

Material Data sheet

Type	Mn-Zn Ferrites
Grade	CF199A
Application	Broadband transformers and EMI-EMC filters

Material Properties	Conditions	Symbol	Value	Unit
Initial Permeability	25°C, 10kHz, $\leq 0.25\text{mT}$	μ_i	10000 $\pm 30\%$	
Flux Density	25°C, 10 kHz, 1200A/m	B_s	400	mT
	100°C, 10 kHz 1200A/m	B_s	240	mT
Relative loss factor	25°C, 10KHz, 0.25 mT	$\tan\delta/\mu_i$	<3	$10^{-6}/\text{K}$
	25°C, 100KHz, 0.25 mT		<30	
Hysteresis material constant	25°C, 10KHz	ηB	< 0.4	$10^{-6}/\text{mT}$
Curie Temperature		T_c	≥ 120	°C
Density	25°C	d	4.9×10^3	kg/m ³
Resistivity	25°C	ρ_{DC}	0.3	$\Omega\text{-m}$

Material data specified here on the basis of the test results of toroids T2512

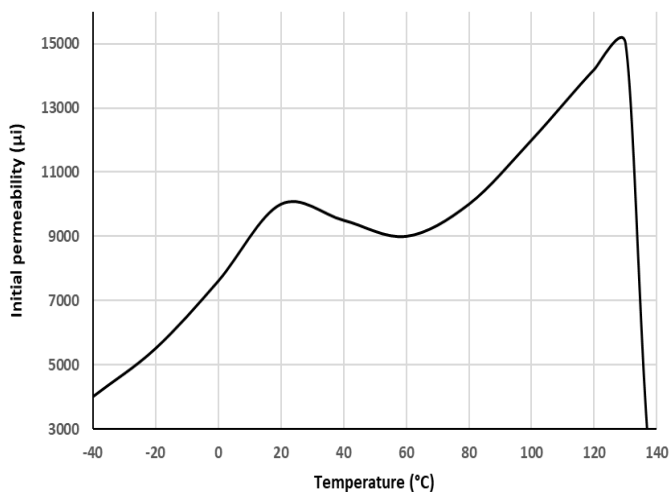


Figure 1: Temperature dependent permeability curve

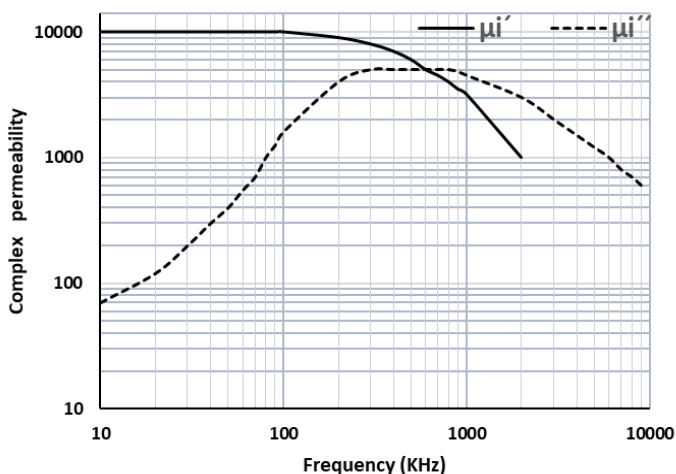


Figure 2: Complex permeability vs frequency

Material Data sheet

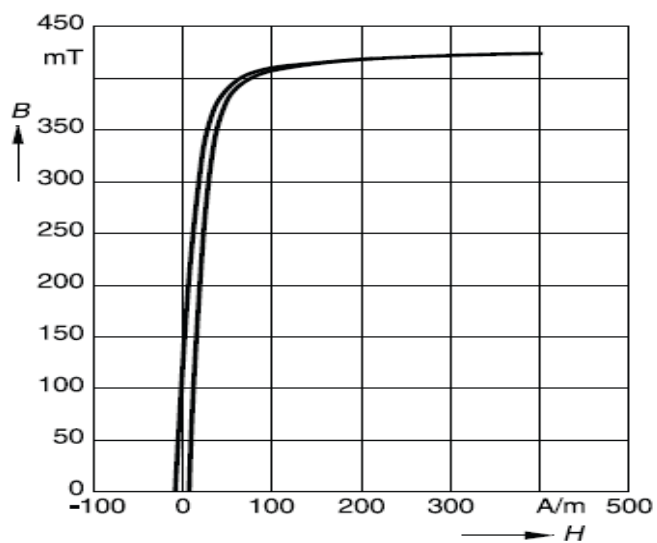


Figure 3: Typical magnetisation curve at 25°C

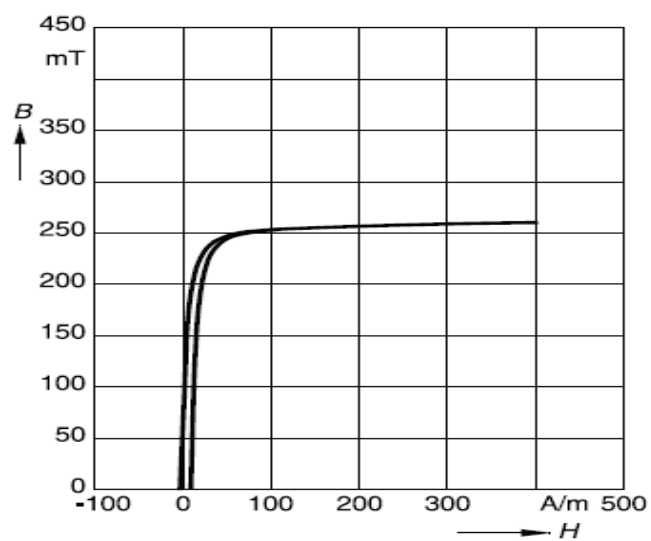


Figure 4: Typical magnetisation curve at 100°C

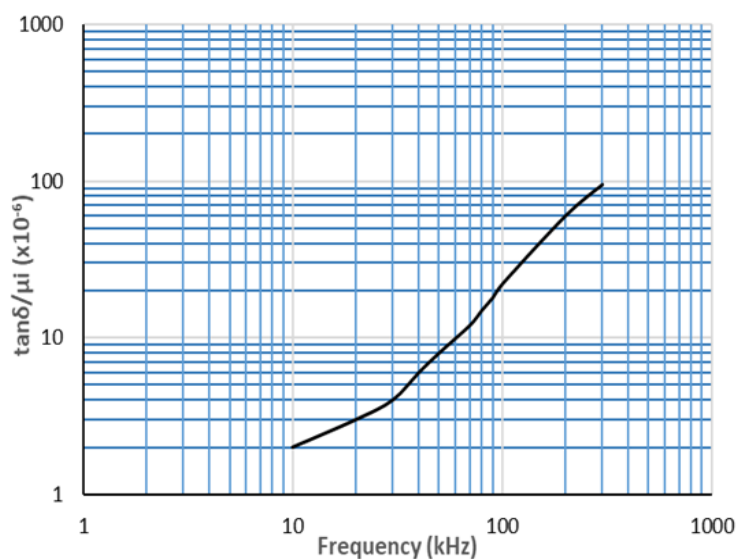


Figure 5: Frequency dependent relative loss factor