

Device Modeling Report

COMPONENTS:MAGNETIC CORE
PART NUMBER:3E8
MANUFACTURER:FERROXCUBE



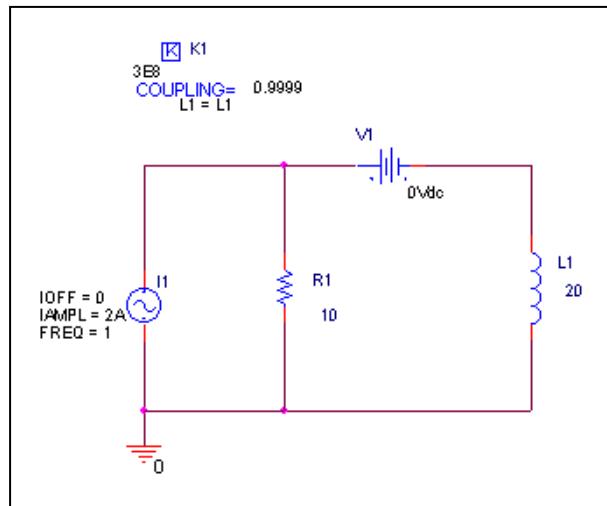
Bee Technologies Inc.

MAGNETIC CORE

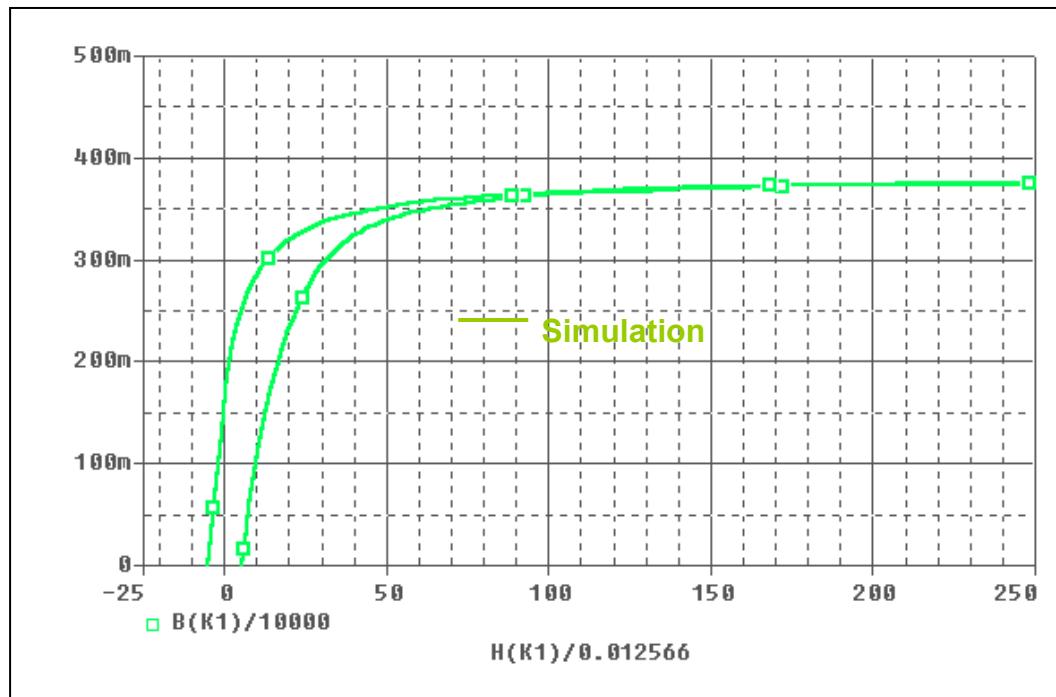
| Pspice model parameter | Model description |
|------------------------|-----------------------------|
| A | thermal energy parameter |
| K | domain anisotropy parameter |
| C | domain flexing parameter |
| MS | magnetization saturation |

Hysteresis Curve Characteristics

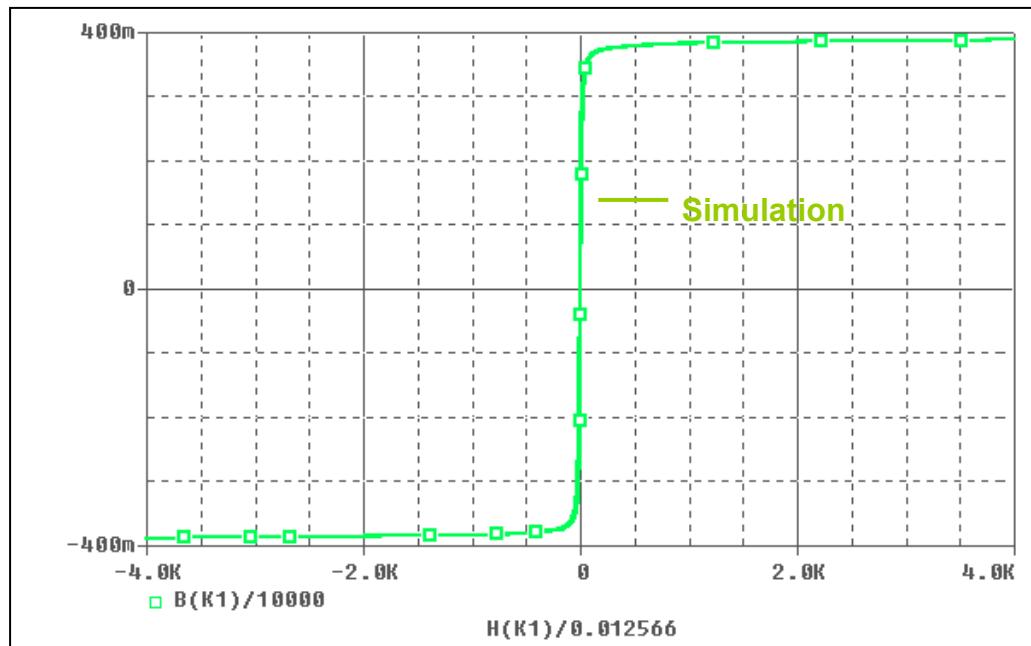
Evaluation Circuit



Simulation result



Simulation result



Comparison Table

| H(A/m) | B(mT) Measurement | B(mT) Simulation | %Error |
|---------------|------------------------------|-----------------------------|---------------|
| 50 | 340 | 351.28 | 3.318 |
| 75 | 365 | 361.343 | 1.002 |
| 100 | 370 | 365.795 | 1.136 |
| 125 | 372 | 369.379 | 0.705 |
| 150 | 372 | 371.567 | 0.116 |
| 175 | 375 | 373.354 | 0.439 |
| 200 | 375 | 373.999 | 0.267 |
| 225 | 375 | 374.673 | 0.087 |
| 250 | 375 | 375.332 | 0.089 |
| 25 | 280 | 269.366 | 3.798 |
| 50 | 336 | 339.265 | 0.972 |
| 75 | 355 | 356.308 | 0.368 |
| 100 | 365 | 363.575 | 0.390 |
| 125 | 370 | 367.864 | 0.577 |
| 150 | 370 | 370.58 | 0.157 |
| 175 | 375 | 372.574 | 0.647 |
| 200 | 375 | 374.06 | 0.251 |
| 225 | 375 | 375.175 | 0.047 |
| 250 | 375 | 376.071 | 0.286 |