

THA100 High Bs & High Frequency Low-Loss FeNi Soft Magnetic

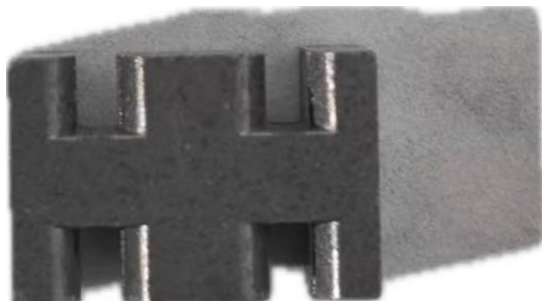
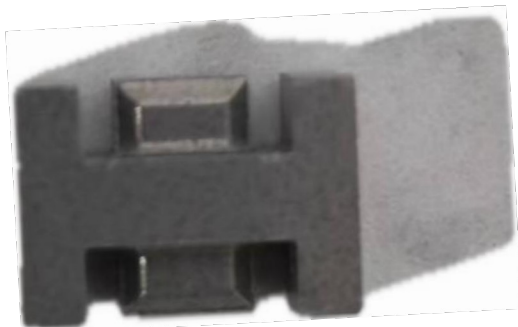
Characteristics	
Parameter	Typical Value
Material Grade	THA100
Initial Permeability	100
Saturation Magnetic Flux Density Bs (mT)	1500
Curie Temperature (°C)	>500
Operating Temperature (°C)	-55~200
Power Loss Density @100kHz/100mT, 100°C (mW/cm³)	200
Power Loss Density @500kHz/50mT, 100°C (mW/cm³)	300
Power Loss Density @1MHz/50mT, 100°C (mW/cm³)	820
Power Loss Density @1MHz/100mT, 100°C (mW/cm³)	4200

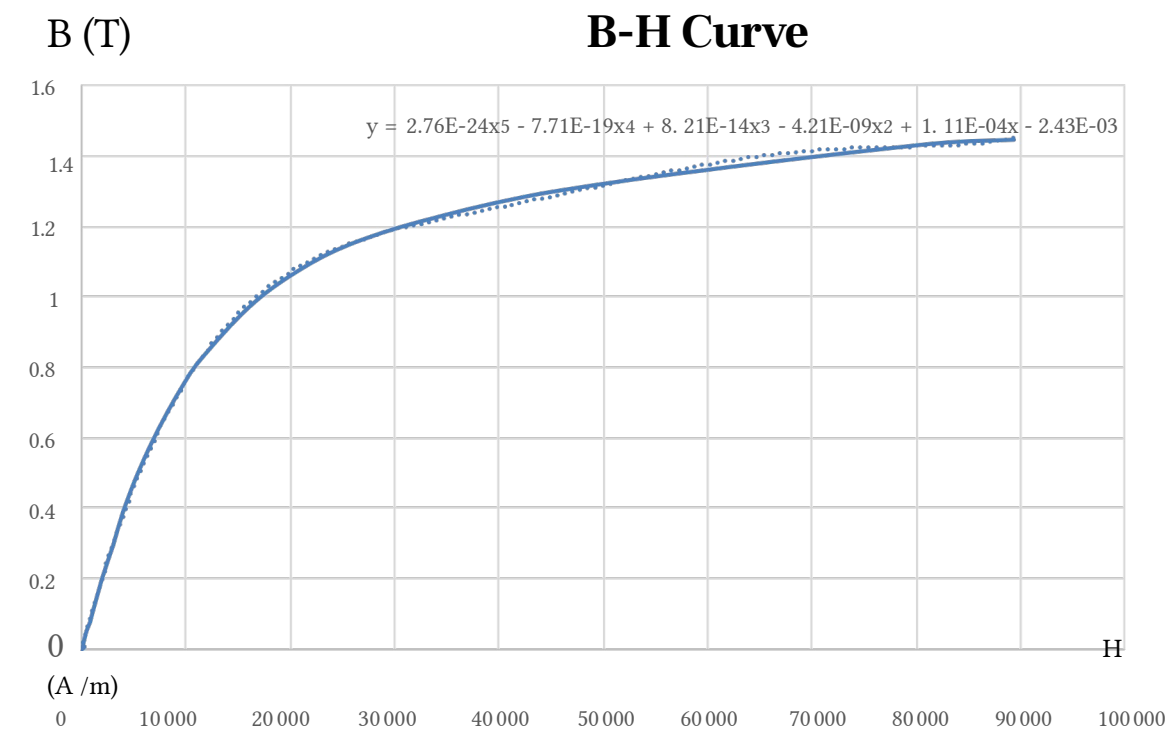
Material Characteristics:

