

DATA SHEET

3N1

Material specification

2022 Nov 16th



3N1 SPECIFICATION

An EMI-suppression material for conducted and radiated emissions up to 300 MHz with a maximum impedance in the frequency range 30 to 100 MHz.

SYMBOL	CONDITIONS	VALUE	UNIT
μ_i	25°C; 10kHz; 0.25mT	≈ 1800	
$\mu_{i\text{remanence}}$	25°C; 10kHz; 0.25mT	≈ 600	
B	25°C; 10kHz; 1200A/m	≈ 420	mT
	100°C; 10kHz; 1200A/m	≈ 280	
$Z C_1 / N^2$	25°C; 30MHz; 0.25mT	≈ 40	Ω/mm
	25°C; 100MHz; 0.25mT	≈ 59	
ρ_{DC}	25°C	$\approx 10^3$	Ωm
T_c		≥ 150	°C
density		≈ 4800	kg / m^3

Measured on T14/9/5

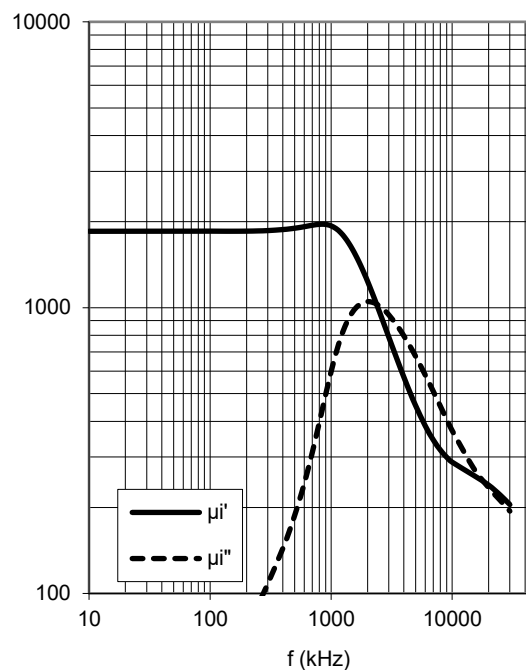


Fig.1 Complex permeability as a function of frequency

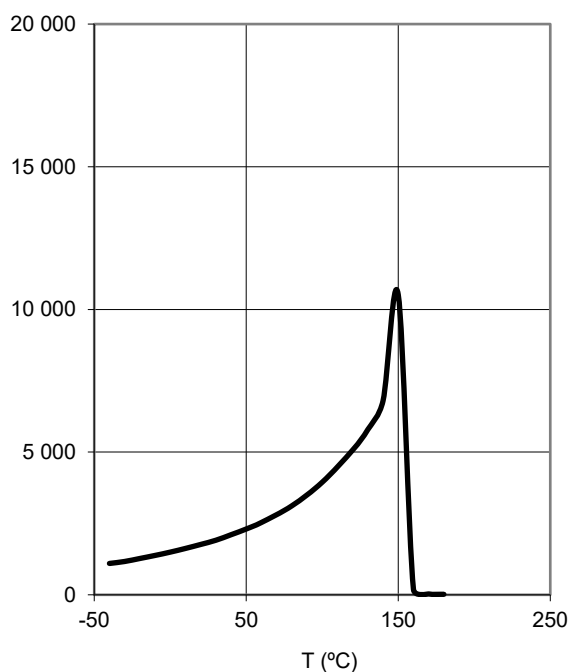


Fig.2 Permeability as a function of temperature

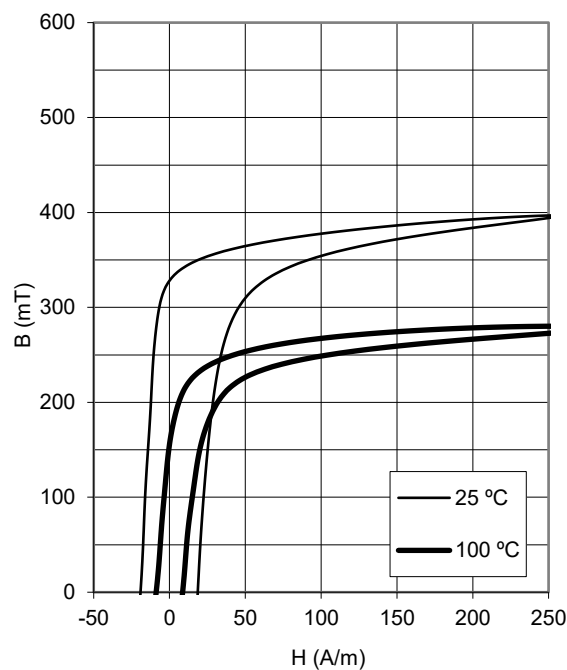


Fig.3 Typical BH loop

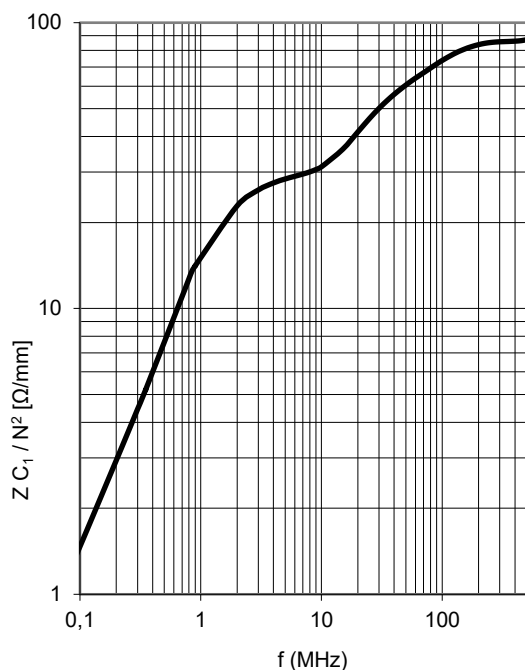


Fig.4 Normalized impedance as a function of frequency

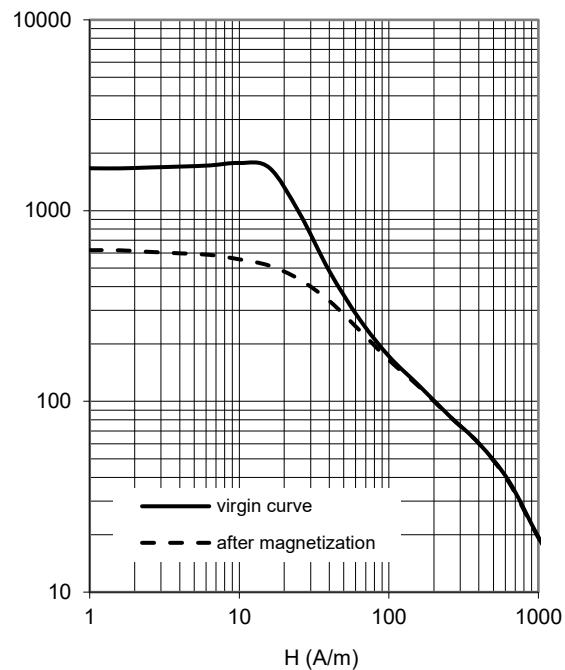


Fig.5 Reversible permeability as a function of magnetic field strength