

# F5A

**Material Type:** Manganese-Zinc Ferrite

- Properties:**
- \*Higher permeability power grade
  - \*High saturation
  - \*Low loss
  - \*Losses minimised 50°C - 80°C

**Frequency range:** Up to 150/200kHz (depending upon flux density)

**Typical Applications:** Power Supplies, EHT Transformers.

**Available core shapes:** E, U, ETD, RM, Ring Cores.

## Material Specification

Parameter	Symbol	Standard Conditions of test	Unit	F5A
Initial Permeability (nominal)	-	B<0.1mT 10kHz 25°C	-	<b>2500</b> ±20%
Saturation Flux Density (typical)	B <sub>sat</sub>	H=796 A/m = 10 Oe 25°C 100°C	mT	<b>470</b> <b>350</b>
Remanent Flux Density (typical)	B <sub>r</sub>	H→ 0 (from near Saturation) 10kHz 25°C	mT	<b>150</b>
Coercivity (typical)	H <sub>c</sub>	B→ 0 (from near Saturation) 10kHz 25°C	A/m	<b>15</b>
Curie Temperature (minimum)	Θ <sub>c</sub>	B<0.10mT 10kHz	°C	<b>200</b>
Resistivity (typical)	ρ	1 V/cm 25°C	ohm-cm	<b>100</b>
Amplitude Permeability (minimum)	μ <sub>a</sub>	400mT 320mT 25°C 100°C	-	<b>2400</b> <b>1825</b>
Total Power Loss Density (maximum)	P <sub>v</sub>	200mT; 25kHz 200mT; 25kHz 60°C 100°C	mW/cm <sup>3</sup>	<b>190</b> <b>190</b>

