

F47

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 upon flux density)

Typical Applications: SMPS.

Available core shapes: E, ETD, EFD, RM, Ring Cores.

Material Specification

Parameter	Symbol	Standard Conditions of test	Unit	F47
Initial Permeability (nominal)	-	B<0.1mT 10kHz 25°C	-	1800 ±20%
Saturation Flux Density (typical)	B _{sat}	H=796 A/m = 10 Oe 25°C 100°C	mT	470 350
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 2000
Total Power Loss Density	P _v	100mT; 100kHz 100mT; 100kHz 50mT; 400kHz 50mT; 400kHz 25°C (typ.) 100°C (max.) 25°C (typ.) 100°C (max.)	mW/cm ³	110 80 150 150

