

# F19

**Material Type:** Nickel-Zinc Ferrite

- Properties:**
- \*Medium permeability
  - \*Low loss factors at low frequencies
  - \*High impedance at megahertz frequencies

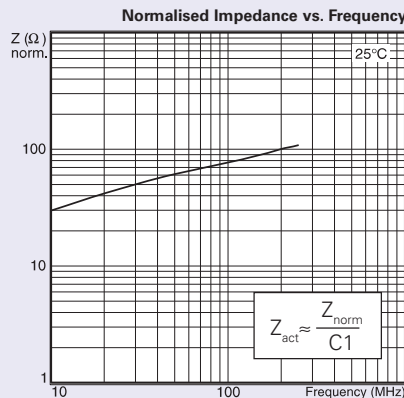
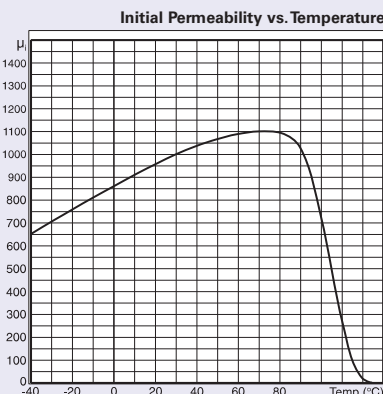
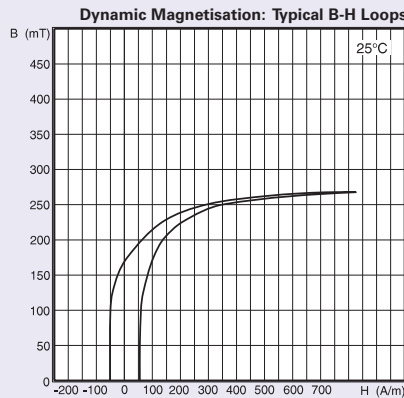
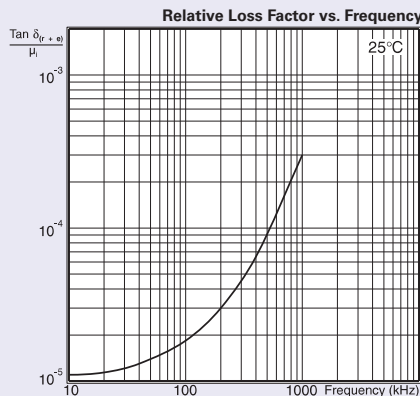
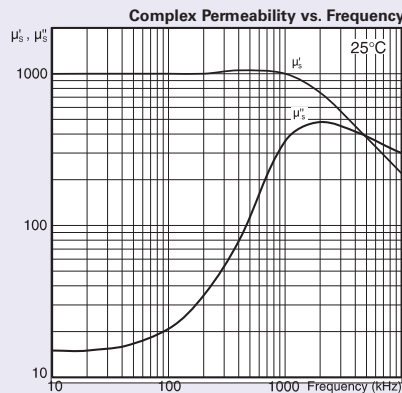
**Frequency range:** 100kHz - 1MHz (Low losses)  
25MHz - 100MHz (High impedance)

**Typical Applications:** SMD suppression

**Available core shapes:** Ring cores, beads, sleeves, cable suppressors, SM beads.

## Material Specification

Parameter	Symbol	Standard Conditions of test	Unit	F19
Initial Permeability (nominal)	-	B<0.1mT 10kHz 25°C	-	<b>1000</b> ±20%
Saturation Flux Density (typical)	$B_{sat}$	H=796 A/m = 10 Oe 25°C	mT	<b>260</b>
Remanent Flux Density (typical)	$B_r$	H→0 (from near Saturation) 10kHz 25°C	mT	<b>165</b>
Coercivity (typical)	$H_c$	B→0 (from near Saturation) 10kHz 25°C	A/m	<b>53</b>
Loss Factor (maximum)	$\frac{\tan \delta_{r+s}}{\mu_i}$	B<0.10mT 25°C	500kHz 1MHz	<b>130</b> <b>350</b>
Curie Temperature (minimum)	$\Theta_c$	B<0.10mT 10kHz	°C	<b>120</b>
Temperature Factor	$\frac{\Delta\mu}{\mu_i \cdot \Delta T}$	+25°C to +55°C B<0.10mT 10kHz	°C	<b>3 to 6.5</b>
Resistivity (typical)	$\rho$	1 V/cm 25°C	ohm-cm	<b>10<sup>4</sup></b>



Data is derived from measurements on a ring core of 30mm outside diameter.