Device Modeling Report

COMPONENTS:MAGNETIC CORE
PART NUMBER:3S4
MANUFACTURER:FERROXCUBE
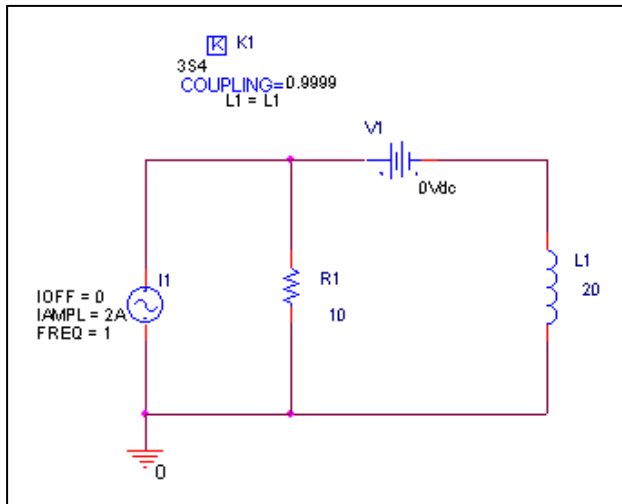
Bee Technologies Inc.

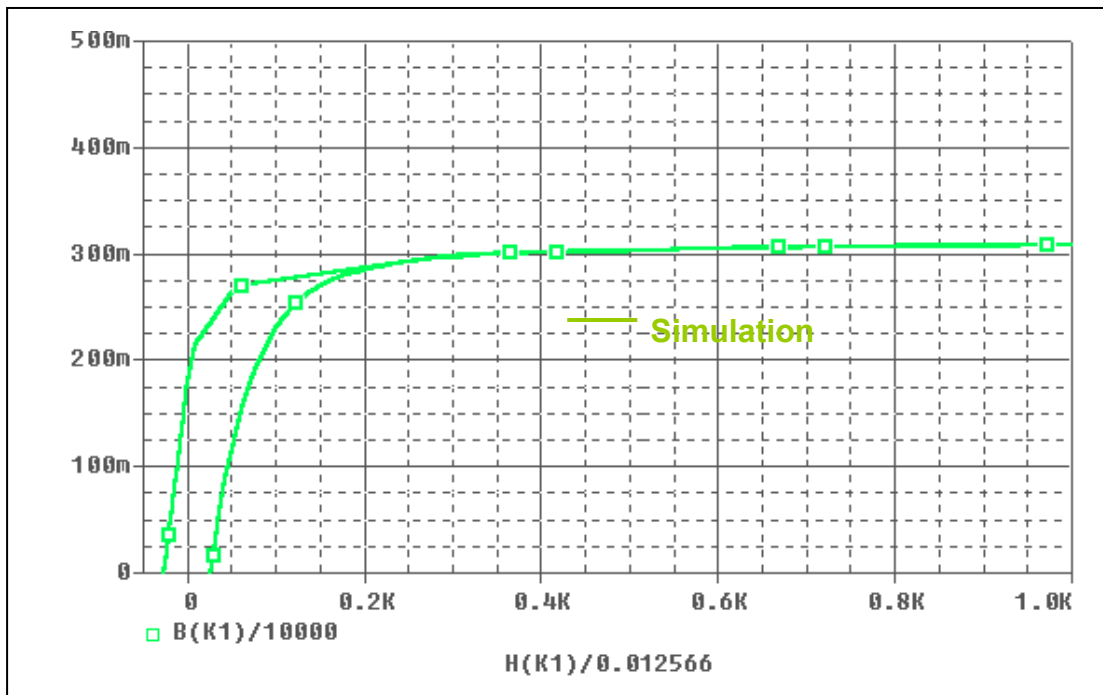## MAGNETIC CORE

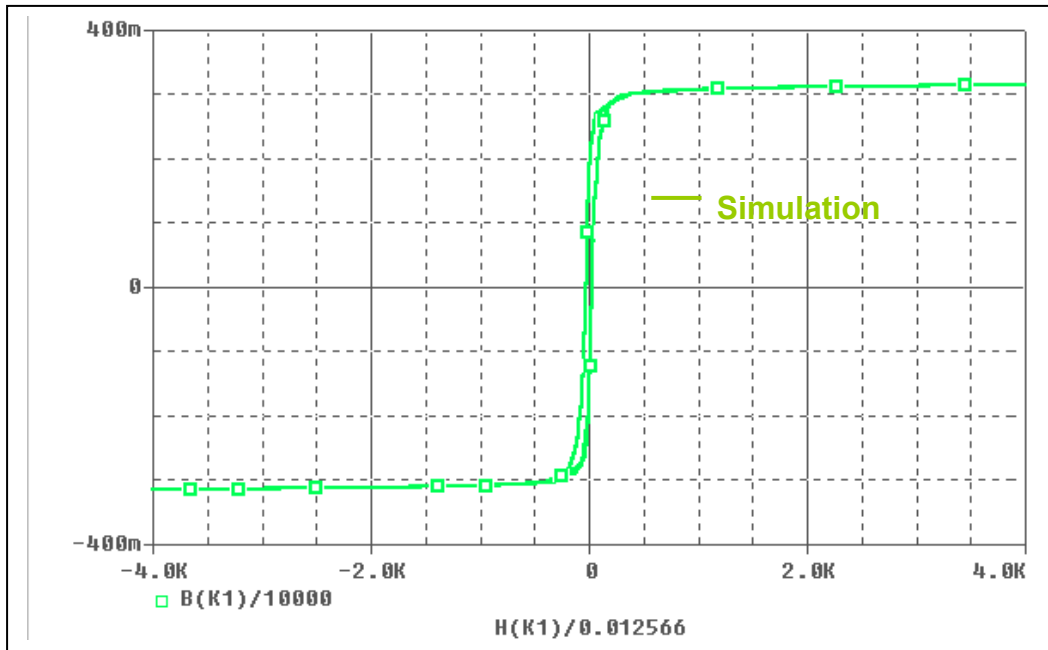| Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

Hysteresis Curve Characteristics

Evaluation Circuit

Simulation result

Simulation result

Comparison Table

H(A/m)	B(mT) Measurement	B(mT) Simulation	%Error
50	265	262.324	1.010
100	280	274.219	2.065
180	295	284.473	3.568
260	298	294.465	1.186
340	300	300.641	0.214
420	300	302.258	0.753
500	302	303.874	0.621
600	305	305.389	0.128
700	310	306.304	1.192
1000	310	308.32	0.542
260	290	293.533	1.218
340	300	298.377	0.541
420	300	301.167	0.389
500	302	303.159	0.384
600	305	304.531	0.154
700	310	305.899	1.323
1000	310	308.048	0.630