

Parameter	Symbol	Standard Conditions of test	Unit	P12
Initial Permeability (nominal)	μ_i	B<0.1mT 10kHz 25°C	-	2000 ± 20%
Remanent Flux Density (typical)	B_r	H→0 (from near Saturation) 10kHz 25°C	mT	35
Coercivity (typical)	H_c	B→0 (from near Saturation) 10kHz 25°C	A/m	7
Loss Factor (maximum)	$\frac{\tan \delta_{(r+\epsilon)}}{\mu_i}$	B<0.10mT 25°C 10kHz 100kHz	10^{-6}	0.8 2.5
Temperature Factor	$\frac{\Delta \mu}{\mu_i^2 \cdot \Delta T}$	+25°C to +55°C B<0.1mT 10kHz	$10^{-6}/^\circ\text{C}$	0.4 to 1
Curie Temperature (minimum)	Θ_c	B<0.1mT 10kHz	°C	150
Dis-accommodation Factor (max)	$\frac{\Delta \mu}{\mu_i^2 \cdot \log_{10}(t_2/t_1)}$	B<0.25mT 10 to 100 mins 50°C	10^{-6}	3
Hysteresis Material Constant (maximum)	η_B	B from 1.5 to 3mT 10kHz 25 °C	$10^{-6}/\text{mT}$	0.45
Resistivity (typical)	ρ	1 V/cm 25°C	ohm-cm	100

Material type: Manganese-Zinc Ferrite

Properties:

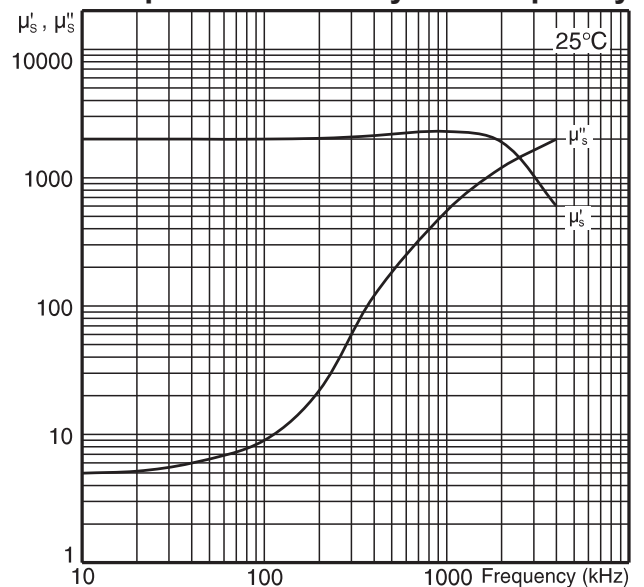
- High stability of inductance
- Low temperature coefficient
- Low loss factors
- Medium permeability

Frequency range: Depends on application

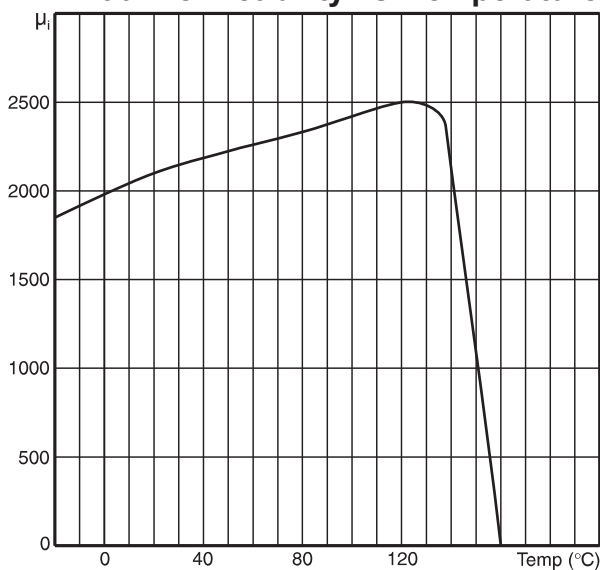
Typical applications: Filter networks

Typical core shapes: RM and pot cores

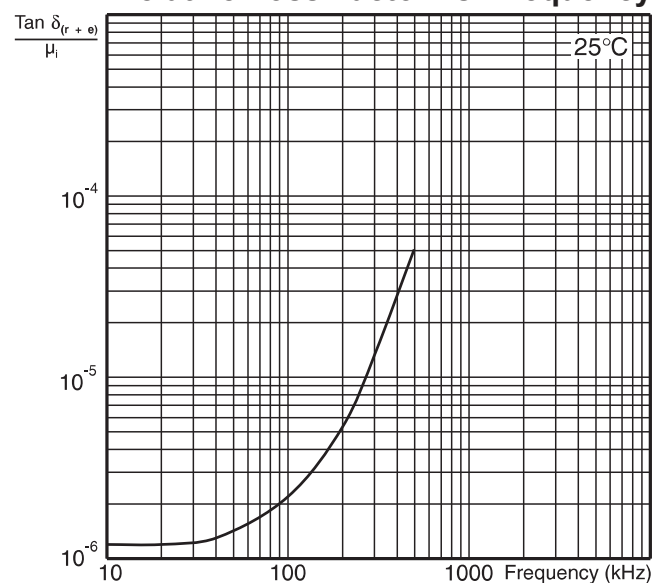
Complex Permeability vs. Frequency



Initial Permeability vs. Temperature



Relative Loss Factor vs. Frequency



Dynamic Magnetisation: Typical B-H Loops

