

This NiZn is our most popular ferrite for suppression of conducted EMI from 20 MHz to 250 MHz. This material is also used for inductive applications such as high frequency common-mode chokes.

Available in 43 material:

- EMI Suppression Beads
- Beads On Leads
- SM beads
- Multi-Aperture Cores
- Round Cable EMI Suppression Cores
- Round Cable Snap-Its
- Flat Cable EMI Suppression Cores
- Flat Cable Snap-Its
- Miscellaneous Suppression Cores
- Bobbins
- Toroids

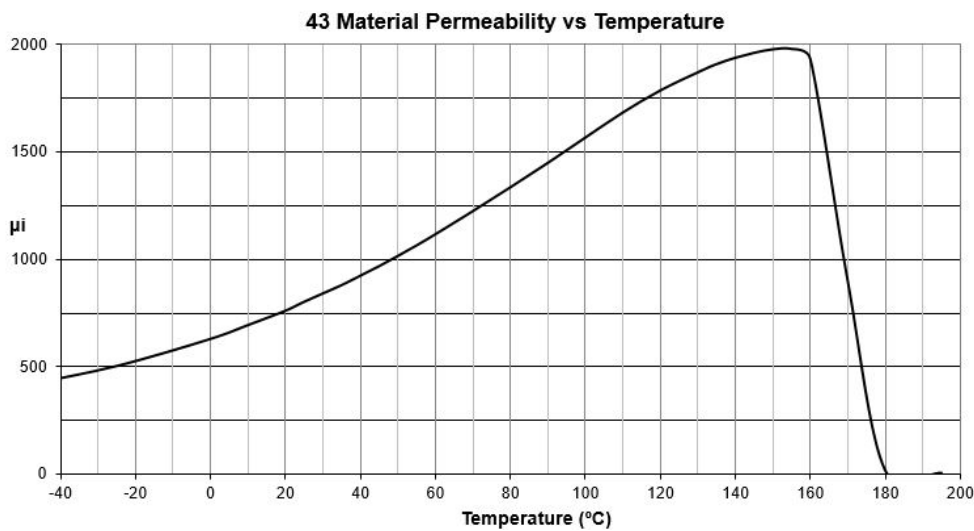
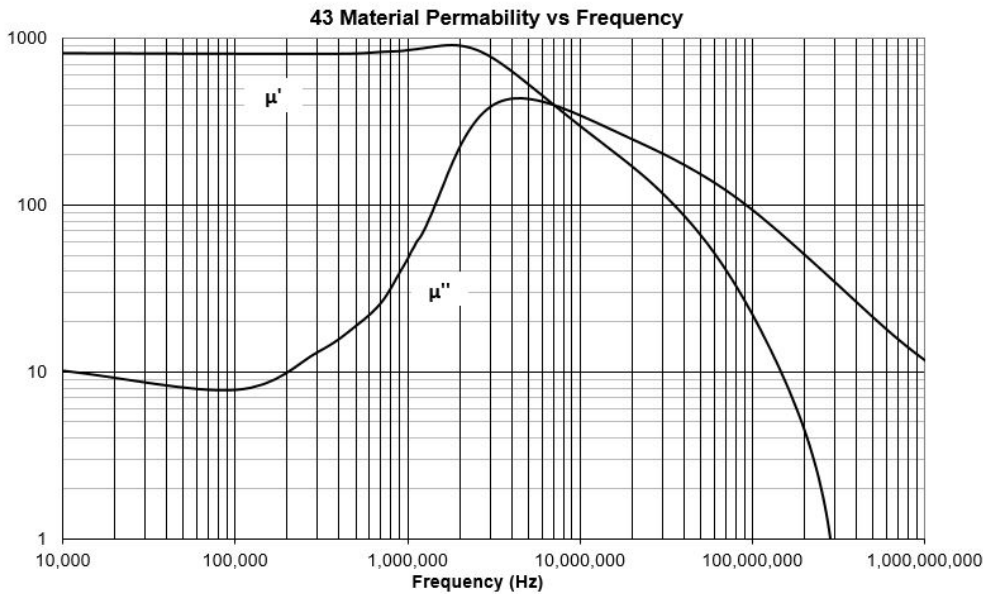
43 Material Characteristics

