

F81

Material Type: Manganese-Zinc Ferrite

Properties: Good stability of inductance
High permeability
Low losses

Frequency Range: DC to 500 kHz (subject to application)

Typical Application: Wideband and pulse transformers, filters and EMI suppression

Standard Geometries: Toroids, squaroids and baluns
Additional shapes are available upon request



Parameter	Symbol	Standard Test Conditions			Unit	Value
Initial Permeability (nominal)	μ_i	B < 0.1 mT	f = 10 kHz	T = 25°C	-	4400
Saturation Flux Density (typical)	B_s	H = 796 A/m (10 Oe)		T = 25°C	mT	380
Remanent Flux Density (typical)	B_r	H ~ 0 A/m (from near saturation) f = 10 kHz		T = 25°C	mT	92
Coercivity (typical)	H_c	B ~ 0 mT (from near saturation) f = 10 kHz		T = 25°C	A/m	14
Loss Factor (maximum)	$\frac{\tan \delta}{\mu_i}$	B < 0.1 mT	f = 100 kHz	T = 25°C	10 ⁻⁶	10
Curie Temperature (minimum)	T_c	B < 0.1 mT	f = 10 kHz		°C	150
Relative Temperature Factor (typical)	$\frac{\Delta \mu}{\mu_i^2 \Delta T}$	B < 0.1 mT	f = 10 kHz	T = 25 to 55°C	10 ⁻⁶ /°C	0 to 2.0
Resistivity (typical)	ρ	E = 1 V/cm		T = 25°C	Ω·cm	20

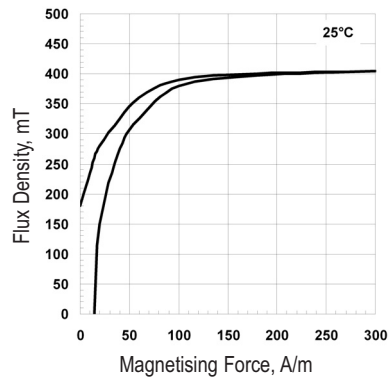
* Data was derived from measurements made on a standard test toroid core with an outside diameter of 30 mm



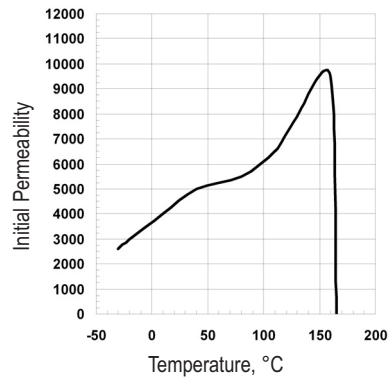
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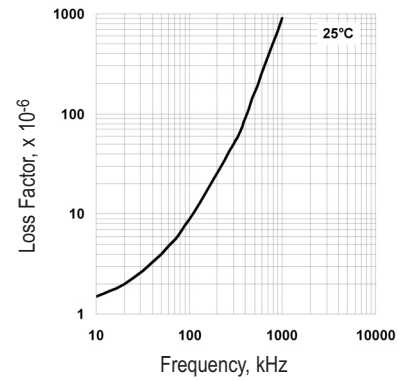
Dynamic Magnetisation Curve



Permeability vs Temperature



Loss Factor vs Frequency



Permeability vs Frequency

