

DATA SHEET

3H3 Material specification

Supersedes data of September 2004

2008 Sep 01

Material specification

3H3

3H3 SPECIFICATIONS

A low frequency filter material optimized for frequencies up to 0.2 MHz.

	CONDITIONS	VALUE	UNIT
μ_i	25 °C; ≤ 10 kHz; 0.25 mT	2000 $\pm 20\%$	
B	25 °C; 10 kHz; 1200 A/ m 100 °C; 10 kHz; 1200 A/ m	≈ 360 ≈ 270	mT
$\tan\delta/\mu_i$	25 °C; 0.25 mT; 30 kHz 25 °C; 0.25 mT; 100 kHz	$\leq 1.6 \times 10^{-6}$ $\leq 2.5 \times 10^{-6}$	
η_B	25 °C; 100 kHz; 1.5 to 3 mT	$\leq 0.6 \times 10^{-3}$	T ⁻¹
D _F	0.25 mT; 10 kHz; 25 °C 40 °C	$\leq 3 \times 10^{-6}$ $\leq 3 \times 10^{-6}$	
α_F	≤ 10 kHz; 0.25 mT; 5 to 25 °C 25 to 55 °C 25 to 70 °C	$(0.7 \pm 0.3) \times 10^{-6}$ $(0.7 \pm 0.3) \times 10^{-6}$ $(0.7 \pm 0.3) \times 10^{-6}$	K ⁻¹
ρ	DC; 25 °C	≈ 2	Ωm
T _C		≥ 160	°C
density		≈ 4700	kg/m ³

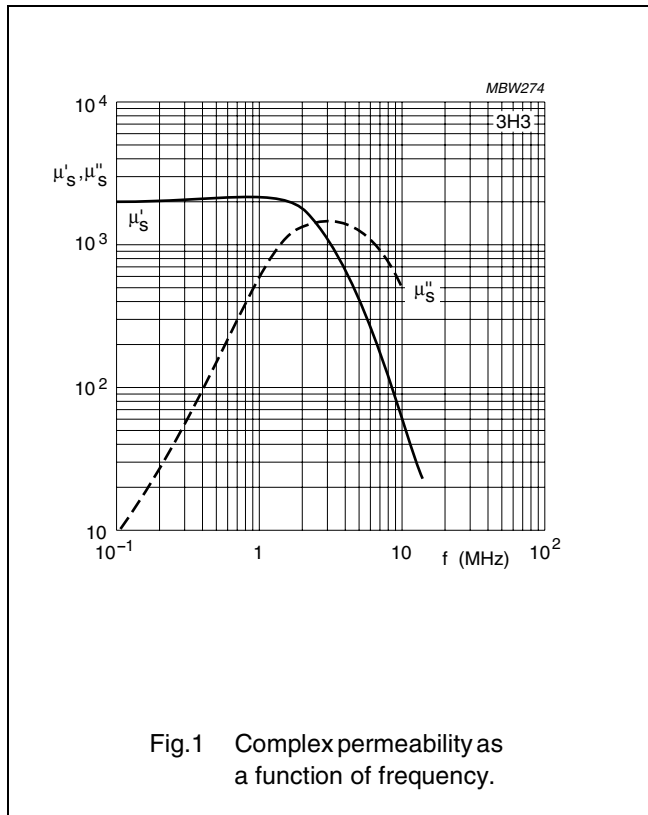


Fig.1 Complex permeability as a function of frequency.

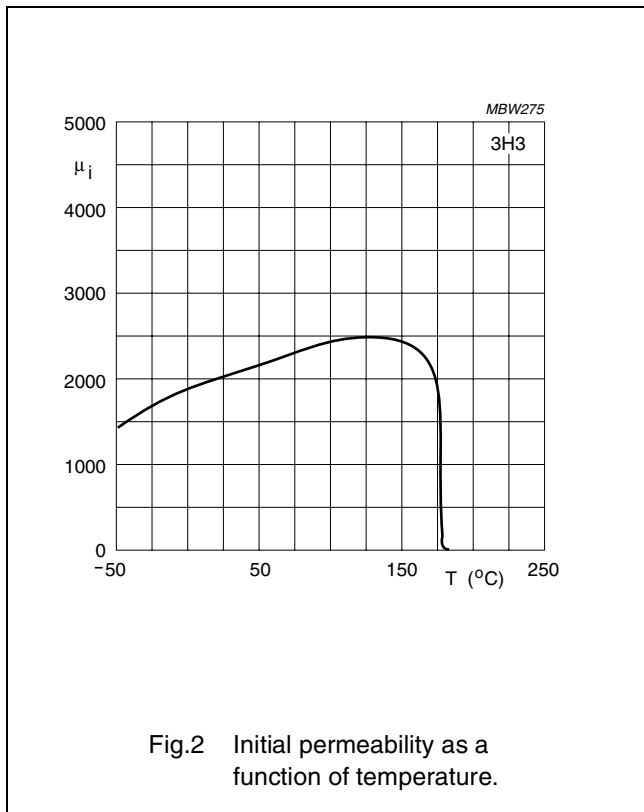


Fig.2 Initial permeability as a function of temperature.

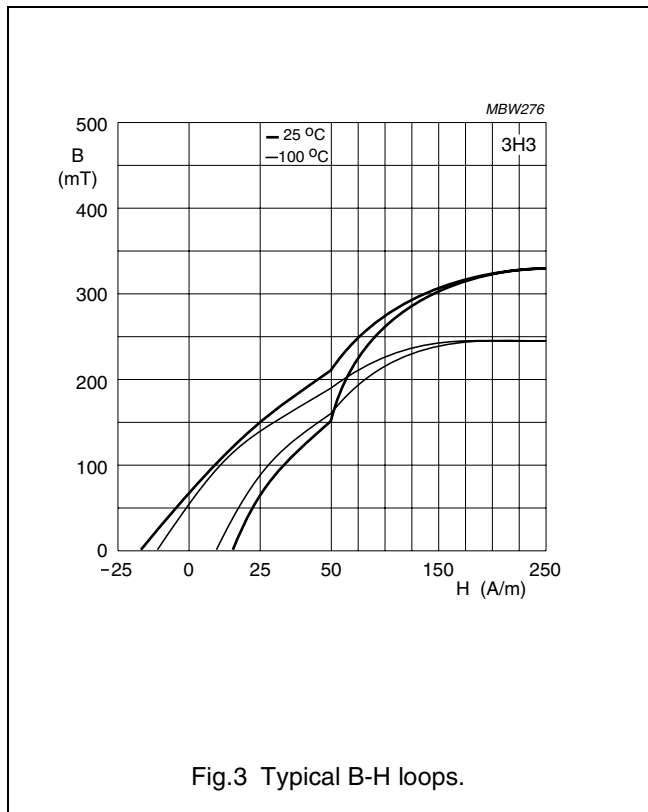


Fig.3 Typical B-H loops.




DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

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