- High Bs and excellent DC-bias capability
- Low high-frequency core loss and high power factor $f \times B$
- High temperature stability

Applications:

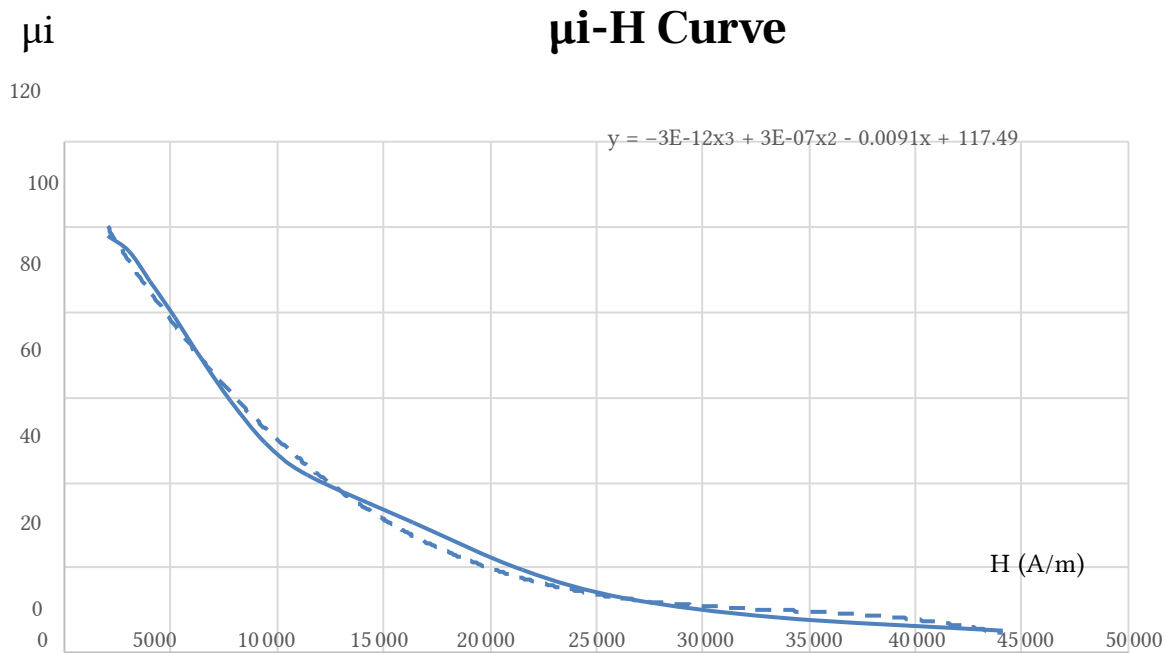
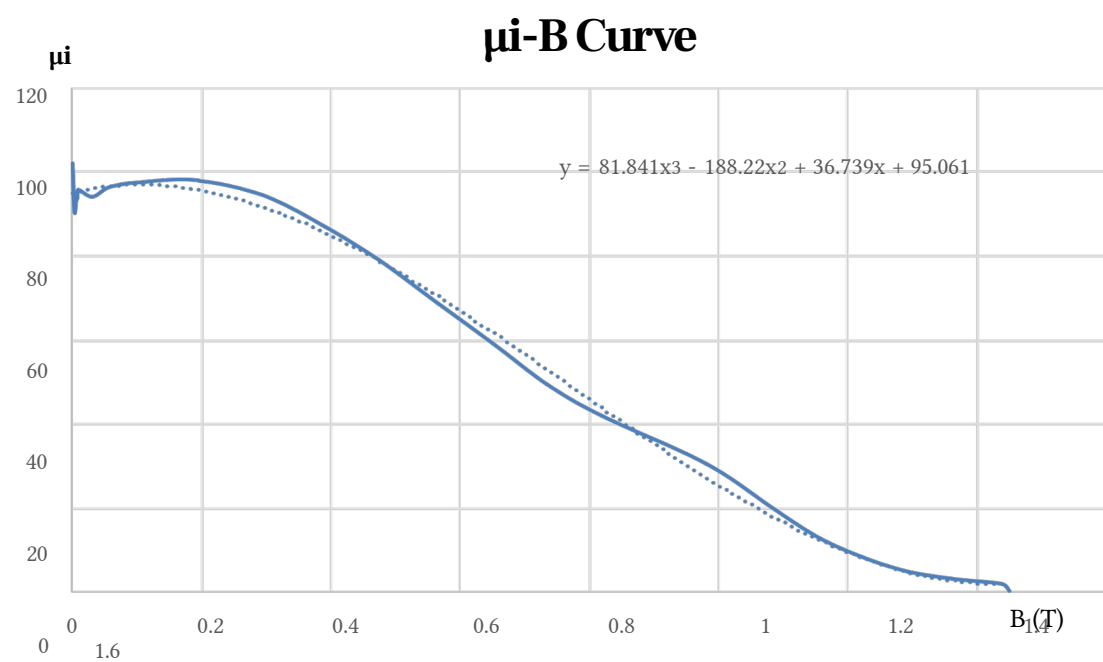
- Chip inductors and VRM inductors
- DC-DC inductor / transformer cores
- High-density PFC, resonant inductors
- High-density flyback transformers





