



# Material Data sheet

<b>Type</b>	Mn-Zn Ferrites
<b>Grade</b>	CF199A
<b>Application</b>	Broadband transformers and EMI-EMC filters

Material Properties	Conditions	Symbol	Value	Unit
Initial Permeability	25°C, 10kHz, $\leq 0.25\text{mT}$	$\mu_i$	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	$\text{Tan}\delta/\mu_i$	<3	$10^{-6}/\text{K}$
	25°C, 100KHz, 0.25 mT		<30	
Hysteresis material constant	25°C, 10KHz	$\eta B$	< 0.4	$10^{-6}/\text{mT}$
Curie Temperature		$T_c$	$\geq 120$	°C
Density	25°C	d	$4.9 \times 10^3$	$\text{kg}/\text{m}^3$
Resistivity	25°C	$\rho_{DC}$	0.3	$\Omega\text{-m}$

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

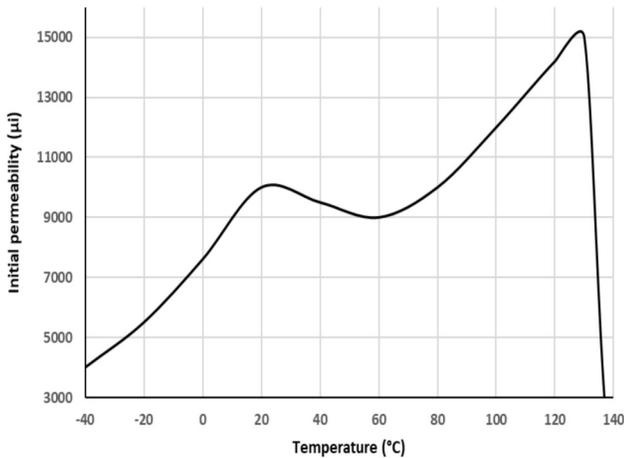


Figure 1: Temperature dependent permeability

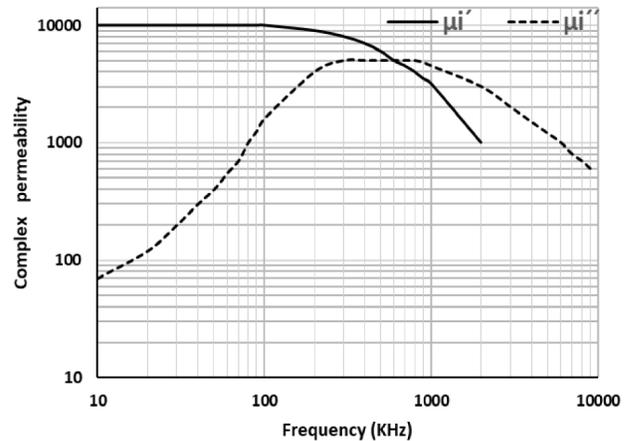


Figure 2: Complex permeability vs frequency