



# NATIONAL MAGNETICS GROUP, INC.

MANUFACTURERS OF MAGNETIC AND ADVANCED MATERIALS

AFFILIATE: TCI CERAMICS, INC.

## M5

### Material

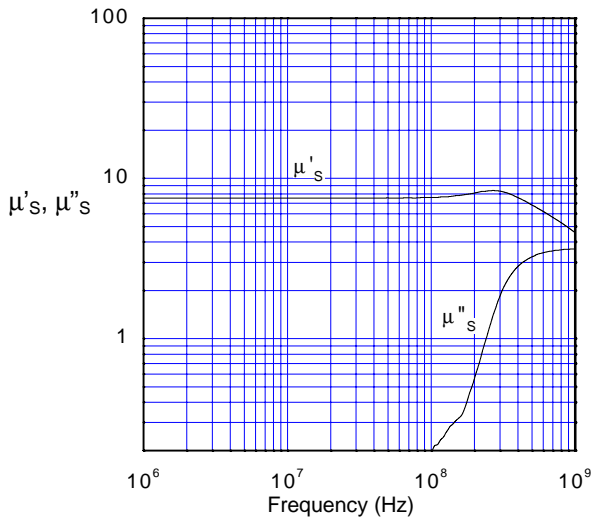
A NiZn ferrite designed for high frequency applications (up to 400 MHz) including transformers, antennas and resonant circuit inductors.

### Specifications

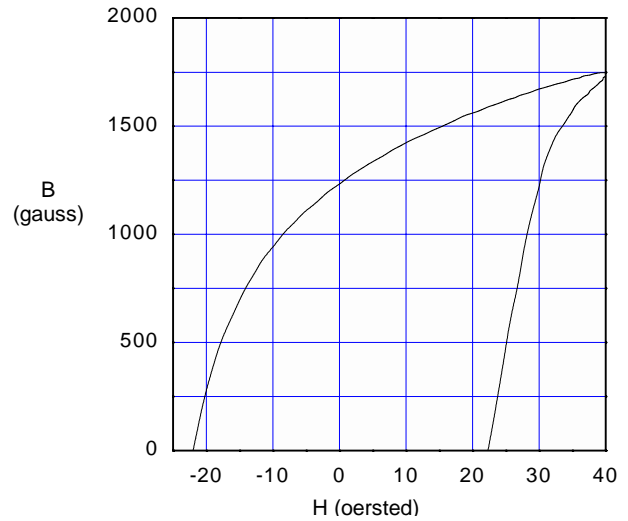
Property	Unit	Symbol	Standard Test Conditions	Value
Initial Permeability		$\mu_i$	Frequency=10 kHz; B<10 gauss	7.5 ± 20%
Saturation Flux Density	gauss	$B_s$	H=40 oersted	≈ 1750
Residual Flux Density	gauss	$B_r$		≈ 1250
Coercive Force	oersted	$H_c$		≈ 23
Loss Factor	$10^{-6}$	$\text{Tan}\delta/\mu_i$	Frequency=100 MHz; B=1gauss	≤ 3500
Volume Resistivity	$\Omega$ cm	$\rho$		≈ $10^7$
Curie Temperature	°C	$T_c$		> 320

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

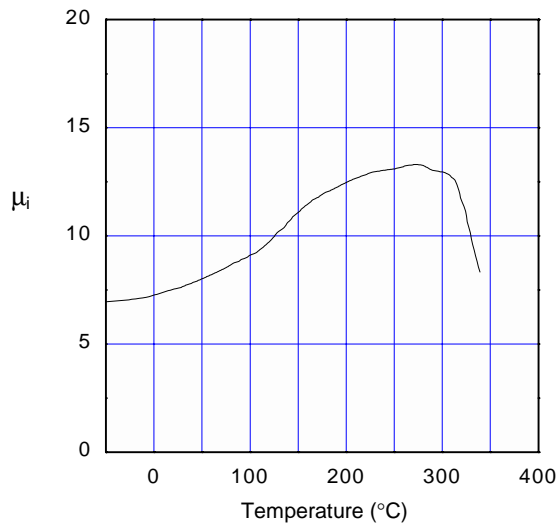
#### Complex Permeability vs. Frequency



#### B – H Loop



#### Initial Permeability vs. Temperature



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