



MMG Canada Limited

F82F

Material Type: Manganese-Zinc Ferrite

Properties: High permeability
High saturation flux density
Good performance with frequency

Frequency Range: DC to 1 MHz (subject to application)

Typical Application: Wideband and pulse transformers, filters and common mode chokes

Standard Geometries: Toroids, baluns, E, RM and pot cores
Additional shapes are available upon request



| Parameter | Symbol | Standard Test Conditions | | | Unit | Value | | |
|--------------------------------------|-----------------------------|---|-----------------------|------------------------|------------------------|--------------------------|----------|-----|
| Initial Permeability (nominal) | μ_i | $B < 0.1 \text{ mT}$ | $f = 10 \text{ kHz}$ | $T = 25^\circ\text{C}$ | - | 5000 | | |
| Saturation Flux Density (typical) | B_s | $H = 796 \text{ A/m (10 Oe)}$ | | | $T = 25^\circ\text{C}$ | mT | 460 | |
| Remanent Flux Density (typical) | B_r | $H \sim 0 \text{ A/m (from near saturation)}$ | | | $f = 10 \text{ kHz}$ | $T = 25^\circ\text{C}$ | mT | 130 |
| Coercivity (typical) | H_c | $B \sim 0 \text{ mT (from near saturation)}$ | | | $f = 10 \text{ kHz}$ | $T = 25^\circ\text{C}$ | A/m | 4.8 |
| Loss Factor (maximum) | $\frac{\tan \delta}{\mu_i}$ | $B < 0.1 \text{ mT}$ | $f = 100 \text{ kHz}$ | $T = 25^\circ\text{C}$ | 10^{-6} | < 12 | | |
| Curie Temperature (minimum) | T_c | $B < 0.1 \text{ mT}$ | $f = 10 \text{ kHz}$ | | $^\circ\text{C}$ | > 200 | | |
| Resistivity (typical) | ρ | $E = 1 \text{ V/cm}$ | | | $T = 25^\circ\text{C}$ | $\Omega \cdot \text{cm}$ | > 10^2 | |

* Data was derived from measurements made on a standard test toroid core with an outside diameter of 30 mm

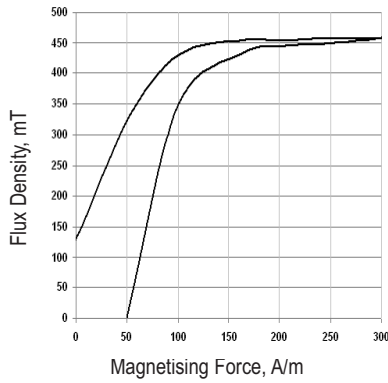




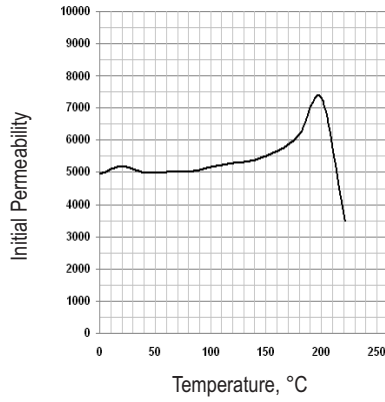
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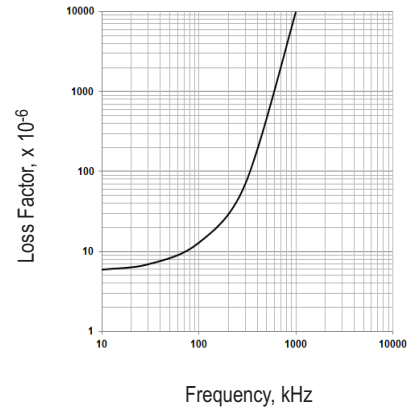
Dynamic Magnetisation Curve



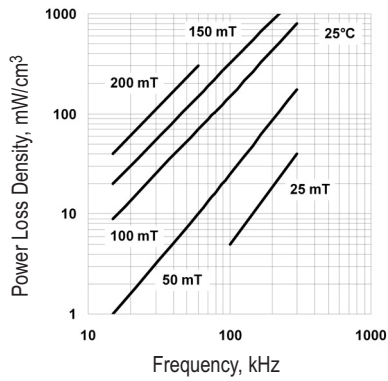
Permeability vs Temperature



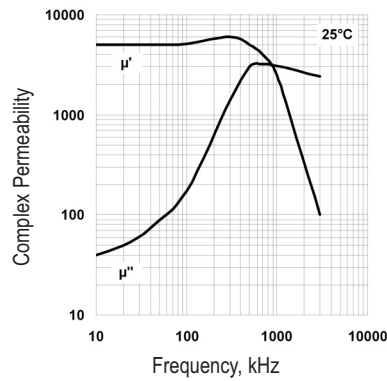
Loss Factor vs Frequency



Power Loss vs Frequency



Permeability vs Frequency



Impedance vs Frequency

