

# F10

**Material Type:** Manganese-Zinc Ferrite

**Properties:** High permeability.

**Frequency range:** Depends on application

**Typical Applications:** Wideband, Pulse Transformers and Filter applications.

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

## Material Specification

Parameter	Symbol	Standard Conditions of test	Unit	F10
Initial Permeability (nominal)	-	B<0.1mT 10kHz 25°C	-	<b>6000</b> ±20%
Saturation Flux Density (typical)	$B_{sat}$	H=796 A/m = 10 Oe 25°C	mT	<b>380</b>
Remanent Flux Density (typical)	$B_r$	H→ 0 (from near Saturation) 10kHz 25°C	mT	<b>200</b>
Coercivity (typical)	$H_c$	B→ 0 (from near Saturation) 10kHz 25°C	A/m	<b>16</b>
Loss Factor (maximum)	$\frac{\tan \delta_{(f+\phi)}}{\mu_i}$	B<0.10mT 10kHz 25°C		<b>10<sup>-6</sup></b> -
Curie Temperature (minimum)	$\Theta_C$	B<0.10mT 10kHz	°C	<b>130</b>
Temperature Factor	$\frac{\Delta\mu}{\mu_i^2 \cdot \Delta T}$	+25°C to +55°C B<0.10mT 10kHz	°C	<b>-1 to +2</b>
Resistivity (typical)	$\rho$	1 V/cm 25°C	ohm-cm	<b>50</b>