Property	Unit	Symbol	Value
Initial Permeability@ B < 10 gauss		μ_i	800
Flux Density @ Field Strength	Gauss Oersted	B H	3500 10
Residual Flux Density	Gauss	B_r	2200
Coercive Force	Oersted	H_c	0.36
Loss Factor @ Frequency	10^{-6} MHz	$\tan \delta / \mu_i$	100 1.0
Temperature Coefficient of Initial Permeability (20 -70°C)	%/°C		1.25
Curie Temperature	°C	T_c	>130
Resistivity	ohm-cm	ρ	1×10^5

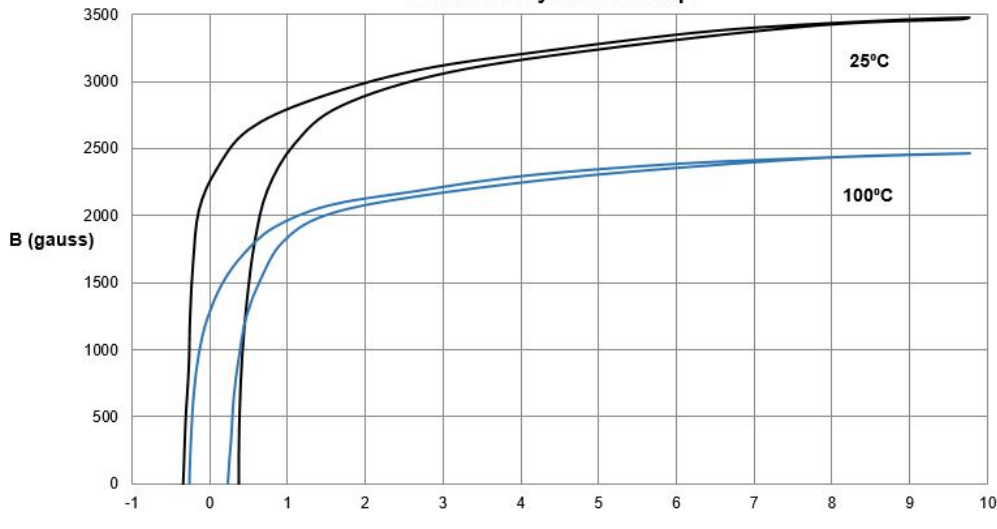
**** Characteristic curves are measured on standard Toroids (18/10/6 mm) at 25°C and 10 kHz unless otherwise indicated. Impedance characteristics are measured on standard shield beads (3.5/1.3/6.0 mm) unless otherwise indicated.

Material Safety Data Sheet (MSDS)

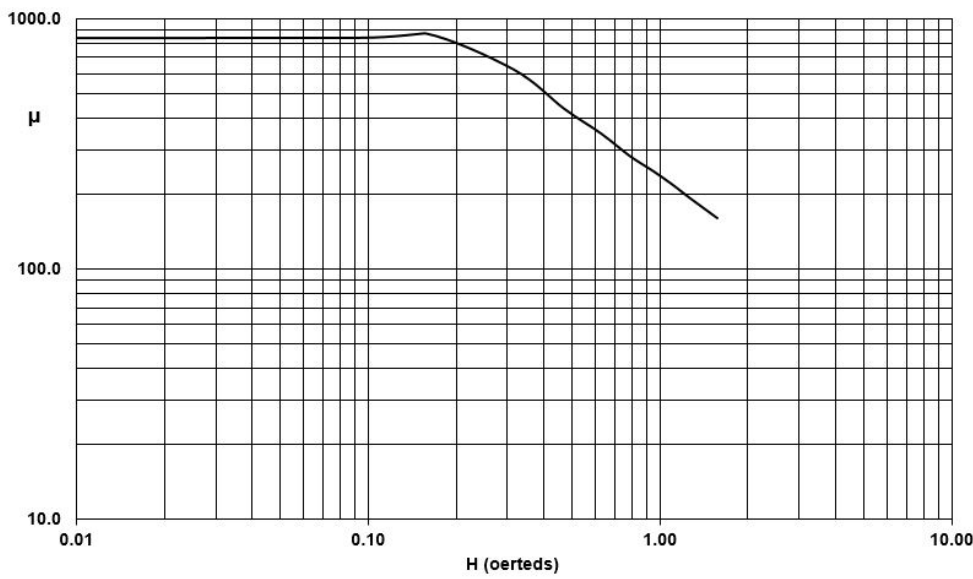
[Click here to download Complex Permeability vs. Frequency \(CSV\)](#)



