



# NATIONAL MAGNETICS GROUP, INC.

MANUFACTURERS OF MAGNETIC AND ADVANCED MATERIALS

AFFILIATE: TCI CERAMICS, INC.

## N23

### Material

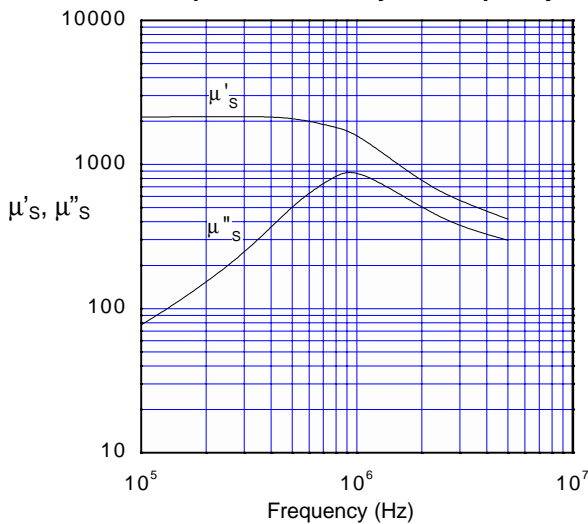
A high permeability NiZn ferrite with high resistivity for electromagnetic absorbing applications for frequencies ranging from 30 MHz to 1.5 GHz.

### Specifications

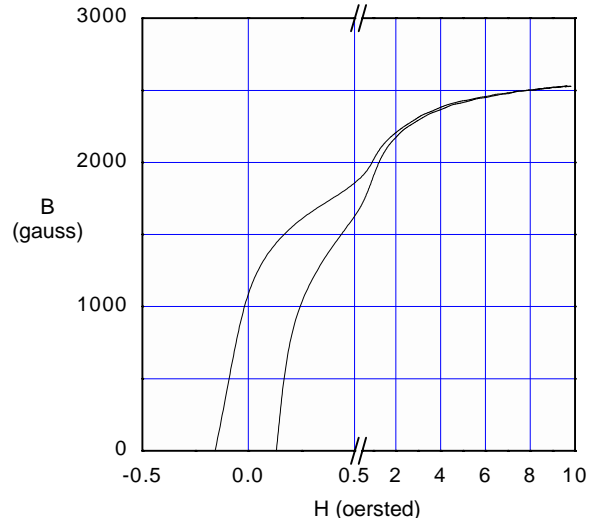
Property	Unit	Symbol	Standard Test Conditions	Value
Initial Permeability		$\mu_i$	Frequency=10 kHz; B<10 gauss	2300 $\pm$ 20%
Saturation Flux Density	gauss	$B_s$	H=10 oersted	$\approx$ 2500
Residual Flux Density	gauss	$B_r$		$\approx$ 1200
Coercive Force	oersted	$H_c$		$\approx$ 0.15
Loss Factor	$10^{-6}$	$\tan\delta/\mu_i$	Frequency=1 MHz; B=1 gauss	$\leq$ 350
Temperature Coefficient of Initial Permeability (20-70°C)	%/°C			$\leq$ 0.7
Volume Resistivity	$\Omega$ cm	$\rho$		$\approx 1 \times 10^8$
Curie Temperature	°C	$T_c$		$\geq$ 95

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

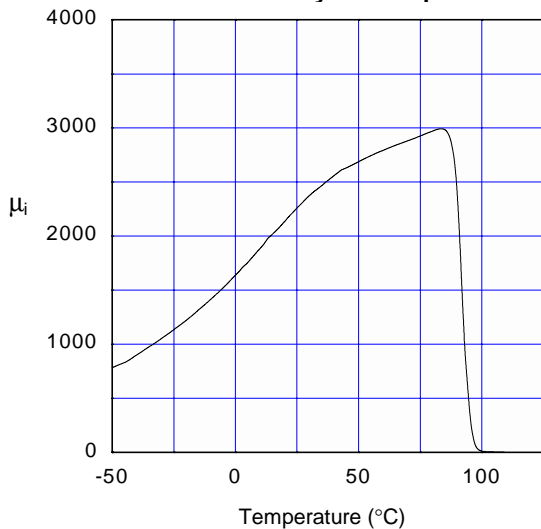
Complex Permeability vs. Frequency



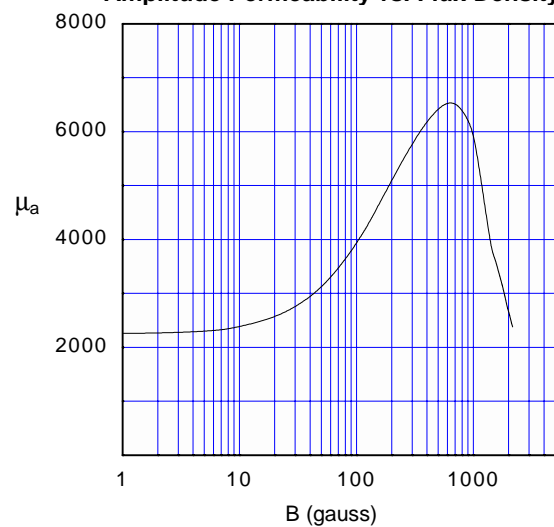
B - H Loop



Initial Permeability vs. Temperature



Amplitude Permeability vs. Flux Density



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