

Parameter	Symbol	Standard Conditions of test		Unit	F48
Initial Permeability (nominal)	$\mu_i$	B<0.1mT 10kHz	25°C	-	2300 ± 20%
Saturation Flux Density (typical)	$B_{sat}$	H=796 A/m = 10Oe	25°C 100°C	mT	480 380
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	20
Curie Temperature (minimum)	$\Theta_c$	B<0.1mT	10kHz	°C	220
Resistivity (typical)	$\rho$		1 V/cm 25°C	ohm-cm	100
Amplitude Permeability (minimum)	$\mu_a$	400mT 320mT	25°C 100°C	-	2500 2000
Total Power Loss Density (max)	$P_v$	100mT; 100kHz 200mT; 100kHz	100°C 100°C	mW/cm <sup>3</sup>	70 380

**Material type:** Manganese-Zinc Ferrite

**Properties:**

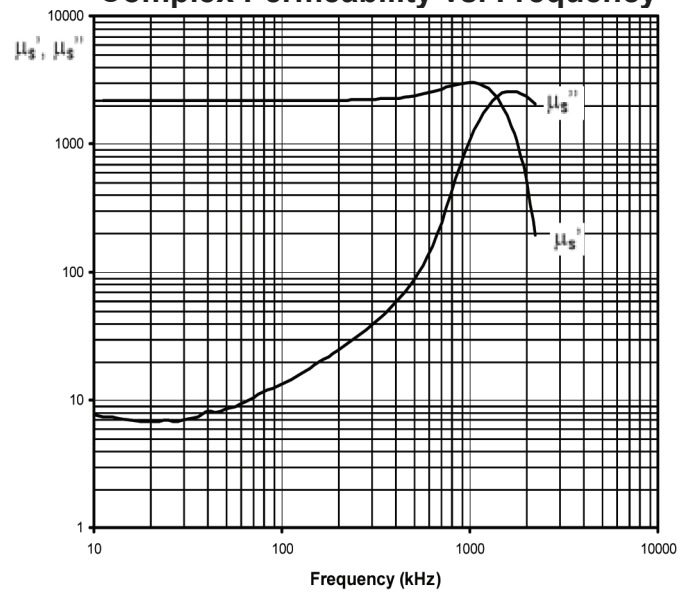
- Low power loss
- Losses minised 80-100°C
- High saturation
- Improved permeability

