

# F39

**Material Type:** Manganese-Zinc Ferrite

**Properties:** Very high permeability

**Frequency range:** Depends on application

**Typical Applications:** Broadband and Pulse Transformers, Balanced (common-mode) chokes and inductors for filters.

**Available core shapes:** EP, Pot, RM, Ring Cores.

## Material Specification

Parameter	Symbol	Standard Conditions of test	Unit	F39
Initial Permeability (nominal)	-	B<0.1mT 10kHz 25°C	-	<b>10 000</b> ±30%
Saturation Flux Density (typical)	B <sub>sat</sub>	H=796 A/m = 10 Oe 25°C	mT	<b>380</b>
Remanent Flux Density (typical)	B <sub>r</sub>	H→ 0 (from near Saturation) 10kHz 25°C	mT	<b>200</b>
Coercivity (typical)	H <sub>c</sub>	B→ 0 (from near Saturation) 10kHz 25°C	A/m	<b>16</b>
Loss Factor (maximum)	$\frac{\tan \delta_{(f+g)}}{\mu_i}$	B<0.10mT 10kHz 25°C		10 <sup>-6</sup> -
Curie Temperature (minimum)	Θ <sub>C</sub>	B<0.10mT 10kHz	°C	<b>125</b>
Temperature Factor	$\frac{\Delta\mu}{\mu_i^2 \cdot \Delta T}$	+25°C to +55°C B<0.10mT 10kHz	°C	-
Resistivity (typical)	ρ	1 V/cm 25°C	ohm-cm	<b>100</b>