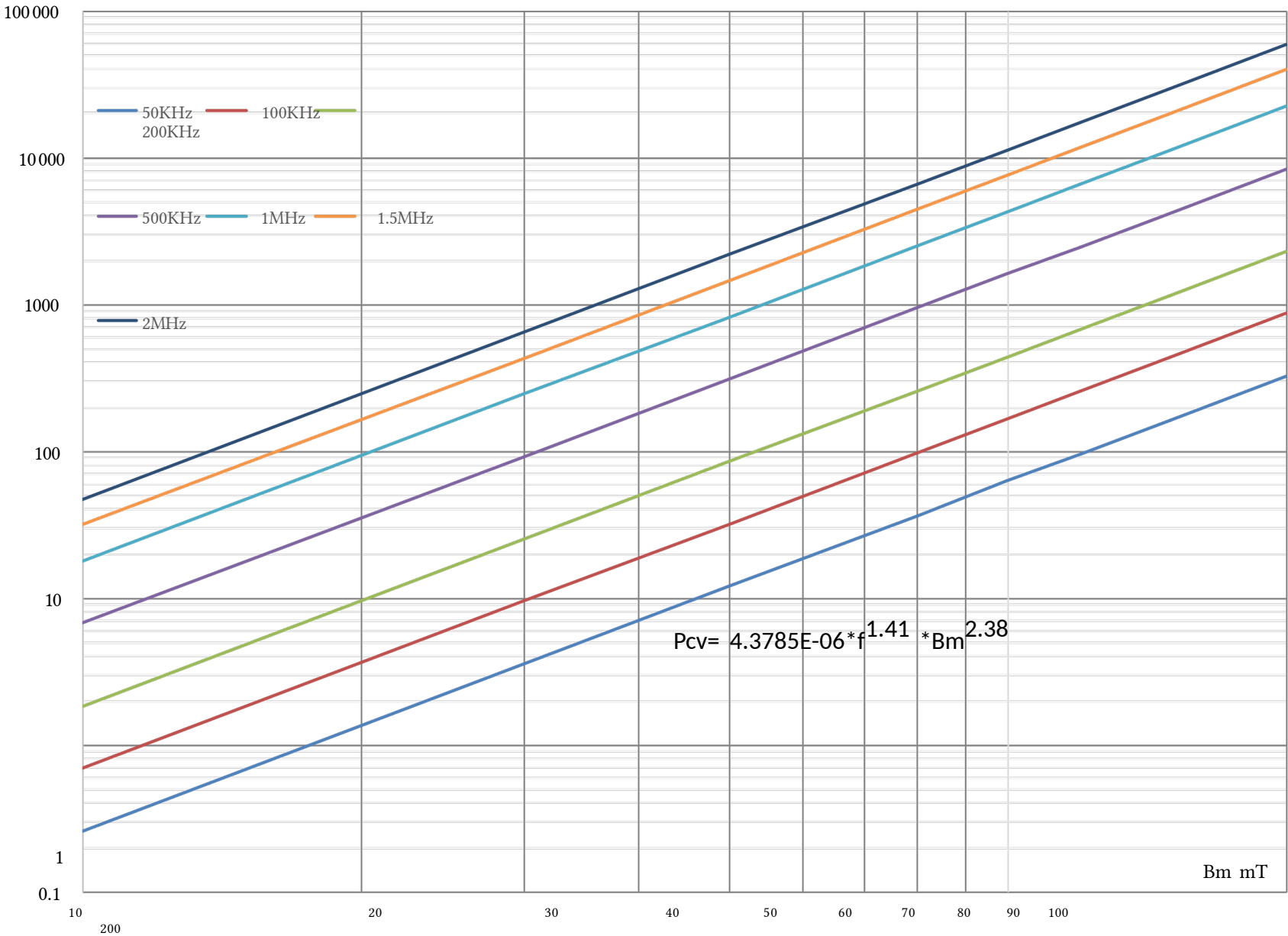
Material Characteristics:

- **Bs of 1.45 T**
- **Approximately 65% of initial permeability retained at 0.6 T**
- **Strong DC-bias capability; permeability ≈ 56 at 100 Oe**



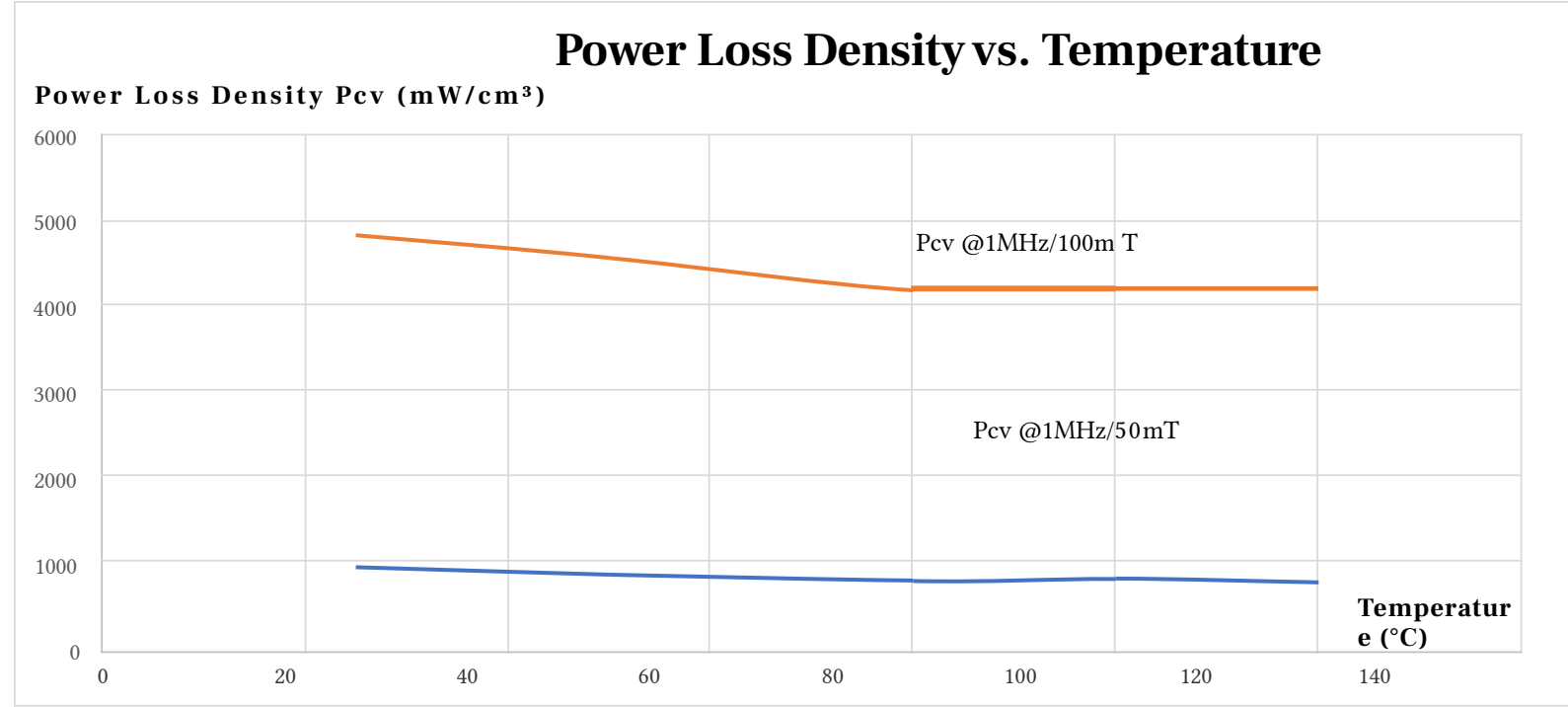
The above typical data are measured on a standard ring core $\phi 25 \times \phi 17 \times 4$; specific product performance will be adjusted on this basis.
The above typical data are calculated from the standard ring core. Specific performance of the product will be adjusted on this basis.