**Frequency range:** Up to 500kHz depending on flux density

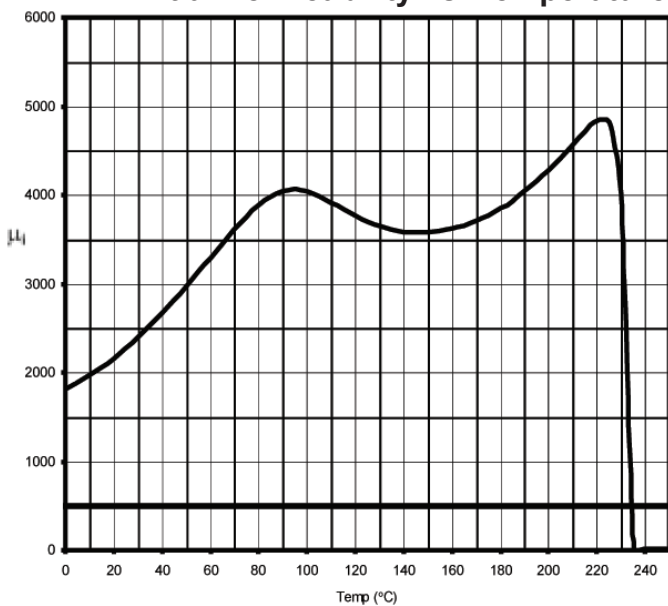
**Typical applications:** SMPS

**Typical core shapes:** Planar, E, U, ETD, RM, ring cores

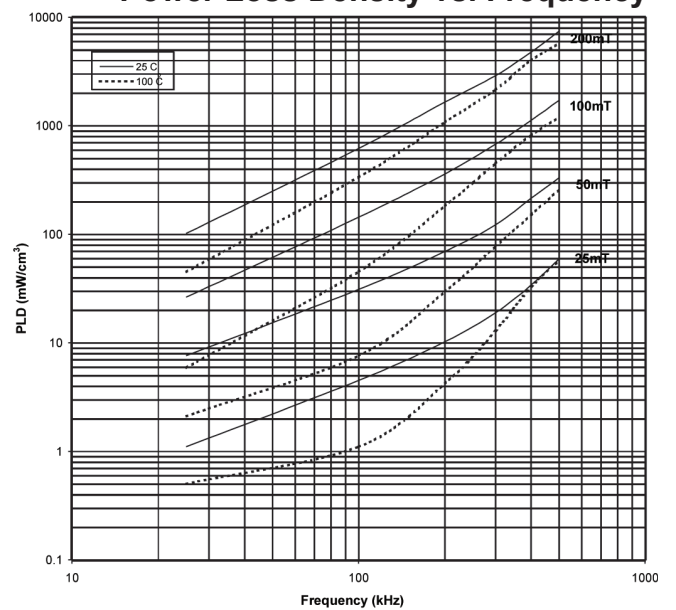
**Complex Permeability vs. Frequency**



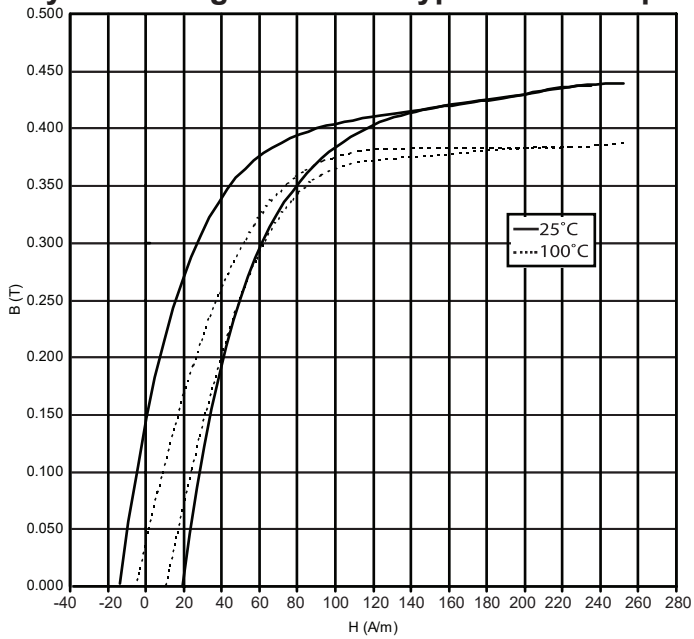
**Initial Permeability vs. Temperature**



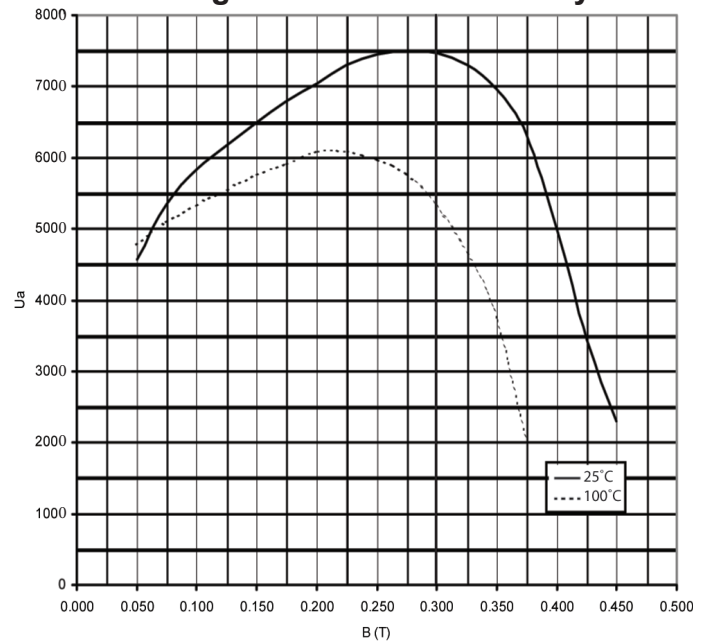
**Power Loss Density vs. Frequency**



**Dynamic Magnetisation: Typical B-H Loops**



**Static Magnetisation: Permeability vs. B**



**Power Loss Density vs. Temperature**

