

Parameter	Symbol	Standard Conditions of test		Unit	F47
Initial Permeability (nominal)	μ_i	B<0.1mT 10kHz	25°C	-	1800 ± 20%
Saturation Flux Density (typical)	B_{sat}	H=796 A/m = 10Oe	25°C 100°C	mT	470 360
Remanent Flux Density (typical)	B_r	H→0 (from near Saturation) 10kHz	25°C	mT	130
Coercivity (typical)	H_c	B→0 (from near Saturation) 10kHz	25°C	A/m	24
Curie Temperature (minimum)	θ_c	B<0.1mT	10kHz	°C	200
Resistivity (typical)	ρ		1 V/cm 25°C	ohm-cm	100
Amplitude Permeability (minimum)	μ_a	400mT 340mT	25°C 100°C	-	2500 1000
Total Power Loss Density (max)	P_v	200mT; 25kHz 200mT; 25kHz 100mT; 100kHz 100mT; 100kHz 50mT; 400kHz 50mT; 400kHz	25°C 100°C 25°C 100°C 25°C 100°C	mW/cm ³	120 100 110 80 150 150

Material type:

Manganese-Zinc Ferrite

Properties:

- Higher frequency power grade
- Low losses in recommended frequency range
- High saturation
- Medium permeability
- Losses minimised 60°C-80°C

Frequency range:

300kHz to 1MHz
(depending on flux density)

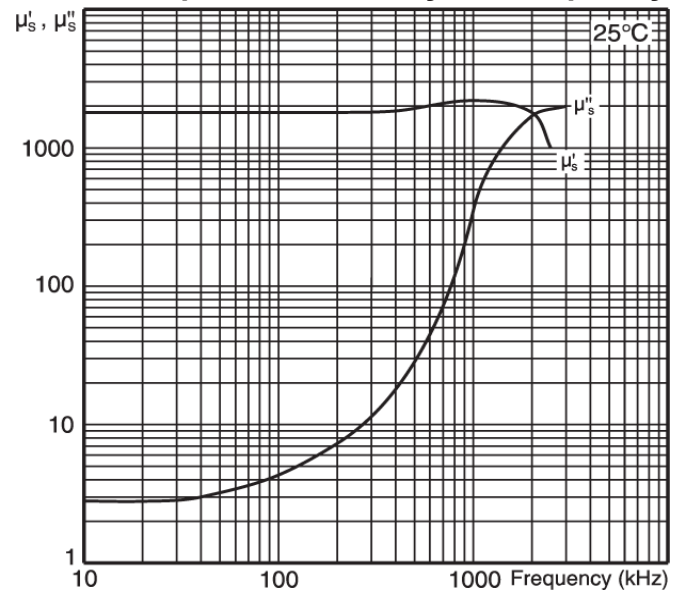
Typical applications:

SMPS

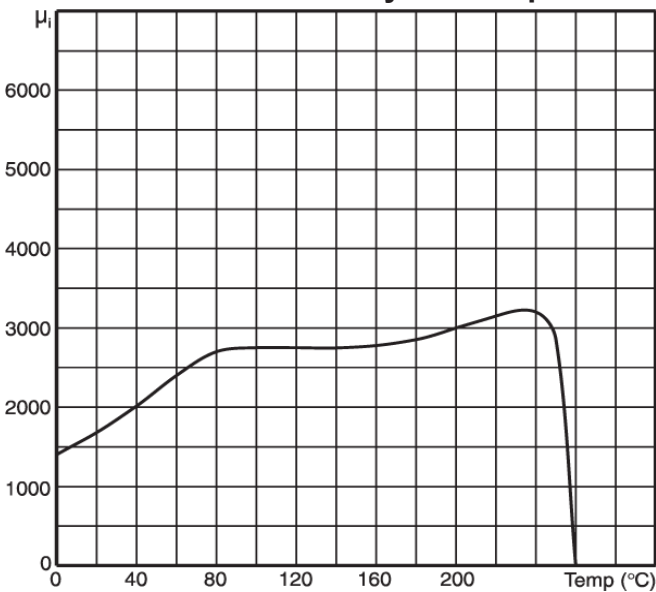
Typical core shapes:

E, ETD, EFD, RM and ring cores

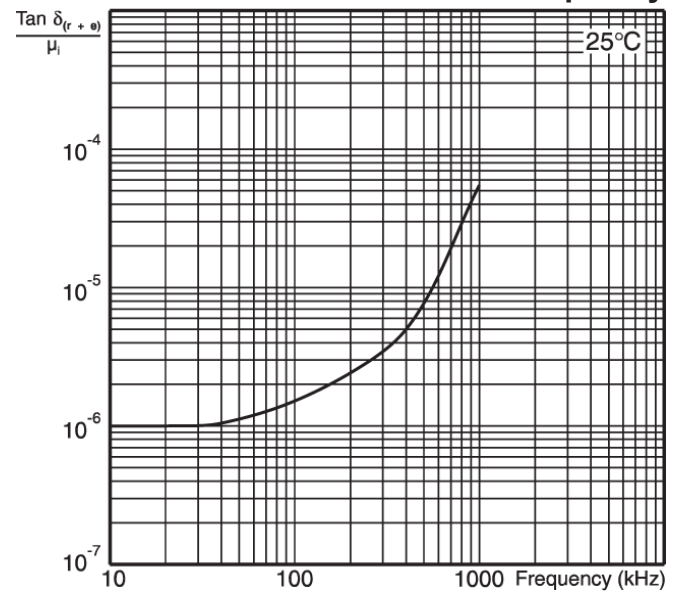
Complex Permeability vs. Frequency



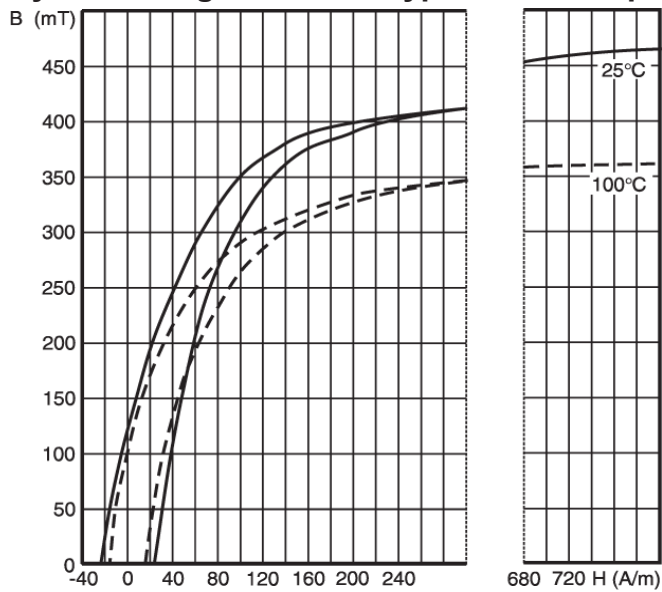
Initial Permeability vs. Temperature



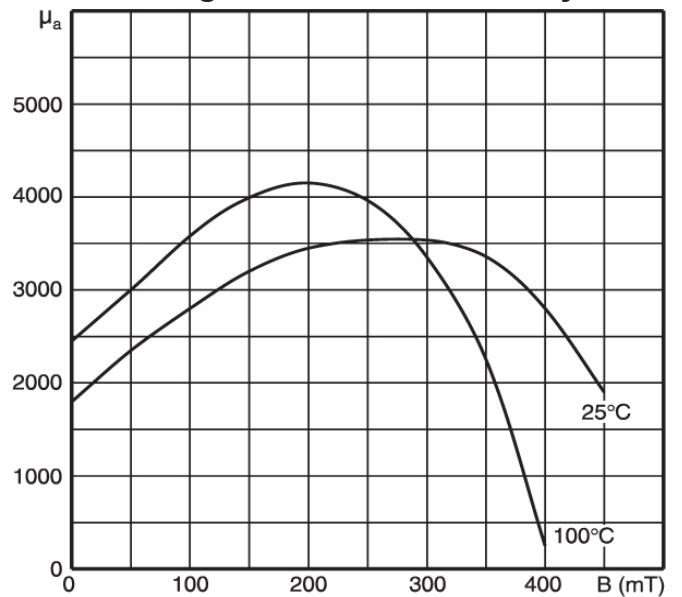
Relative Loss Factor vs. Frequency



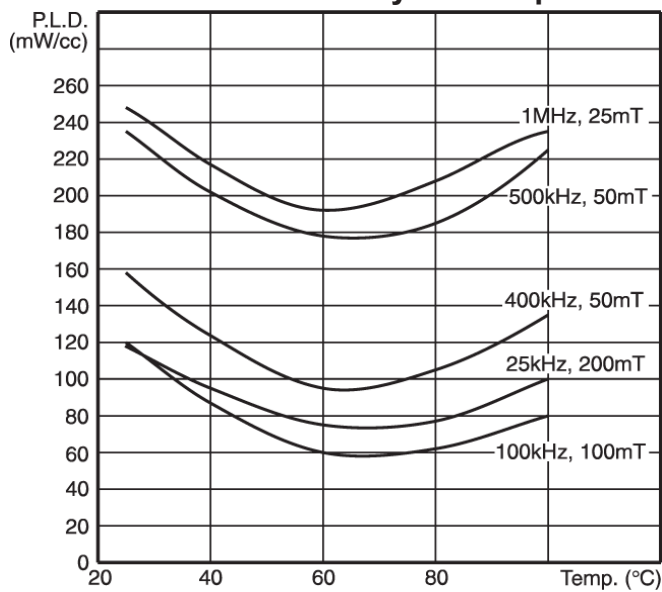
Dynamic Magnetisation: Typical B-H Loops



Static Magnetisation: Permeability vs. B



Power Loss Density vs. Temperature



Power Loss Density vs. Frequency