Power Loss Density vs. Flux Density & Frequency Pcv (mW/cm³)



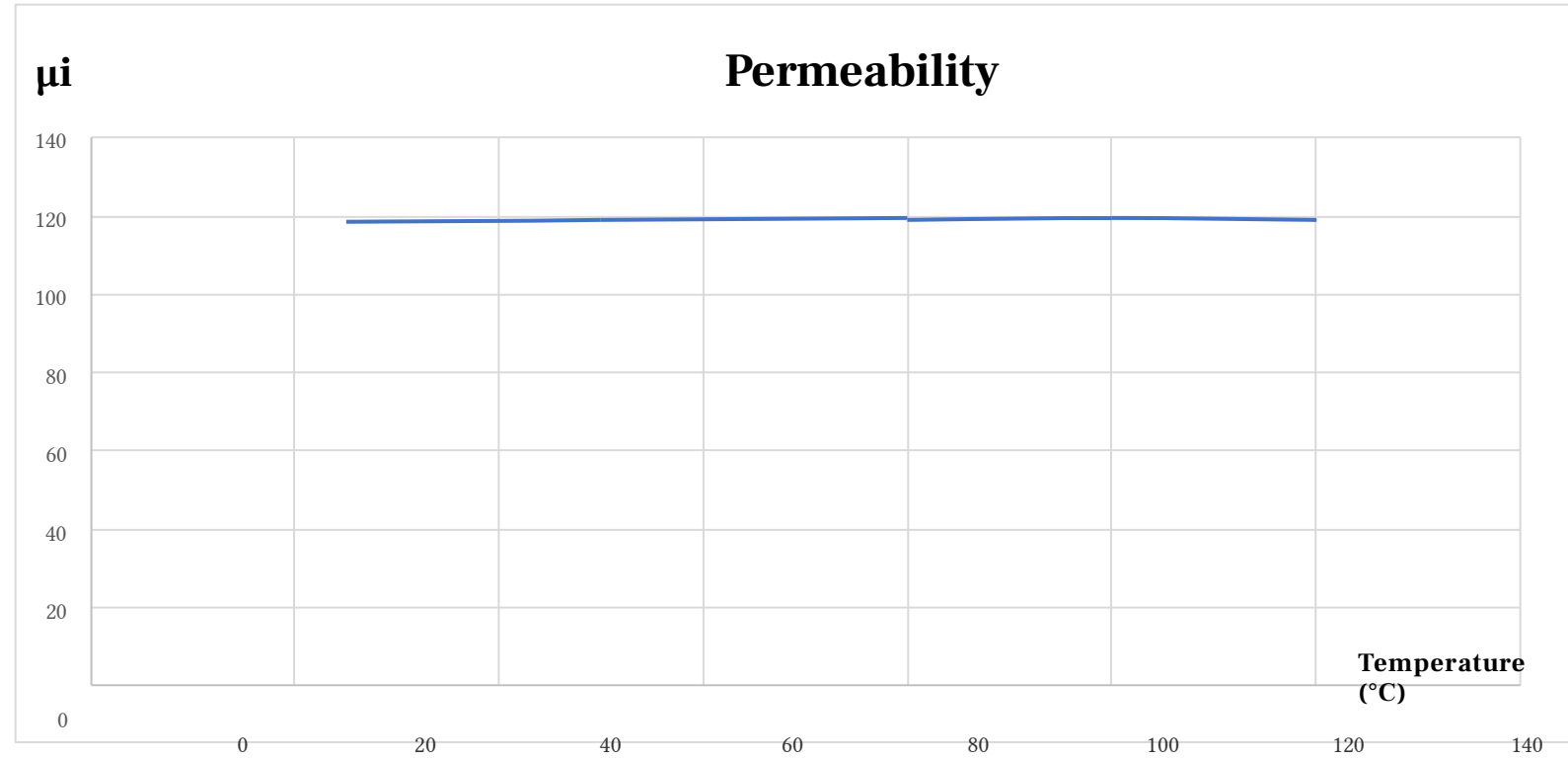
Material Characteristics:
Low frequency exponent α and low flux exponent β of core loss, suitable for high-frequency, high-flux-density applications

