$\mu_{\rm S}'\,,\,\mu_{\rm S}''$

Material Type:	Manganese-Zinc Ferrite		
Properties:	*Low loss power grade. *High saturation *Losses minimised 80°C - 100°C *Medium permeability		
Frequency range:	Up to 500kHz (depending upon flux density)		
Typical Applications:	SMPS.		
Available core shapes:	E, U, ETD, RM, Ring Cores.		

25°C

Material Specification

Parameter	Symbol	Standard Conditions of test		Unit	F45
Initial Permeability (nominal)	-	B<0.1mT 10kHz	25°C	-	2000 ±20%
Saturation Flux Density (typical)	B _{sat}	H=796 A/m = 10 Oe	25°C 100°C	mT	500 380
Remanent Flux Density <i>(typical)</i>	B _r	H→ 0 (from near Saturat 10kHz	ion) 25°C	mT	165
Coercivity (typical)	Н _с	B→ 0 (from near Saturat 10kHz	ion) 25°C	A/m	15
Curie Temperature (minimum)	Θ _c	B<0.10mT	10kHz	°C	230
Resistivity (typical)	ρ		1 V/cm 25°C	ohm- cm	100
Amplitude Permeability (minimum)	μ _a	400mT 340mT	25°C 100°C	-	2500 2000
Total Power Loss Density (maximum)	P _v	100mT; 100kHz 200mT; 100kHz	100°C 100°C	mW/ cm ³	80 400

Power Loss Density vs. Frequency







Complex Permeability vs. Frequency

++++

Relative Loss Factor vs. Frequency







Static Magnetisation: Permeability vs. B

