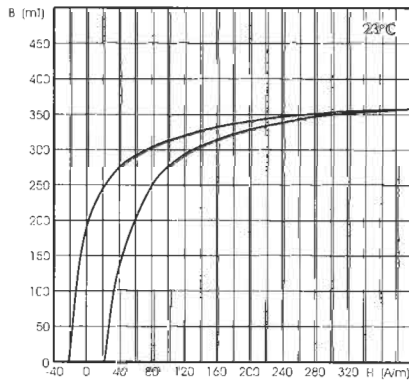


F9Q Material

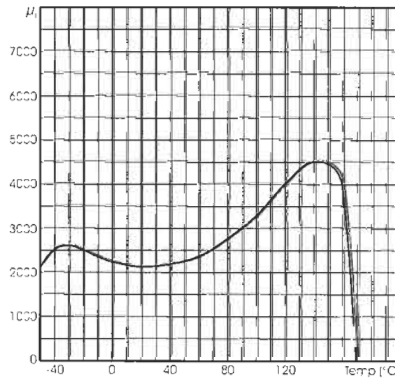
A Manganese-Zinc ferrite specially formulated to obtain a relatively stable initial permeability in the 0°C to 60°C range with the additional feature of maintaining that permeability down to very low temperatures. Suitable for application in pulse and broadband transformers, common-mode chokes and inductors. Available in a wide variety of ring cores, multiaperture and bead cores.

Parameter	Symbol	Unit	Standard Test Conditions	Value
Initial Permeability (Nominal)	μ_i	—	10 kHz ~ 0.1mT	2300 ± 20%
Saturation Flux Density (typical)	B_{sat}	mT	H=199A/m =2.5Oe	350
Residual Flux Density (typical)	B_r	mT	H \Rightarrow 0 (from near Saturation) 10kHz 25°C	190
Coercive force (typical)	H_c	A/m	B \Rightarrow 0 (from near Saturation) 10kHz 25°C	24
Relative Loss Factor (maximum)	Tan δ/μ_i	10 ⁻⁶	100 kHz ~ 0.1mT	20
Curie Temperature (minimum)	T_c	°C	B<0.1mT 1kHz	140
Normalized Impedance	Z	Ω	100 MHz	—
Volume Resistivity (typical)	ρ	Ω -cm	1V/cm 25°C	20

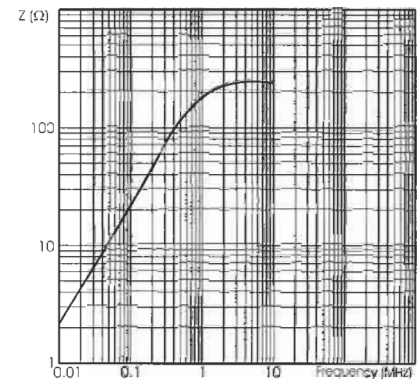
Dynamic Magnetization (BH) Loop



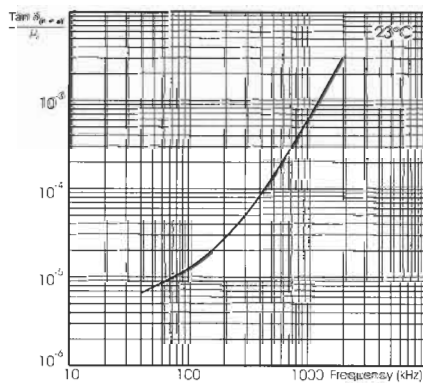
Initial Permeability vs. Temperature



Normalized Impedance vs. Frequency



Relative Loss Factor vs. Frequency



Complex Permeability vs. Frequency