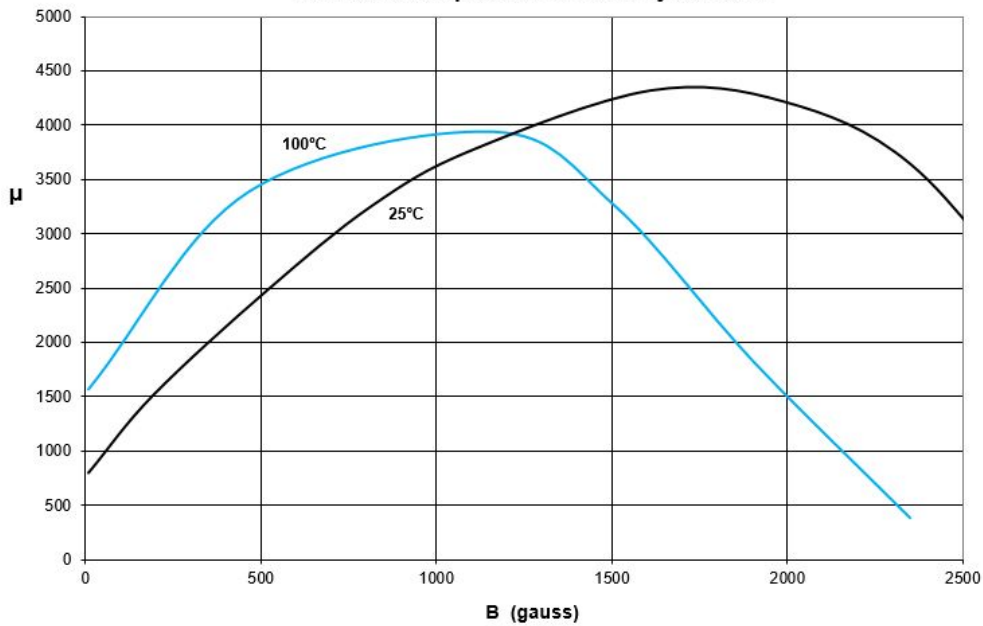
43 Material Hysteresis Loop



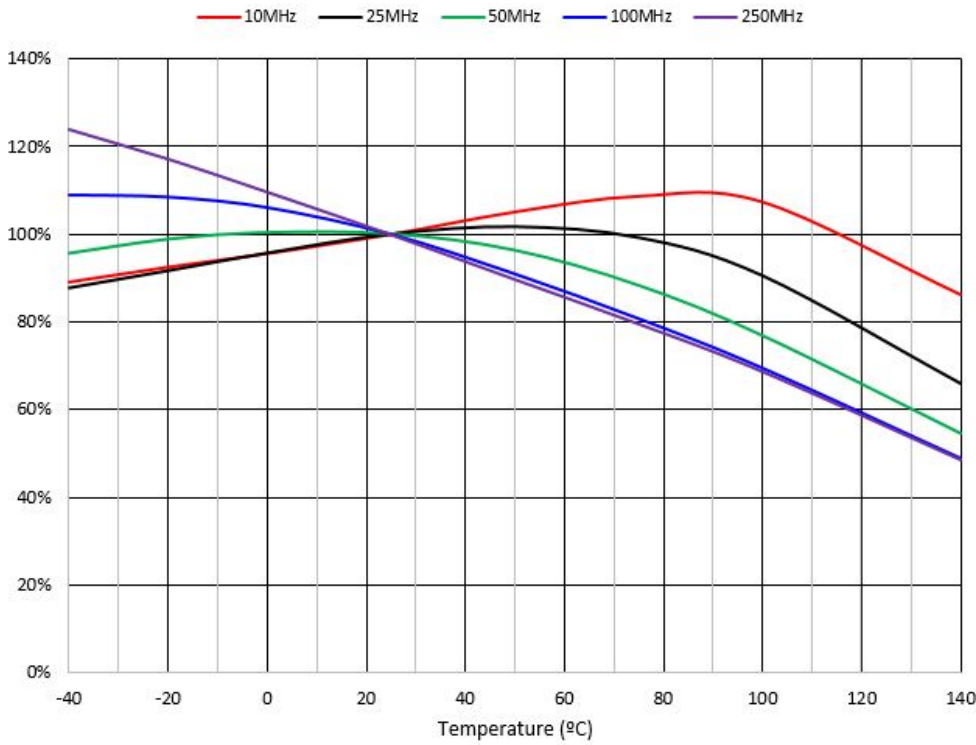
43 Material Incremental Permeability vs Field Strength