The above typical data are measured on a standard ring core $\phi 8 \times \phi 4 \times 3$; specific product performance will be adjusted on this basis.
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Material Characteristics:

Lower high-temperature core loss than ferrite

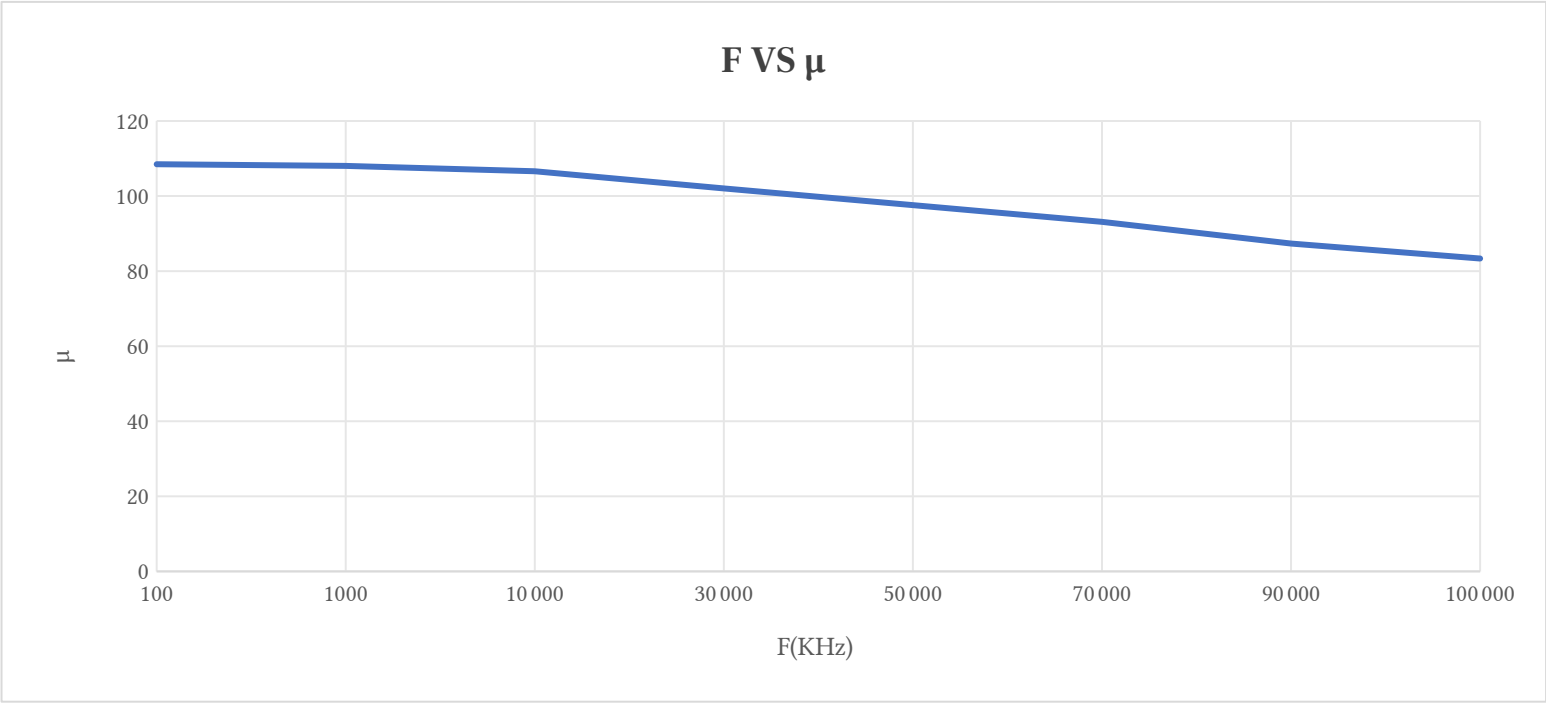


Material Characteristics:

