error</b>
25	300	312.608	4.203
50	345	342.595	0.697
75	360	353.906	1.693
100	365	359.664	1.462
125	370	365.551	1.202
150	375	368.714	1.676
175	375	370.635	1.164
200	375	372.104	0.772
225	375	373.606	0.372
250	375	374.567	0.115
50	340	331.155	2.601
75	355	350.387	1.299
100	360	358.873	0.313
125	365	364.196	0.220
150	375	367.582	1.978
175	375	370.015	1.329
200	375	371.97	0.808
225	375	373.283	0.458
250	375	374.567	0.115