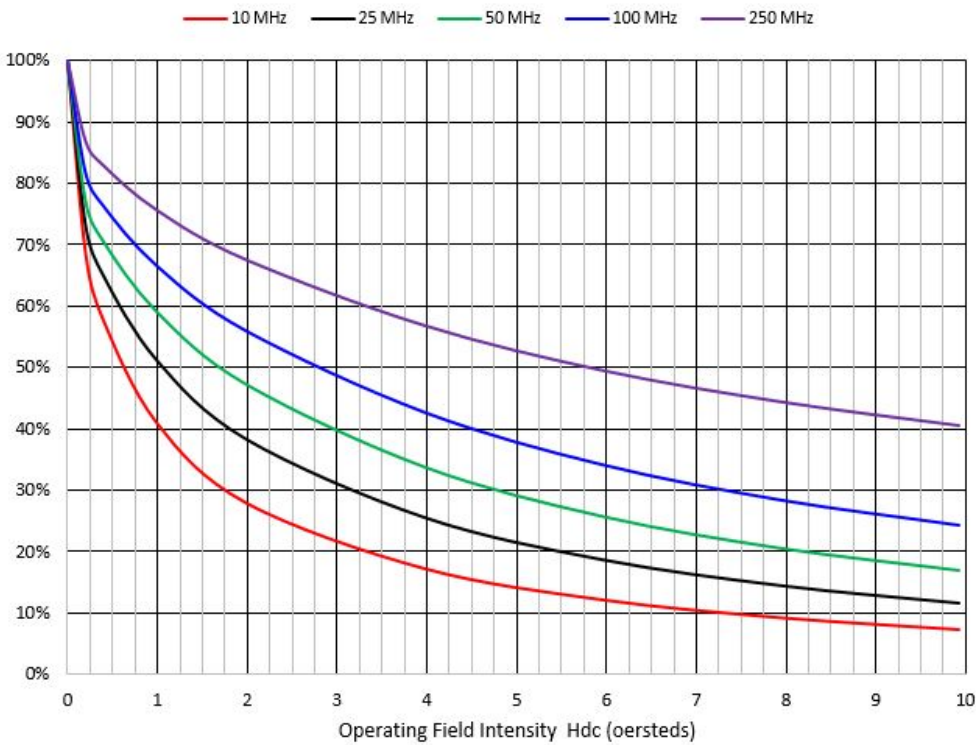
43 Material Amplitude Permeability at 10kHz



43 Material Impedance derating with Temperature



43 Material Impedance derating with applied DC bias



Ferrite Material Constants

Specific Heat	0.25 cal/g/°C
Thermal Conductivity	3.5 - 4.5 mW/cm-°C
Coefficient of Linear Expansion	8 - 10x10 ⁻⁶ /°C
Tensile Strength	4.9 kgf/mm ²
Compressive Strength	42 kgf/mm ²

Young's Modulus	$15 \times 10^3 \text{ kgf/mm}^2$
Hardness (Knoop)	650
Specific Gravity	$\approx 4.7 \text{ g/cm}^3$

The above quoted properties are typical for Fair-Rite MnZn and NiZn ferrites.