High temperature stability of permeability

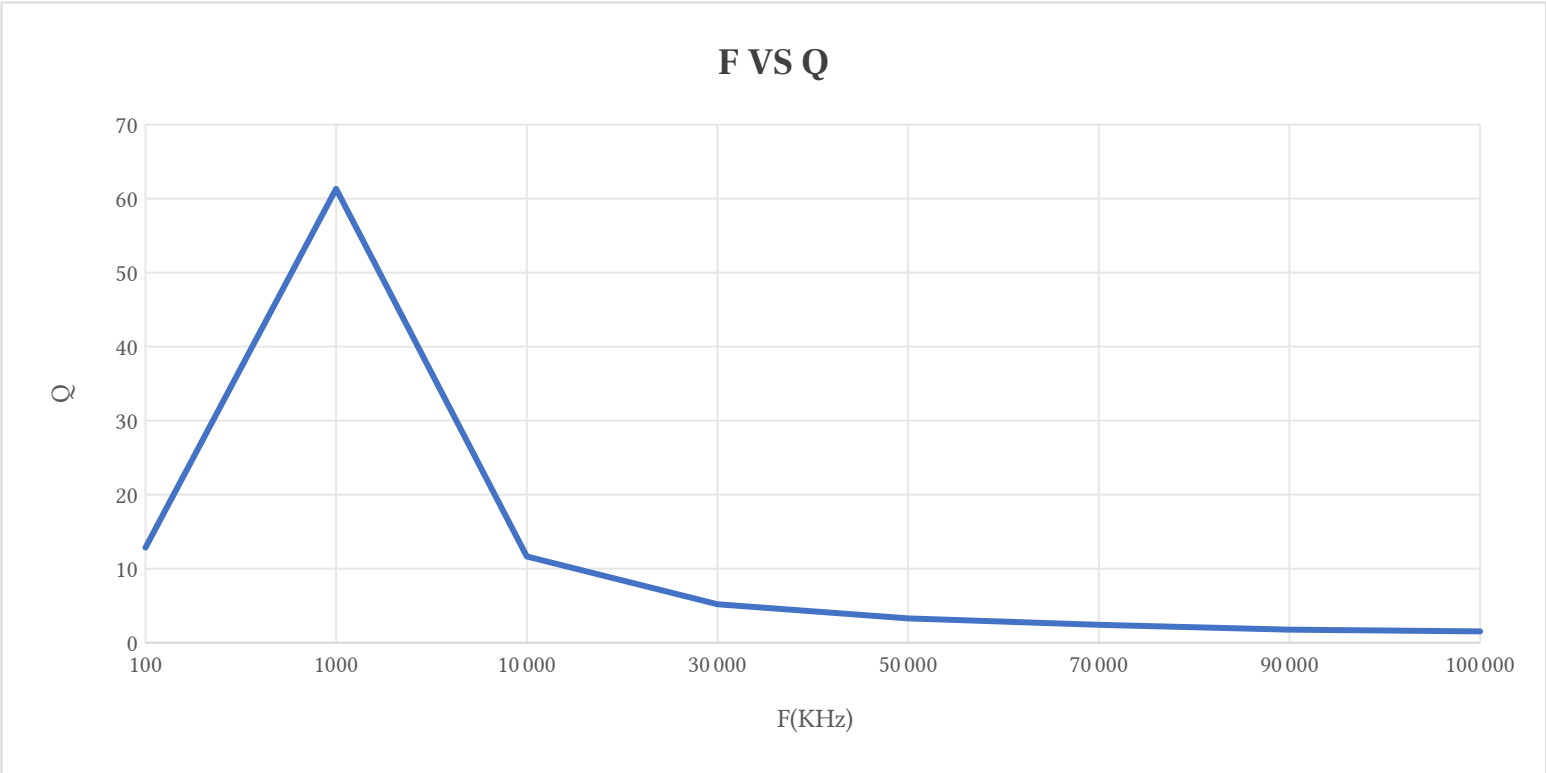
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**Material
Characteristics:**

**Excellent high-
frequency
performance**



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