

# 77 Material

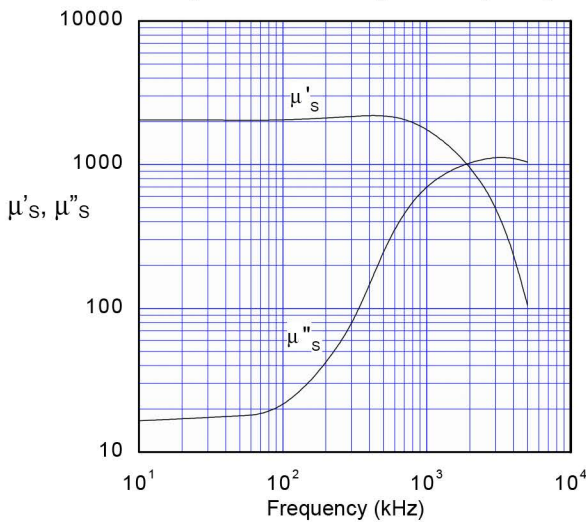
An MnZn ferrite with high saturation for high flux power applications for frequencies up to 200 kHz and also for inductive applications, including RFID transponders.

### Specifications

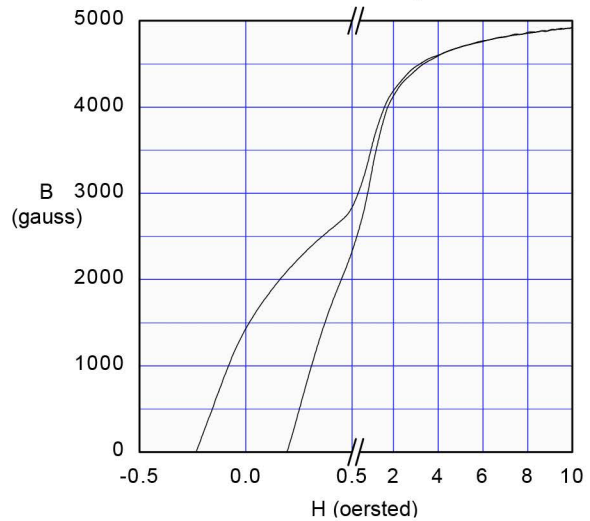
Property	Unit	Symbol	Standard Test Conditions	Value
Initial Permeability		$\mu_i$	Frequency=10 kHz; B<10 gauss	2000 ± 20%
Saturation Flux Density	gauss	$B_s$	H=10 oersted	≈ 4900
Residual Flux Density	gauss	$B_r$		≈ 1500
Coercive Force	oersted	$H_c$		≈ 0.2
Loss Factor	$10^{-6}$	$\tan\delta/\mu_i$	Frequency=0.1 MHz; B=1 gauss	≤ 15
Temperature Coefficient of Initial Permeability (20-70°C)	%/°C			≤ 0.7
Volume Resistivity	$\Omega$ cm	$\rho$		≈ $10^2$
Curie Temperature	°C	$T_c$		≥ 190

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

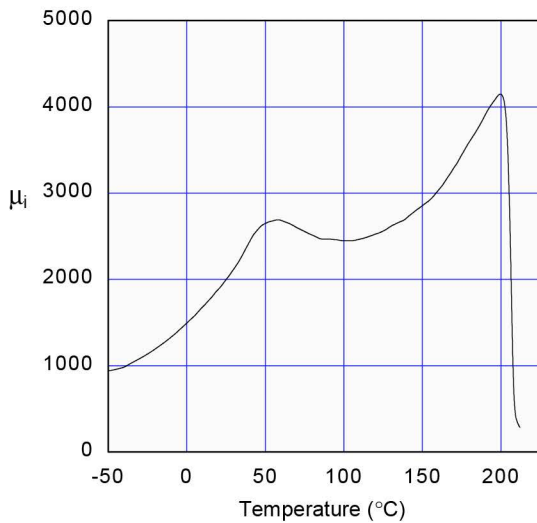
**Complex Permeability vs. Frequency**



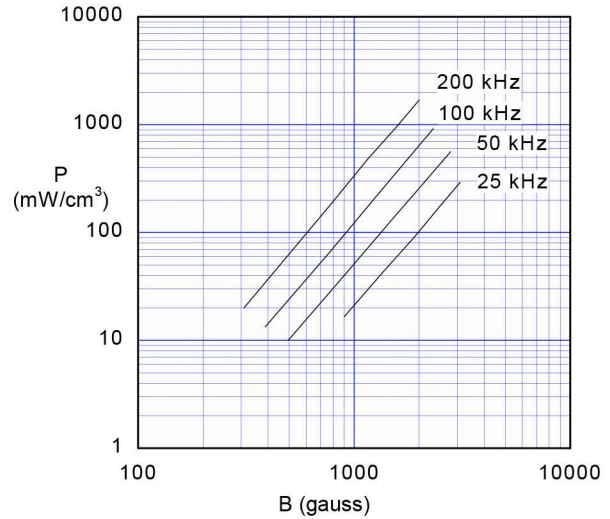
**B – H Loop**



**Initial Permeability vs. Temperature**



**Power Loss Density vs. Flux Density**



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