# Device Modeling Report

COMPONENTS:MAGNETIC CORE
PART NUMBER:6H10
MANUFACTURER:FDK
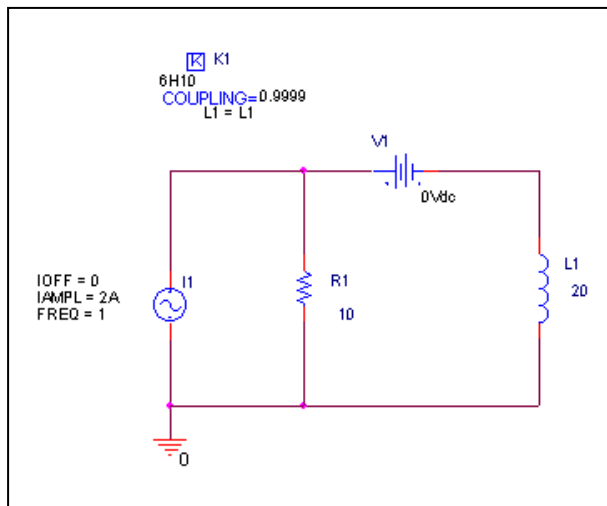


**Bee Technologies Inc.**

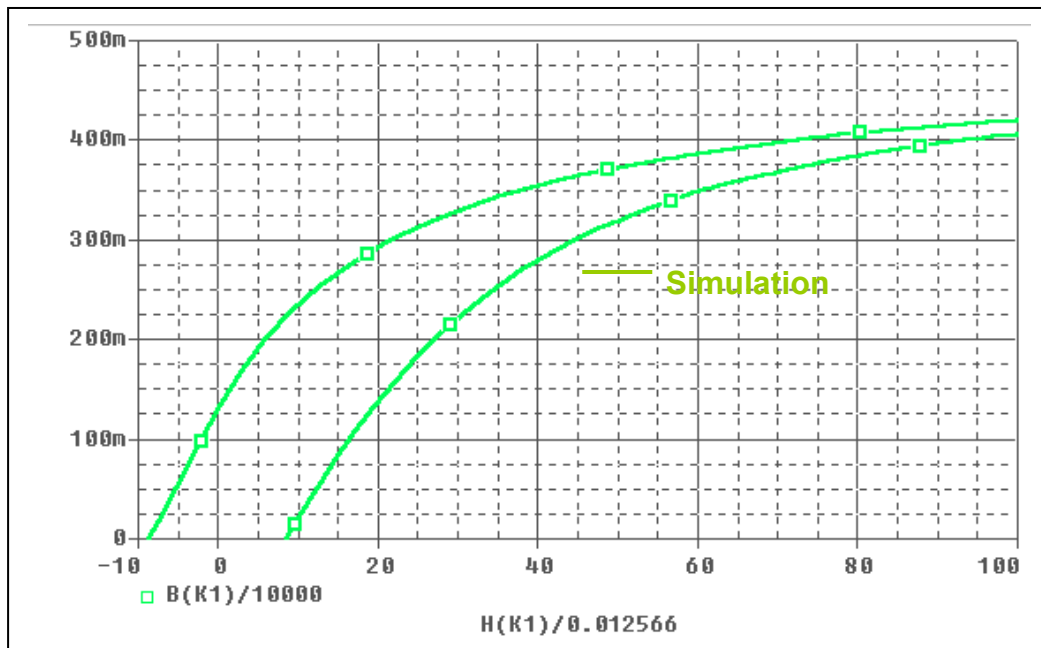**MAGNETIC CORE**

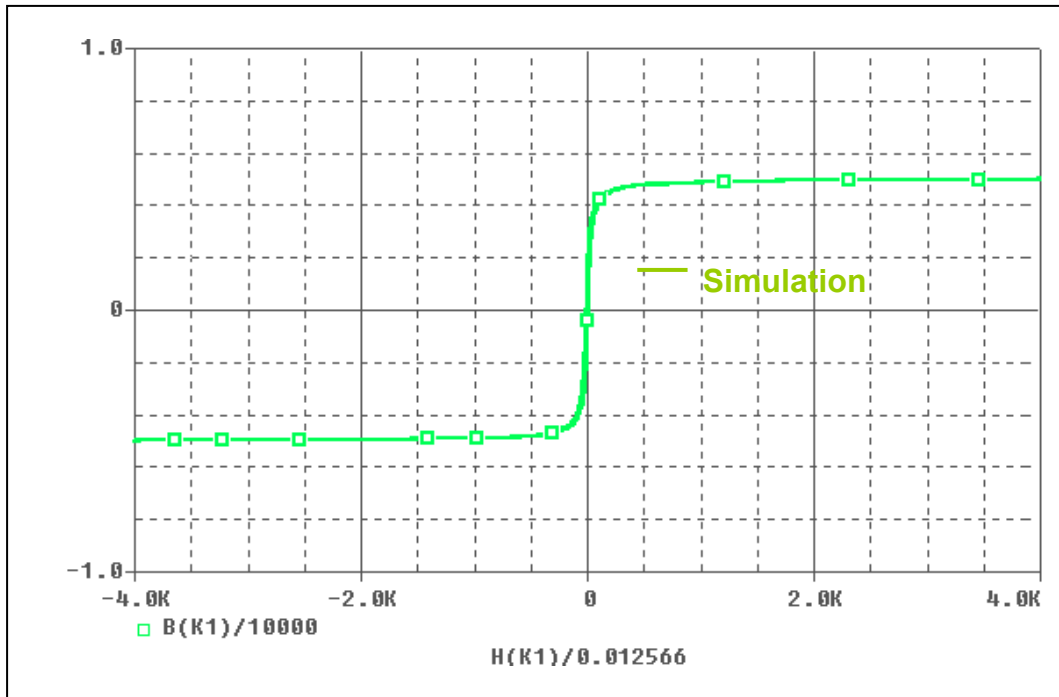| Pspice model parameter | Model description |
|---|---|
| A | thermal energy parameter |
| K | domain anisotropy parameter |
| C | domain flexing parameter |
| MS | magnetization saturation |

# Hysteresis Curve Characteristics

## Evaluation Circuit



## Simulation result

Simulation result

Comparison Table

| H(A/m) | B(mT) Measurement | B(mT) Simulation | %Error |
|--------|-------------------|------------------|--------|
| 40 | 350 | 352.799 | 0.800 |
| 50 | 380 | 371.693 | 2.186 |
| 60 | 400 | 386.259 | 3.435 |
| 70 | 405 | 397.164 | 1.935 |
| 80 | 410 | 406.678 | 0.810 |
| 90 | 415 | 413.876 | 0.271 |
| 100 | 415 | 420.918 | 1.426 |
| 20 | 130 | 136.525 | 5.019 |
| 50 | 310 | 319.243 | 2.982 |
| 60 | 350 | 347.359 | 0.755 |
| 70 | 375 | 368.064 | 1.850 |
| 80 | 395 | 383.704 | 2.860 |
| 90 | 400 | 396.023 | 0.994 |
| 100 | 415 | 405.726 | 2.235 |