

# FTF

**Material Type:** Manganese-Zinc Ferrite

**Properties:** Extra High Permeability  
High curie temperature  
High saturation flux density

**Frequency Range:** DC to 150 kHz (subject to application)

**Typical Application:** Broadband and pulse transformers, balanced and common mode chokes, T1/E1 and DSL transformers

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



Parameter	Symbol	Standard Test Conditions			Unit	Value
Initial Permeability <i>(nominal)</i>	$\mu_i$	$B < 0.1 \text{ mT}$	$f = 10 \text{ kHz}$	$T = 25^\circ\text{C}$	-	15000
Saturation Flux Density <i>(typical)</i>	$B_s$	$H = 796 \text{ A/m (10 Oe)}$		$T = 25^\circ\text{C}$	mT	400
Remanent Flux Density <i>(typical)</i>	$B_r$	$H \sim 0 \text{ A/m (from near saturation)}$ $f = 10 \text{ kHz}$		$T = 25^\circ\text{C}$	mT	110
Coercivity <i>(typical)</i>	$H_c$	$B \sim 0 \text{ mT (from near saturation)}$ $f = 10 \text{ kHz}$		$T = 25^\circ\text{C}$	A/m	2
Loss Factor <i>(maximum)</i>	$\frac{\tan \delta}{\mu_i}$	$B < 0.1 \text{ mT}$	$f = 10 \text{ kHz}$	$T = 25^\circ\text{C}$	$10^{-6}$	7
Curie Temperature <i>(minimum)</i>	$T_c$	$B < 0.1 \text{ mT}$	$f = 10 \text{ kHz}$		$^\circ\text{C}$	120
Resistivity <i>(typical)</i>	$\rho$	$E = 1 \text{ V/cm}$		$T = 25^\circ\text{C}$	$\Omega \cdot \text{cm}$	15

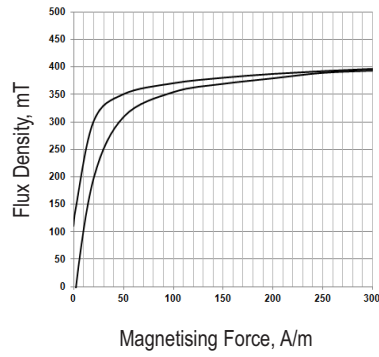
\* Data was derived from measurements made on a standard test toroid core with an outside diameter of 30 mm



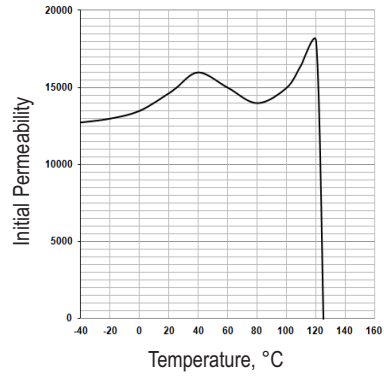
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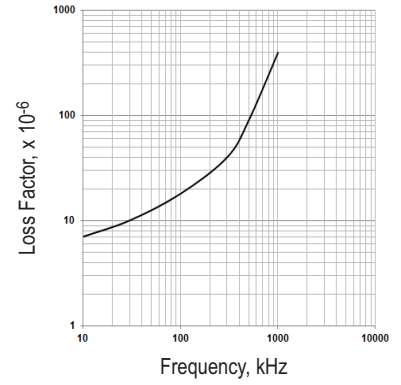
Dynamic Magnetisation Curve



Permeability vs Temperature



Loss Factor vs Frequency



Permeability vs Frequency

