

Material specification

3D3

3D3 SPECIFICATIONS

A medium frequency filter and tuning material optimized for frequencies from 0.2 up to 2 MHz.

SYMBOL	CONDITIONS	VALUE	UNIT
μ_i	25 °C; ≤ 10 kHz; 0.25 mT	750 ± 20 %	
B	25 °C; 10 kHz; 1200 A/m 100 °C; 10 kHz; 1200 A/m	≈ 380 ≈ 310	mT
$\tan\delta/\mu_i$	25 °C; 300 kHz; 0.25 mT 25 °C; 1 MHz; 0.25 mT	$\leq 10 \times 10^{-6}$ $\leq 30 \times 10^{-6}$	
η_B	25 °C; 100 kHz; 1.5 to 3 mT	$\leq 1.8 \times 10^{-3}$	T ⁻¹
D_F	25 °C; 10 kHz; 0.25 mT	$\leq 12 \times 10^{-6}$	
α_F	25 to 70 °C; ≤ 10 kHz; 0.25 mT	$(1.5 \pm 1) \times 10^{-6}$	K ⁻¹
ρ	DC; 25 °C	≈ 2	Ωm
T_C		≥ 200	°C
density		≈ 4700	kg/m ³

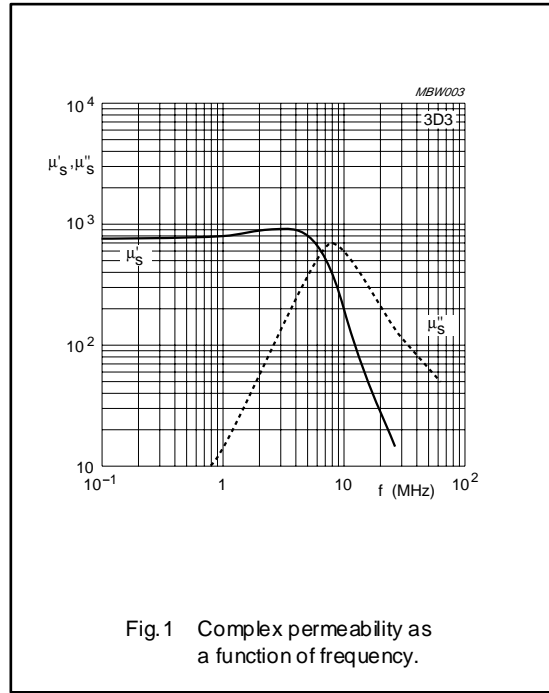


Fig. 1 Complex permeability as a function of frequency.

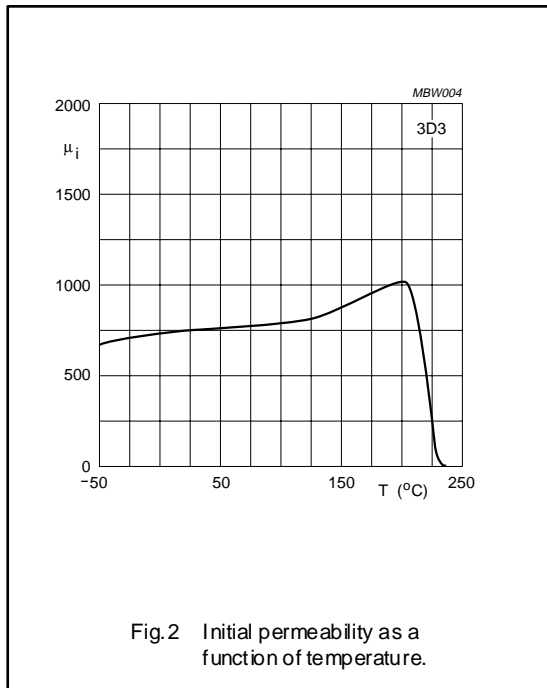


Fig. 2 Initial permeability as a function of temperature.

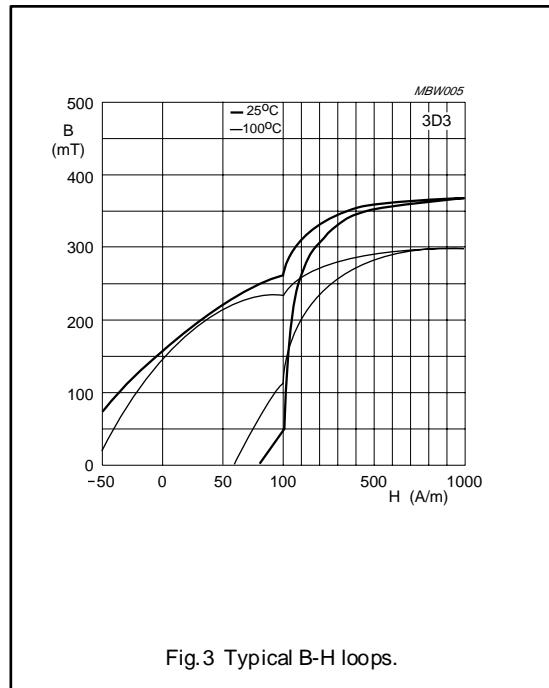


Fig. 3 Typical B-H loops.

