

# Device Modeling Report

COMPONENTS:MAGNETIC CORE  
PART NUMBER:PC40  
MANUFACTURER:TDK



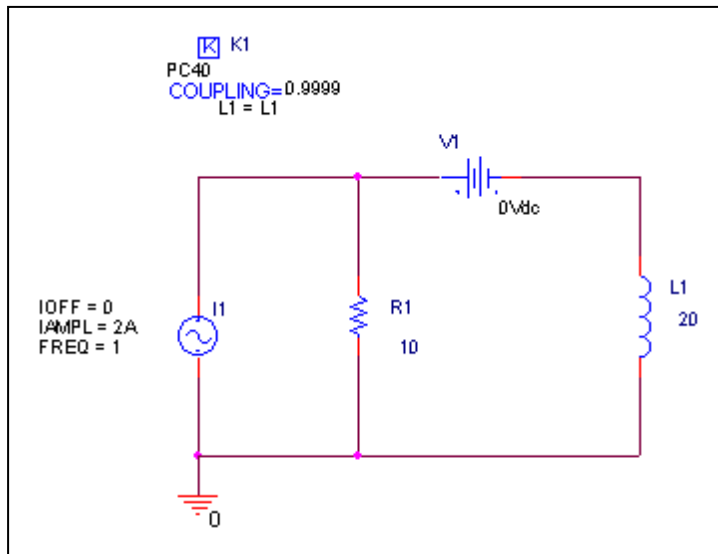
**Bee Technologies Inc.**

## MAGNETIC CORE

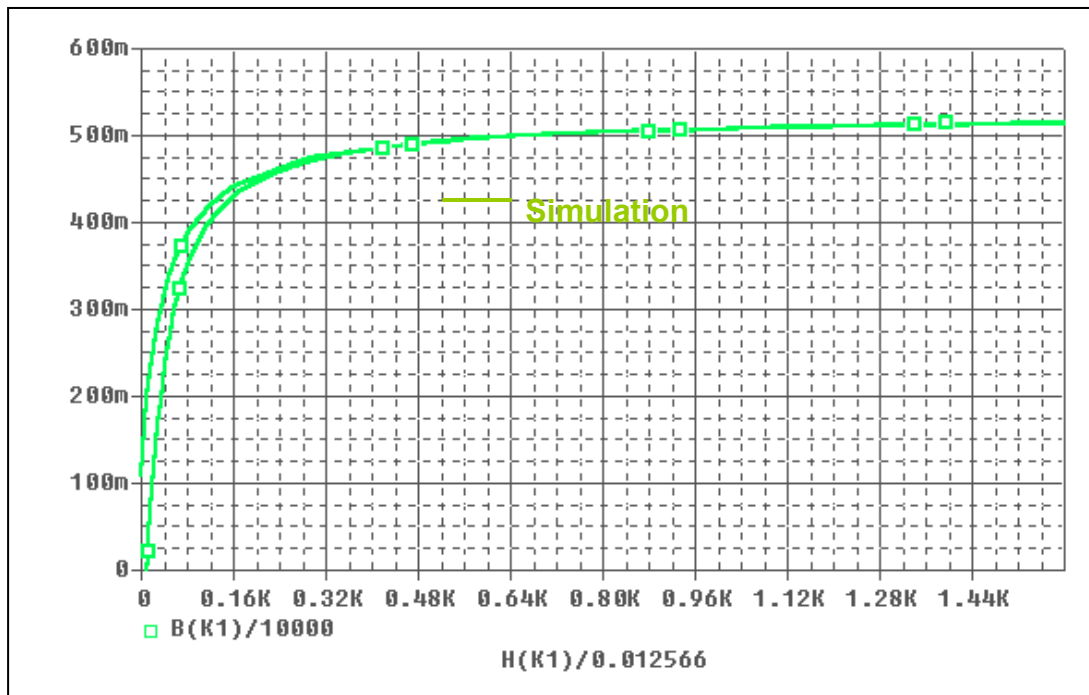
Pspice model parameter	Model description
A	thermal energy parameter
K	domain anisotropy parameter
C	domain flexing parameter
MS	magnetization saturation

# Hysteresis Curve Characteristics

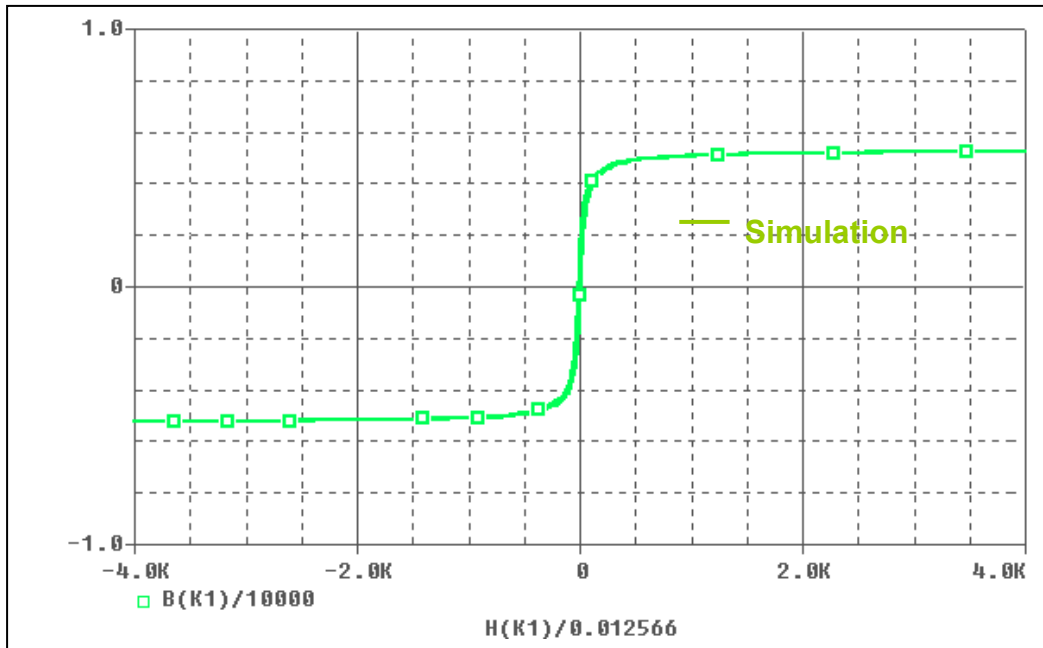
## Evaluation Circuit



## Simulation result



Simulation result



Comparison Table

H(A/m)	B(mT) Measurement	B(mT) Simulation	%Error
80	390	385.106	1.255
160	430	440.077	2.343
320	475	475.93	-0.196
480	490	489.931	0.014
640	500	498.854	0.229
800	500	504.433	0.887
960	505	507.646	0.524
1120	510	511.314	0.258
1280	513	512.345	0.128
1440	517	513.866	0.606
1600	520	515.193	0.924
80	355	351.064	1.109
160	420	429.296	2.213
320	470	473.986	0.848
480	490	489.872	0.026
640	500	498.267	0.347
800	500	503.522	0.704
960	505	507.472	0.490
1120	510	509.947	0.010
1280	513	512.034	0.188
1440	517	513.745	0.630
1600	520	515.047	0.952