

# **Device Modeling Report**

COMPONENTS:MAGNETIC CORE  
PART NUMBER:3F45  
MANUFACTURER:FERROXCUBE



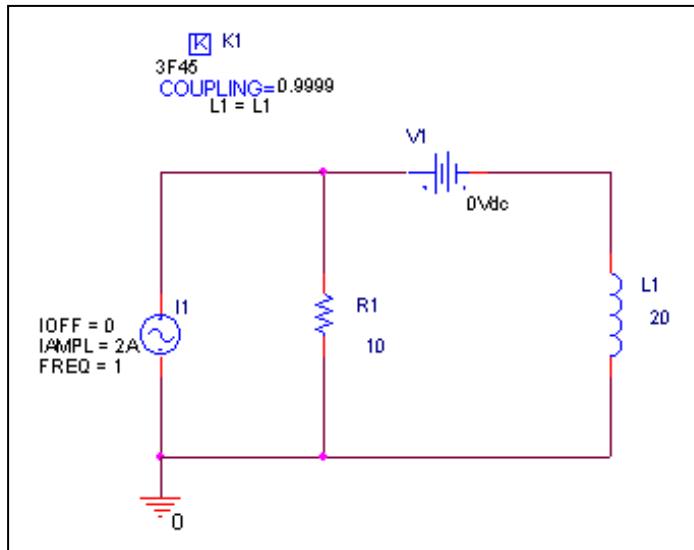
**Bee Technologies Inc.**

## MAGNETIC CORE

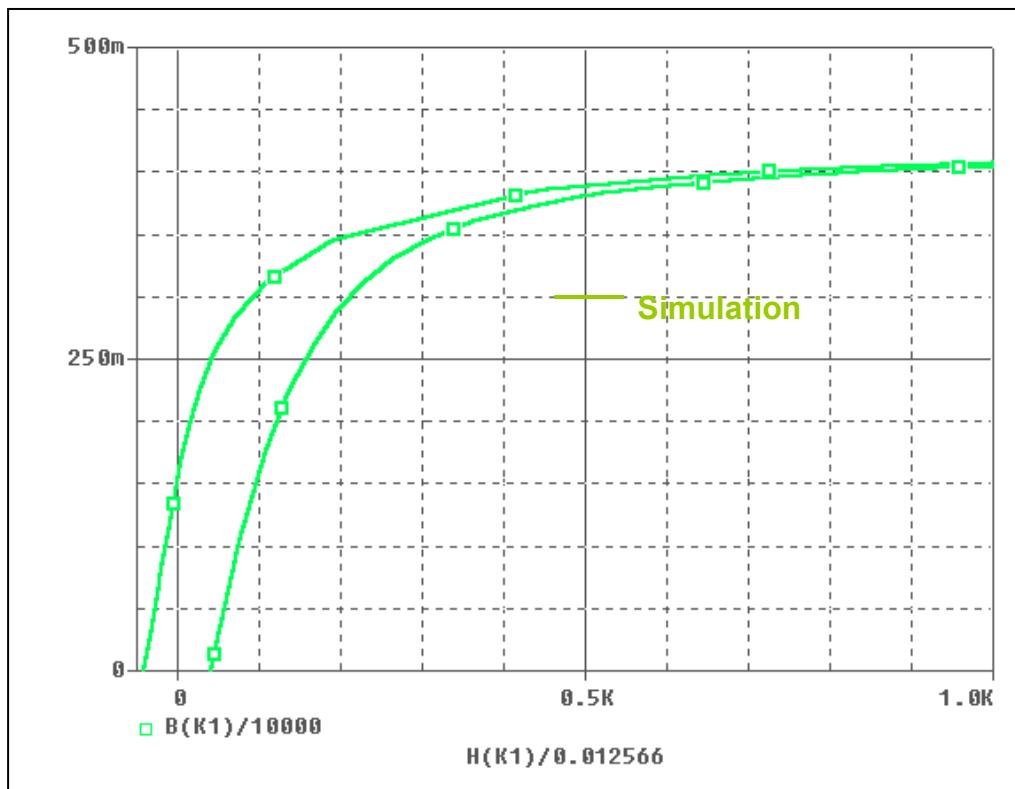
Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

## Hysteresis Curve Characteristics

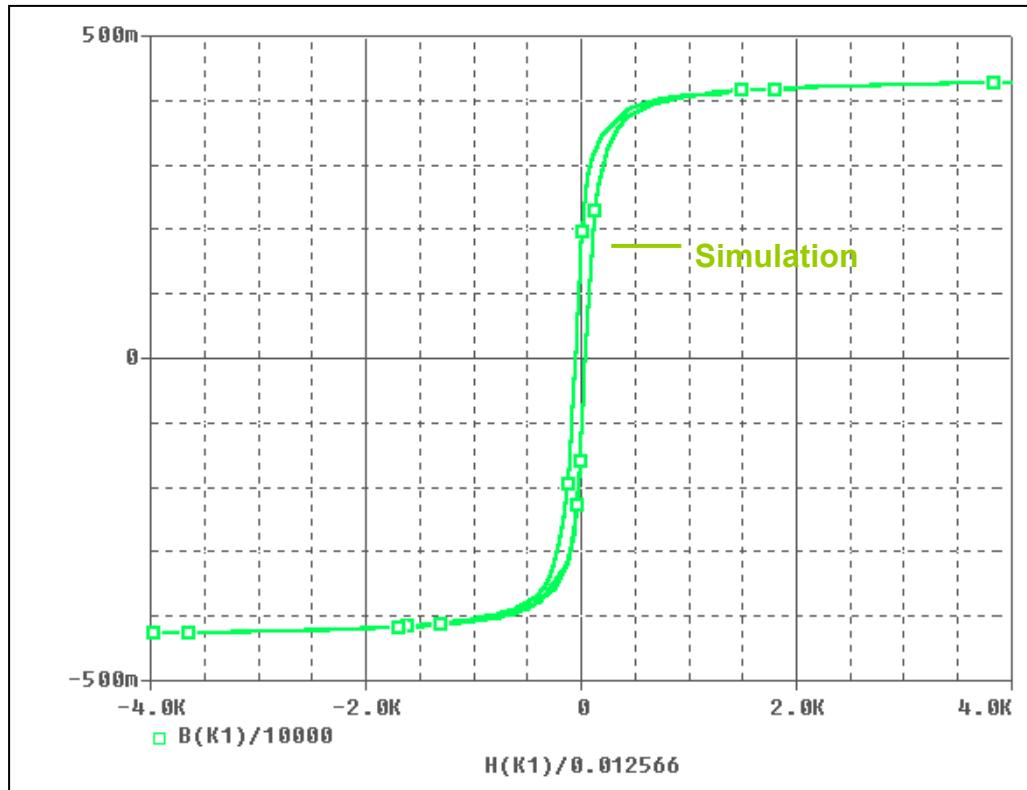
Evaluation Circuit



Simulation result



**Simulation result**



**Comparison Table**

H(A/m)	B(mT) Measurement	B(mT) Simulation	%Error
50	250	259.943	3.977
100	300	303.977	1.326
260	369	356.52	3.382
420	389	381.623	1.896
500	395	388.09	1.749
660	400	397.317	0.671
820	405	402.952	0.506
1000	405	407.745	0.678
100	152	157.671	3.731
260	340	327.535	3.666
420	382	370.373	3.044
500	385	380.083	1.277
660	400	392.413	1.897
820	405	400.073	1.217
1000	405	405.374	0.092