

# F01

**Material Type:** Nickel-Zinc Ferrite

**Properties:** Good Q at high frequency  
Perminvar ferrite  
Low loss factor at high frequency

**Frequency Range:** 500 kHz to 20 MHz (subject to application)

**Typical Application:** Filters, high Q inductors, RF frequency tuned circuits and EMI suppression

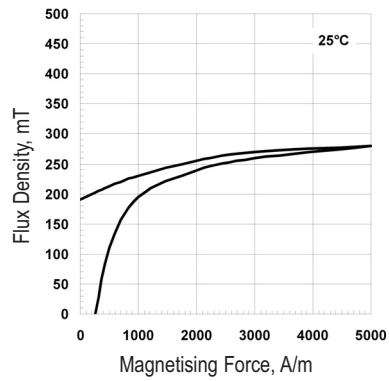
**Standard Geometries:** Toroids, baluns and rod cores  
Additional shapes are available upon request



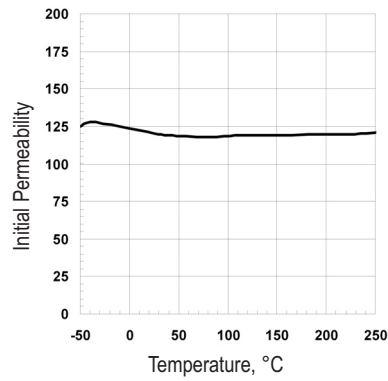
Parameter	Symbol	Standard Test Conditions	Unit	Value
Initial Permeability (nominal)	$\mu_i$	B < 0.1 mT      f = 10 kHz      T = 25°C	-	120
Saturation Flux Density (typical)	$B_s$	H = 4000 A/m (50 Oe)      T = 25°C	mT	280
Remanent Flux Density (typical)	$B_r$	H ~ 0 A/m (from near saturation) f = 10 kHz      T = 25°C	mT	190
Coercivity (typical)	$H_c$	B ~ 0 mT (from near saturation) f = 10 kHz      T = 25°C	A/m	30
Loss Factor (maximum)	$\frac{\tan \delta}{\mu_i}$	B < 0.1 mT      f = 2 MHz      T = 25°C	$10^{-6}$	45
Curie Temperature (minimum)	$T_c$	B < 0.1 mT      f = 10 kHz	°C	300
Resistivity (typical)	$\rho$	E = 1 V/cm      T = 25°C	$\Omega \cdot \text{cm}$	$1 \times 10^7$

\* Data was derived from measurements made on a standard test toroid core with an outside diameter of 30 mm

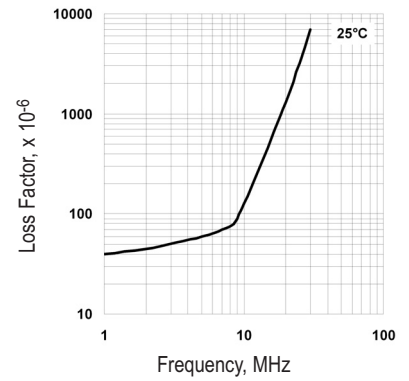
Dynamic Magnetisation Curve



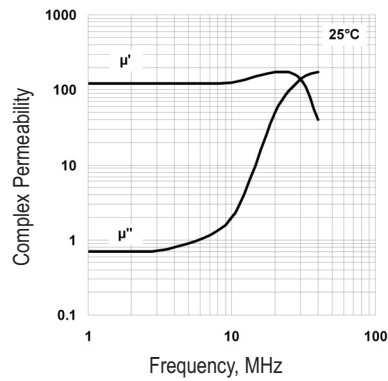
Permeability vs Temperature



Loss Factor vs Frequency



Permeability vs Frequency



Impedance vs Frequency

