

# 33 Material

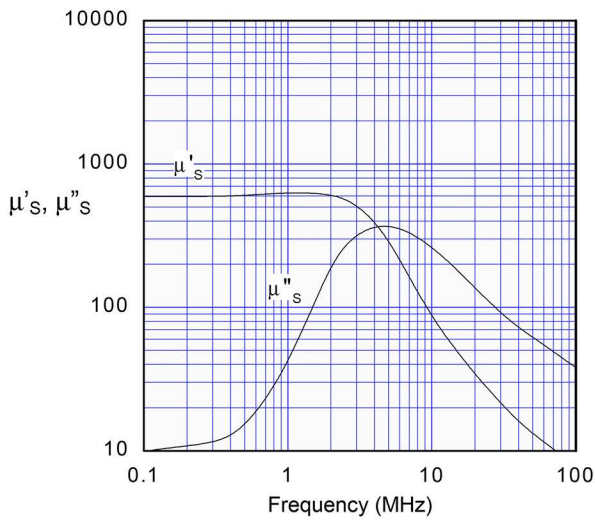
An MnZn ferrite designed for open circuit applications such as inductors and antennas for frequencies up to 3 MHz.

### Specifications

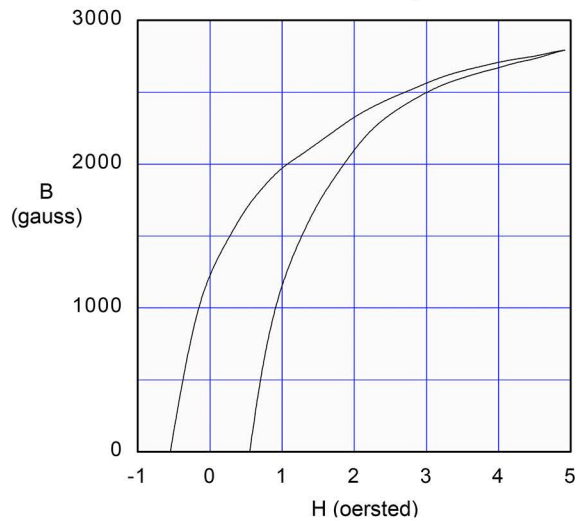
Property	Unit	Symbol	Standard Test Conditions	Value
Initial Permeability		$\mu_i$	Frequency=10 kHz; B<10 gauss	$\approx 600 \pm 20\%$
Saturation Flux Density	gauss	$B_s$	H=5 oersted	$\approx 2800$
Residual Flux Density	gauss	$B_r$		$\approx 1200$
Coercive Force	oersted	$H_c$		$\approx 0.6$
Loss Factor	$10^{-6}$	$\text{Tan}\delta/\mu_i$	Frequency=0.2 MHz; B=1 gauss	$\leq 25$
Temperature Coefficient of Initial Permeability (20-70°C)	%/°C			$\leq 0.1$
Volume Resistivity	$\Omega \text{ cm}$	$\rho$		$\approx 10^2$
Curie Temperature	°C	$T_c$		$\geq 150$

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**

