

Parameter	Symbol	Standard Conditions of test		Unit	F5C
Initial Permeability (nominal)	$\mu_i$	B<0.1mT 10kHz	25°C	-	3000
Saturation Flux Density (typical)	$B_{sat}$	H=796 A/m = 10Oe	25°C 100°C	mT	460 330
Remanent Flux Density (typical)	$B_r$	H→0 (from near Saturation) 10kHz	25°C	mT	150
Coercivity (typical)	$H_c$	B→0 (from near Saturation) 10kHz	25°C	A/m	18
Curie Temperature (minimum)	$\Theta_c$	B<0.1mT	10kHz	°C	180
Resistivity (typical)	$\rho$		1 V/cm 25°C	ohm-cm	100
Amplitude Permeability (minimum)	$\mu_a$	400mT	25°C	-	2400
Total Power Loss Density (max)	$P_v$	200mT; 16kHz 200mT; 16kHz 200mT; 16kHz 200mT; 25kHz 200mT; 25kHz	25°C 60°C 100°C 60°C 100°C	mW/cm <sup>3</sup>	120 110 110 190 190

**Material type:** Manganese-Zinc Ferrite

**Properties:**

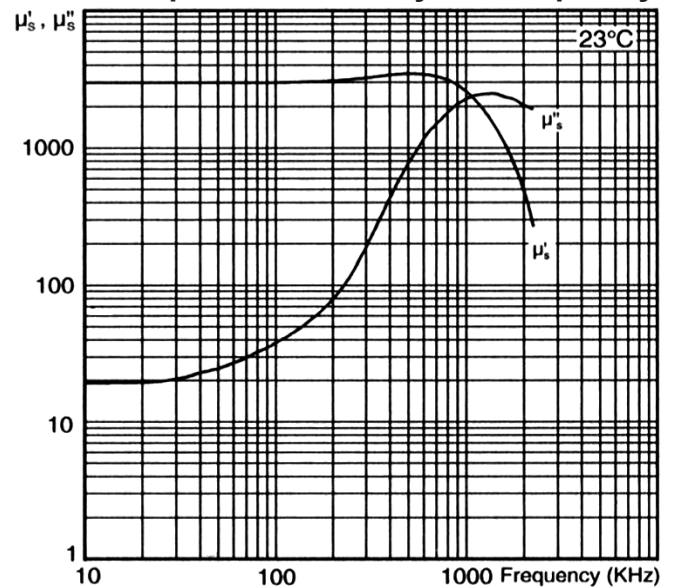
- Losses are minimised in the 40°- 60°C range
- Higher permeability
- High saturation

**Frequency range:** Up to 100kHz (depending on the flux density)

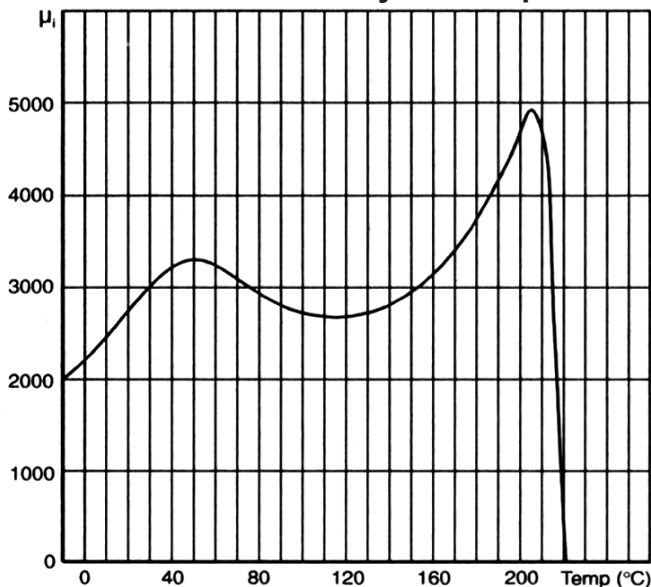
**Typical applications:** Power and filtering; power supplies and EHT transformers.

**Typical core shapes:** Ring cores, E cores, RM cores, Pot cores and Rods

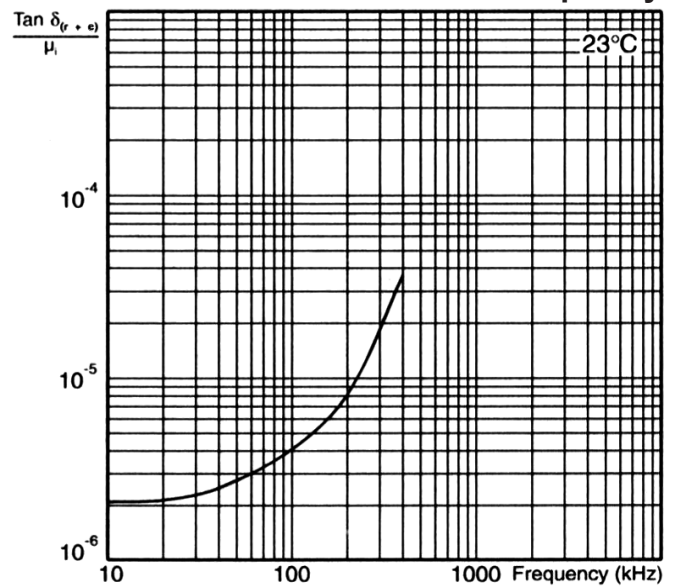
**Complex Permeability vs. Frequency**



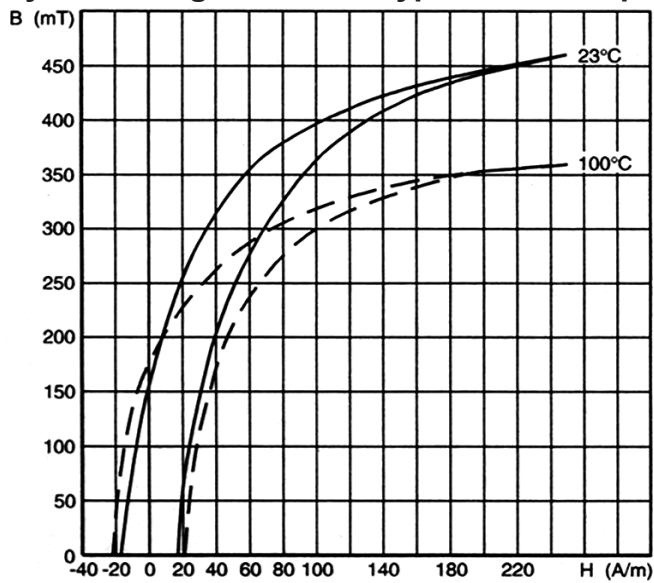
**Initial Permeability vs. Temperature**



**Relative Loss Factor vs. Frequency**



Dynamic Magnetisation: Typical B-H Loops



Static Magnetisation: Permeability vs. B

