



NATIONAL MAGNETICS GROUP, INC.

MANUFACTURERS OF MAGNETIC AND ADVANCED MATERIALS

AFFILIATE: TCI CERAMICS, INC.

M2

Material

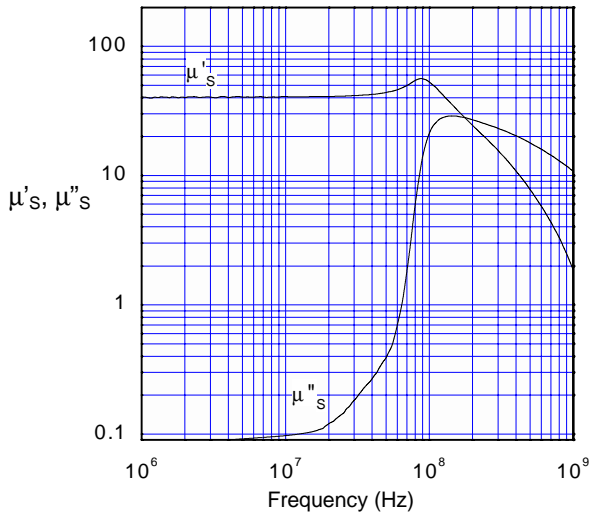
A permivar NiZn ferrite designed for high frequency applications (up to 50 MHz) including broadband transformers, antennas and high frequency, high Q inductors.

Specifications

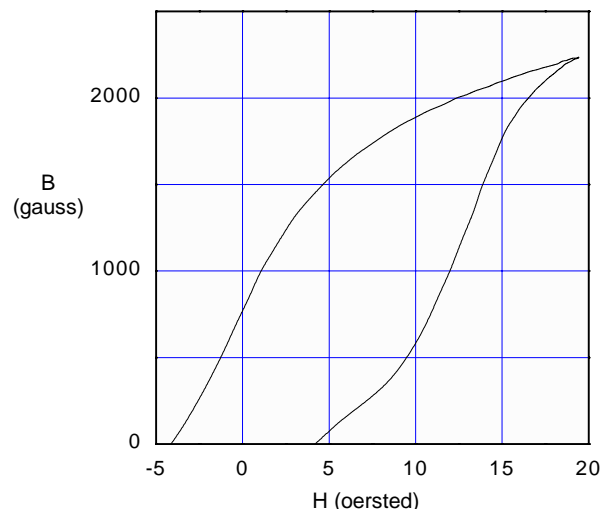
Property	Unit	Symbol	Standard Test Conditions	Value
Initial Permeability		μ_i	Frequency=10 kHz; B<10 gauss	$40 \pm 20\%$
Saturation Flux Density	gauss	B_s	H=20 oersted	≈ 2300
Residual Flux Density	gauss	B_r		≈ 800
Coercive Force	oersted	H_c		≈ 4
Loss Factor	10^{-6}	$\text{Tan} \delta / \mu_i$	Frequency=50 MHz; B=1 gauss	≤ 150
Temperature Coefficient of Initial Permeability (20-70°C)	%/°C			≤ 0.05
Volume Resistivity	$\Omega \text{ cm}$	ρ		$\approx 10^7$
Curie Temperature	°C	T_c		≥ 450

Note: values are typical and based on measurements of a standard toroid at 25 °C

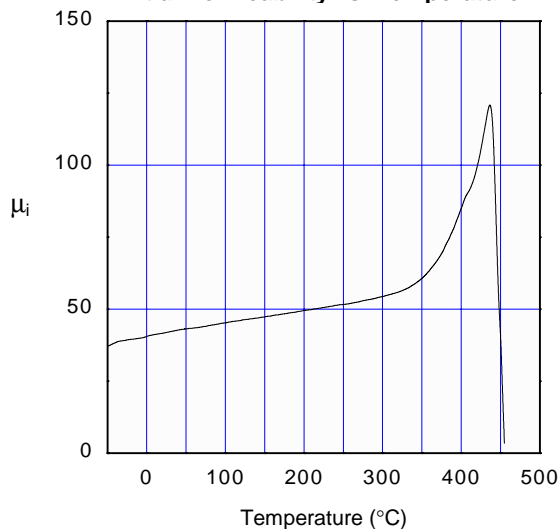
Complex Permeability vs. Frequency



B – H Loop



Initial Permeability vs. Temperature



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