



# NATIONAL MAGNETICS GROUP, INC.

MANUFACTURERS OF MAGNETIC AND ADVANCED MATERIALS

AFFILIATE: TCI CERAMICS, INC.

## MN60

### Material

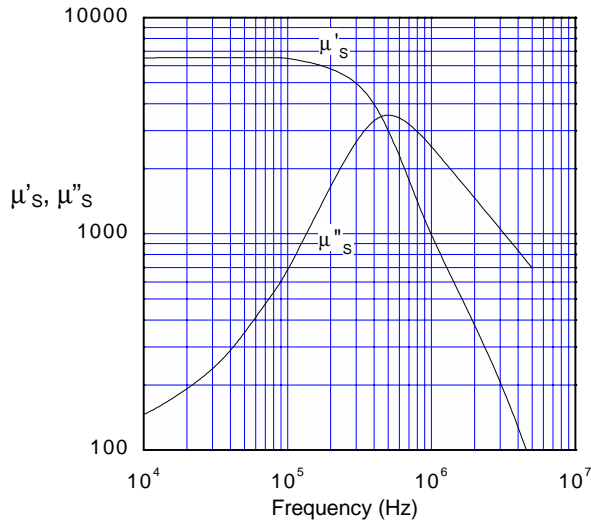
A high permeability, low loss MnZn ferrite designed for a range of applications including pulse transformers, power inverters, antenna cores, rotary devices, CRT display yokes and beam focusing. This material is supplied in block form.

### Specifications

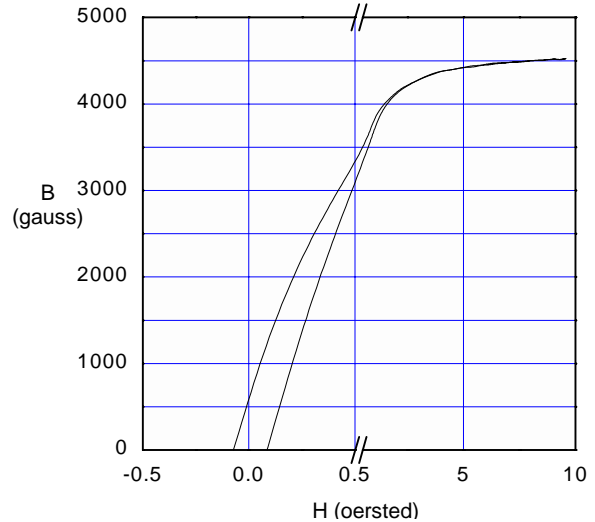
Property	Unit	Symbol	Standard Test Conditions	Value
Initial Permeability		$\mu_i$	Frequency=10 kHz; B<10 gauss	6500 $\pm$ 30%
Saturation Flux Density	gauss	$B_s$	H=10 oersted	$\approx$ 4500
Residual Flux Density	gauss	$B_r$		$\approx$ 800
Coercive Force	oersted	$H_c$		$\approx$ 0.1
Loss Factor	$10^{-6}$	$\text{Tan}\delta/\mu_i$	Frequency=0.1 MHz; B=1 gauss	$\leq$ 12
Temperature Coefficient of Initial Permeability (20-70°C)	%/°C			$\leq$ 0.5
Volume Resistivity	$\Omega$ cm	$\rho$		$\approx$ 200
Curie Temperature	°C	$T_c$		$\geq$ 165
Density	kg/m <sup>3</sup>			$\approx$ 4800

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

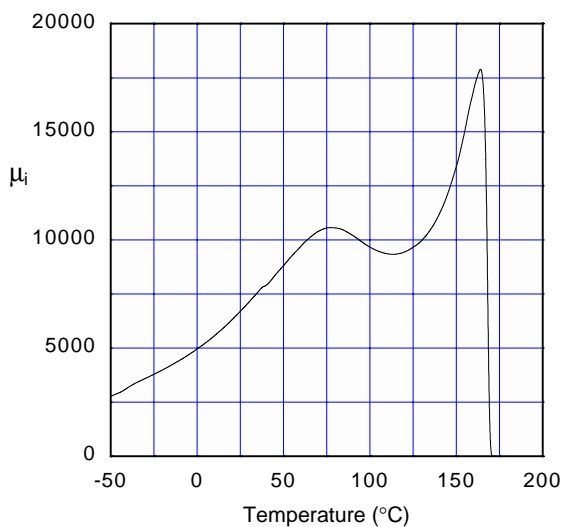
Complex Permeability vs. Frequency



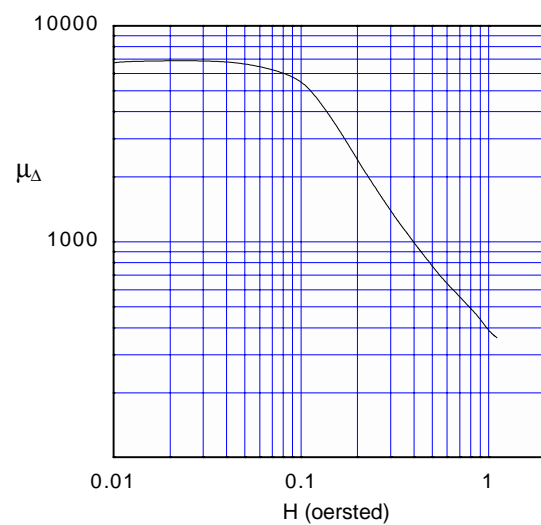
B - H Loop



Initial Permeability vs. Temperature



Incremental Permeability vs. Field Strength



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