

Device Modeling Report

COMPONENTS:MAGNETIC CORE
PART NUMBER:7H10
MANUFACTURER:FDK



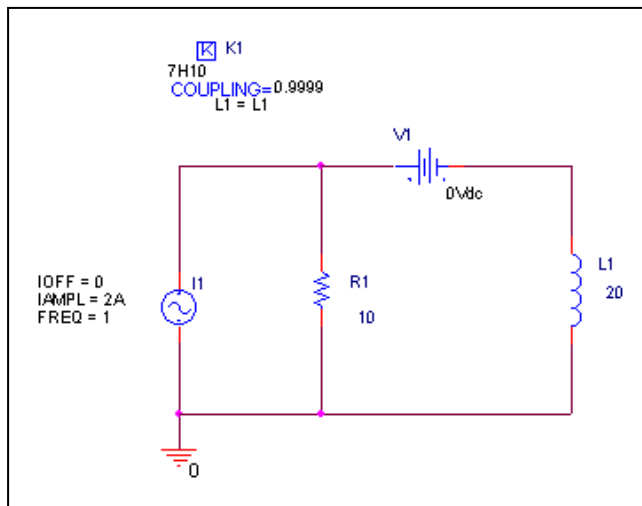
Bee Technologies Inc.

MAGNETIC CORE

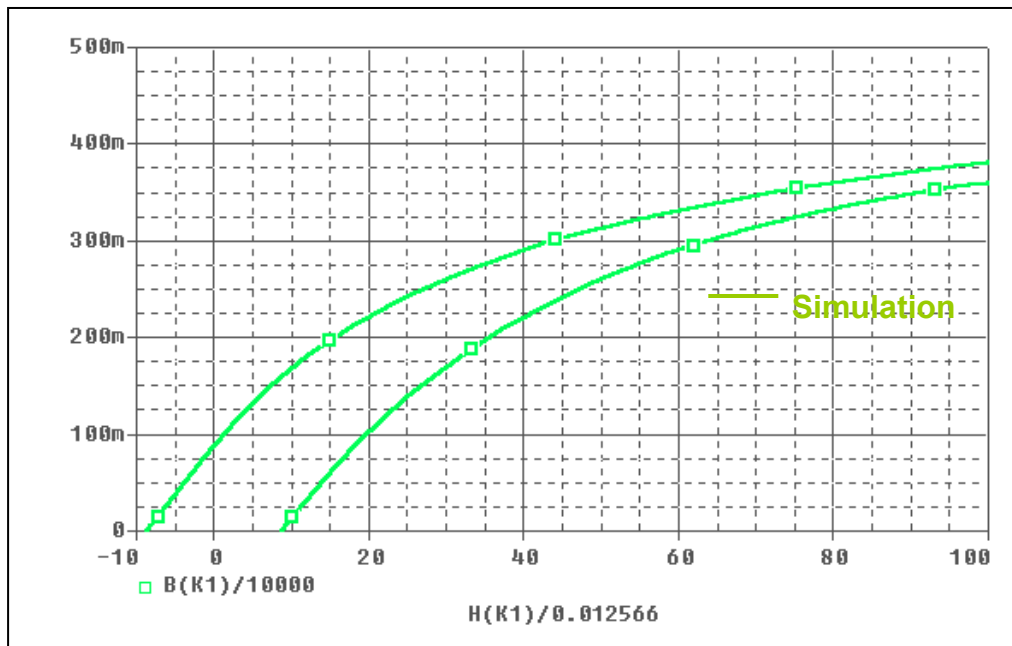
| Pspice model parameter | Model description |
|------------------------|-----------------------------|
| A | thermal energy parameter |
| K | domain anisotropy parameter |
| C | domain flexing parameter |
| MS | magnetization saturation |

Hysteresis Curve Characteristics

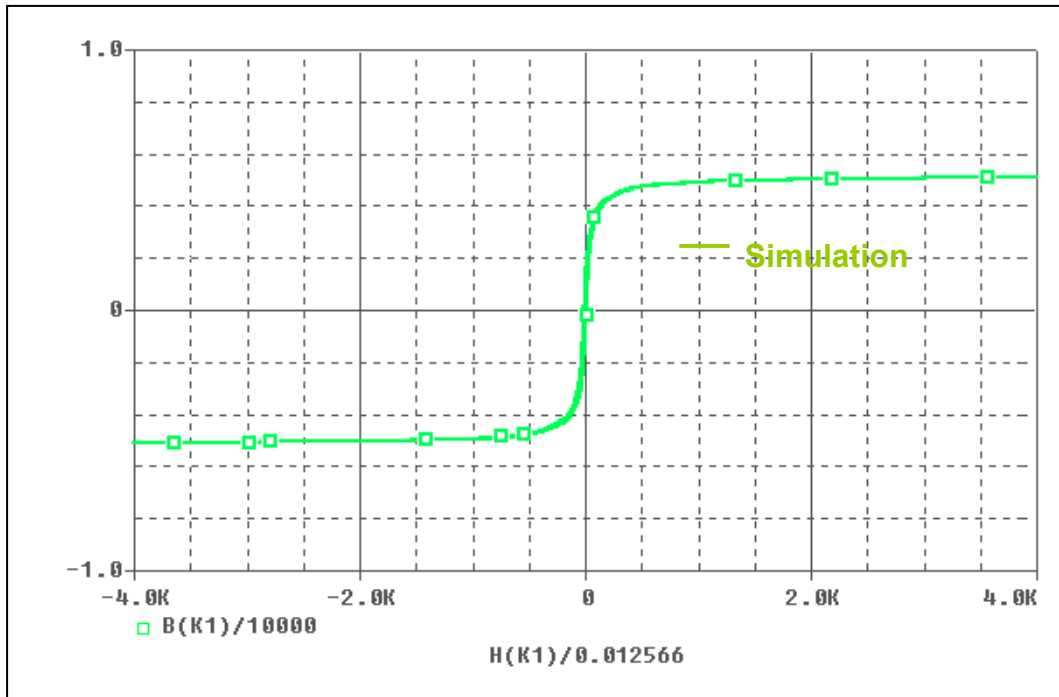
Evaluation Circuit



Simulation result



Simulation result



Comparison Table

| H(A/m) | B(mT) Measurement | B(mT) Simulation | %Error |
|--------|----------------------|---------------------|--------|
| 10 | 170 | 167.392 | 1.534 |
| 20 | 225 | 220.753 | 1.888 |
| 30 | 260 | 259.622 | 0.145 |
| 40 | 290 | 288.851 | 0.396 |
| 50 | 320 | 312.532 | 2.334 |
| 60 | 340 | 331.288 | 2.562 |
| 70 | 348 | 346.731 | 0.365 |
| 80 | 355 | 359.513 | 1.271 |
| 90 | 365 | 370.656 | 1.550 |
| 100 | 375 | 380.711 | 1.523 |
| 14 | 50 | 51.418 | 2.836 |
| 20 | 100 | 101.607 | 1.607 |
| 40 | 210 | 219.989 | 4.757 |
| 50 | 260 | 260.168 | 0.065 |
| 60 | 295 | 289.759 | 1.777 |
| 70 | 320 | 313.142 | 2.143 |
| 80 | 335 | 332.568 | 0.726 |
| 90 | 350 | 347.883 | 0.605 |
| 100 | 375 | 360.813 | 3.783 |