

51 Material



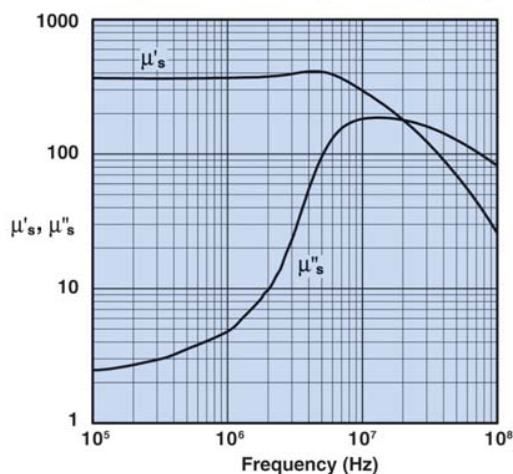
A NiZn ferrite developed for low loss inductive designs for frequencies up to 5.0 MHz.

This material is available as special order for customer specific applications.

51 Material Characteristics:

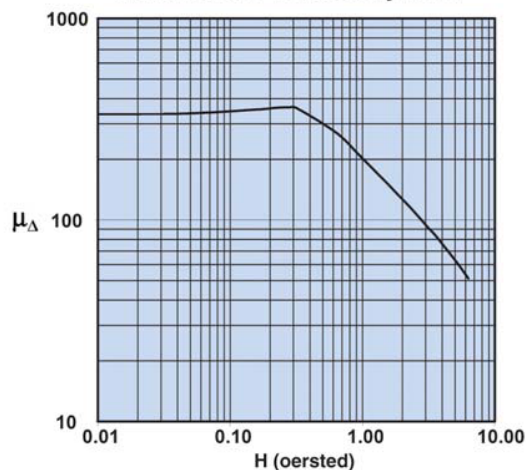
Property	Unit	Symbol	Value
Initial Permeability @ B < 10 gauss		μ_i	350
Flux Density @ Field Strength	gauss oersted	B H	3200 10
Residual Flux Density	gauss	B_r	1200
Coercive Force	oersted	H_c	0.60
Loss Factor @ Frequency	10^{-6} MHz	$\tan \delta / \mu_i$	40 1.0
Temperature Coefficient of Initial Permeability (20 -70°C)	%/°C		0.8
Curie Temperature	°C	T_c	>170
Resistivity	Ω cm	ρ	1×10^9

Complex Permeability vs. Frequency

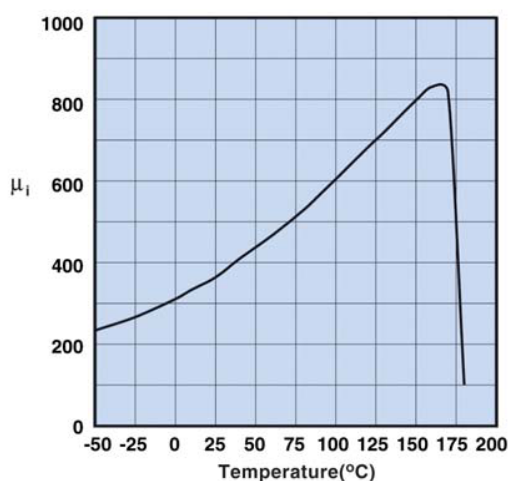


Measured on a 17/10/6mm toroid using the HP 4284A and the HP 4291A.

Incremental Permeability vs. H

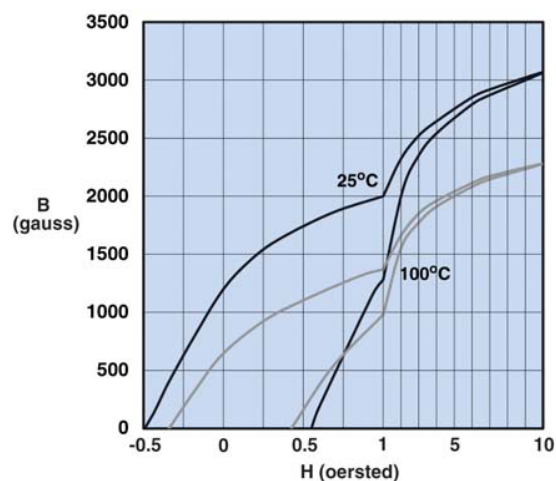


Initial Permeability vs. Temperature



Measured on a 17/10/6mm toroid at 100 kHz.

Hysteresis Loop



Measured on a 17/10/6mm toroid at 10 kHz.

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