

Device Modeling Report

COMPONENTS:MAGNETIC CORE
PART NUMBER:HP5
MANUFACTURER:TDK



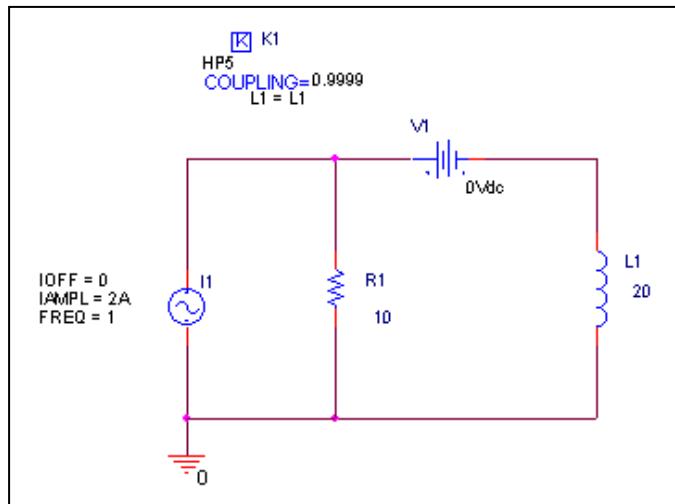
Bee Technologies Inc.

MAGNETIC CORE

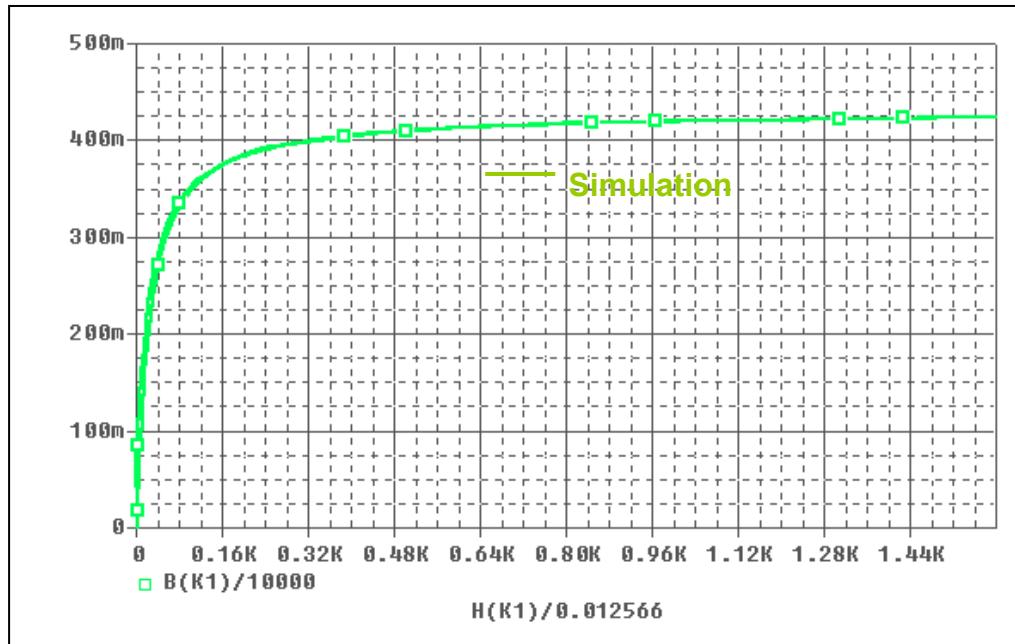
| Pspice model parameter | Model description |
|------------------------|-----------------------------|
| A | thermal energy parameter |
| K | domain anisotropy parameter |
| C | domain flexing parameter |
| MS | magnetization saturation |

Hysteresis Curve Characteristics

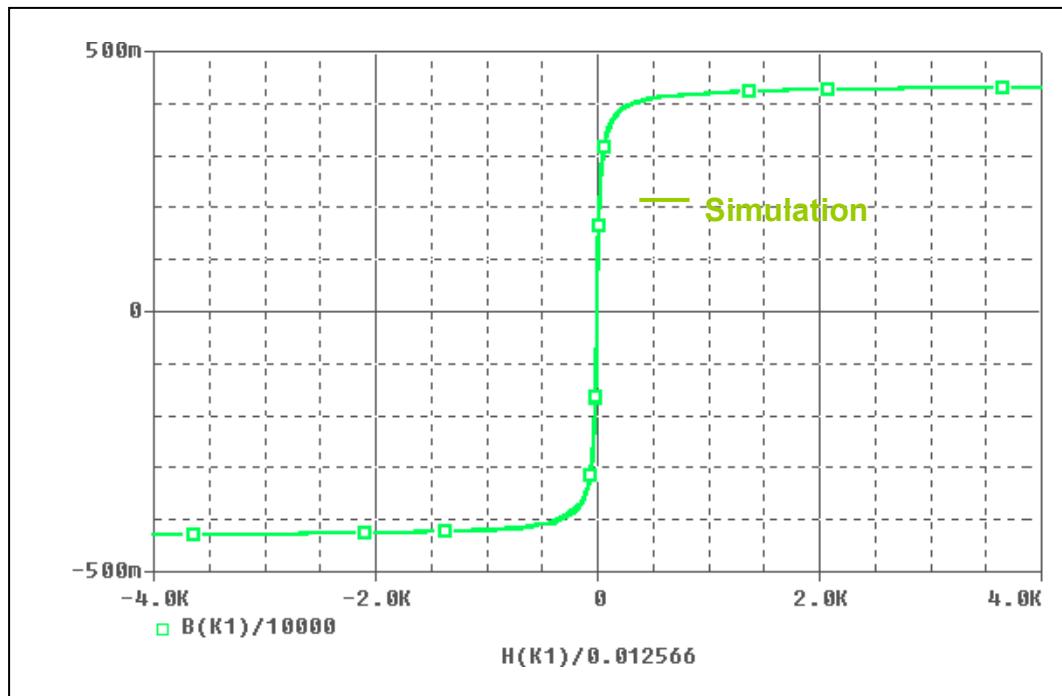
Evaluation Circuit



Simulation result



Simulation result



Comparison Table

| H(A/m) | B(mT) Measurement | B(mT) Simulation | %Error |
|--------|----------------------|---------------------|--------|
| 160 | 385 | 374.026 | 2.850 |
| 320 | 405 | 399.829 | 1.277 |
| 480 | 410 | 408.868 | 0.276 |
| 640 | 412 | 413.77 | 0.430 |
| 800 | 415 | 417.124 | 0.512 |
| 960 | 420 | 419.24 | 0.181 |
| 1120 | 422 | 420.857 | 0.271 |
| 1280 | 425 | 422.176 | 0.664 |