

# **Device Modeling Report**

COMPONENTS:MAGNETIC CORE  
PART NUMBER:PC50  
MANUFACTURER:TDK



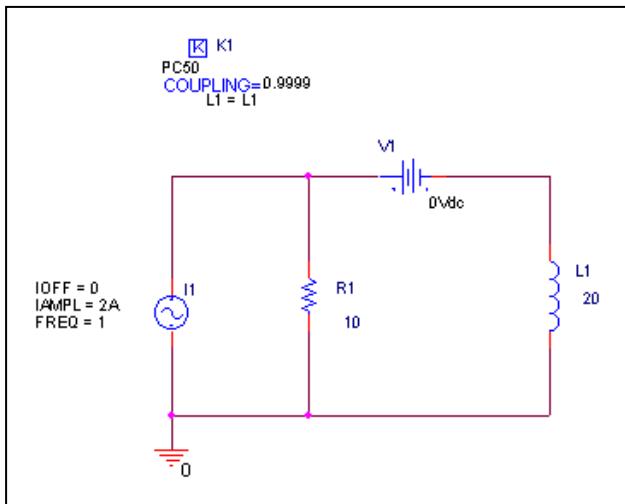
**Bee Technologies Inc.**

## MAGNETIC CORE

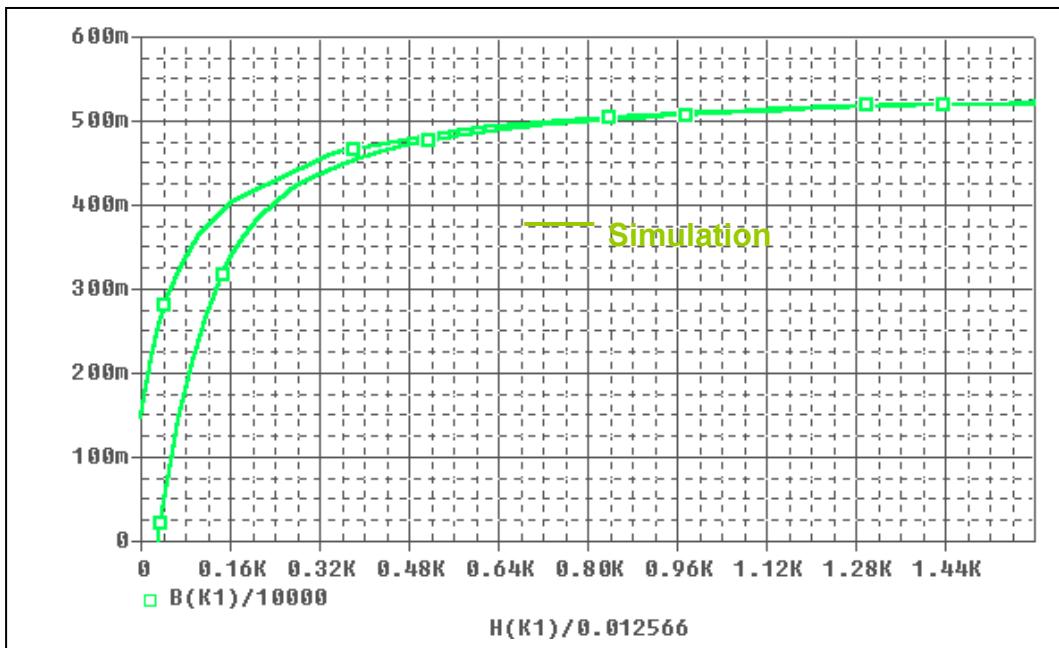
Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

## Hysteresis Curve Characteristics

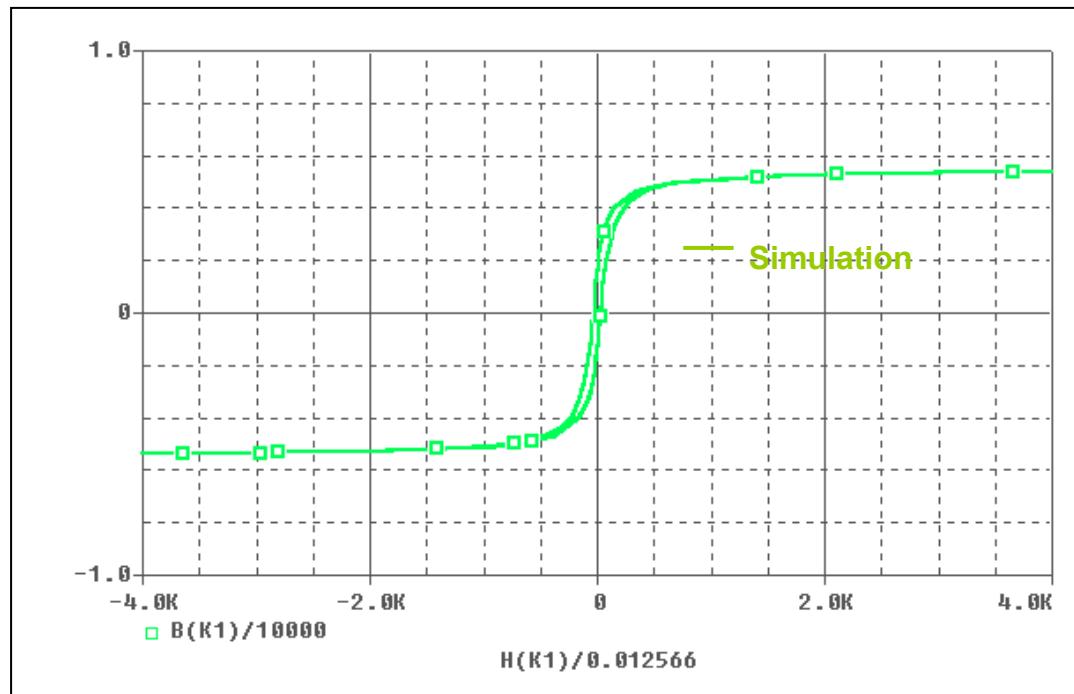
### Evaluation Circuit



### Simulation result



**Simulation result**



**Comparison Table**

H(A/m)	B(mT) Measurement	B(mT) Simulation	%Error
80	350	338.298	3.343
160	395	403.373	2.120
320	440	454.4	3.273
640	505	493.949	2.188
800	510	502.843	1.403
960	515	509.064	1.153
1120	520	513.974	1.159
1280	525	517.53	1.423
1440	530	520.397	1.812
1600	530	521.914	1.526
160	350	336.17	3.951
320	425	437.39	2.915
480	450	471.423	4.761
640	505	488.607	3.246
800	510	499.112	2.135
960	515	506.646	1.622
1120	520	512.058	1.527
1280	525	515.98	1.718
1440	530	519.269	2.025
1600	530	521.914	1.526