

# DATA SHEET

## **4M2** Material specification

Supersedes data of September 2004

2008 Sep 01

Material specification

4M2

4M2 SPECIFICATIONS

Low permeability specialty NiZn ferrite only used in large toroids and machined products mainly for scientific particle accelerators operating at frequencies up to 10 MHz.

SYMBOL	CONDITIONS	VALUE	UNIT
$\mu_i$	25 °C; $\leq 10$ kHz; 0.25 mT	140 $\pm 20\%$	
B	25 °C; 10 kHz; 3000 A/m 100 °C; 10 kHz; 3000 A/m	$\approx 310$ $\approx 270$	mT
$\rho$	DC; 25 °C	$\approx 10^5$	$\Omega\text{m}$
$T_C$		$\geq 200$	°C
density		$\approx 5000$	kg/m <sup>3</sup>

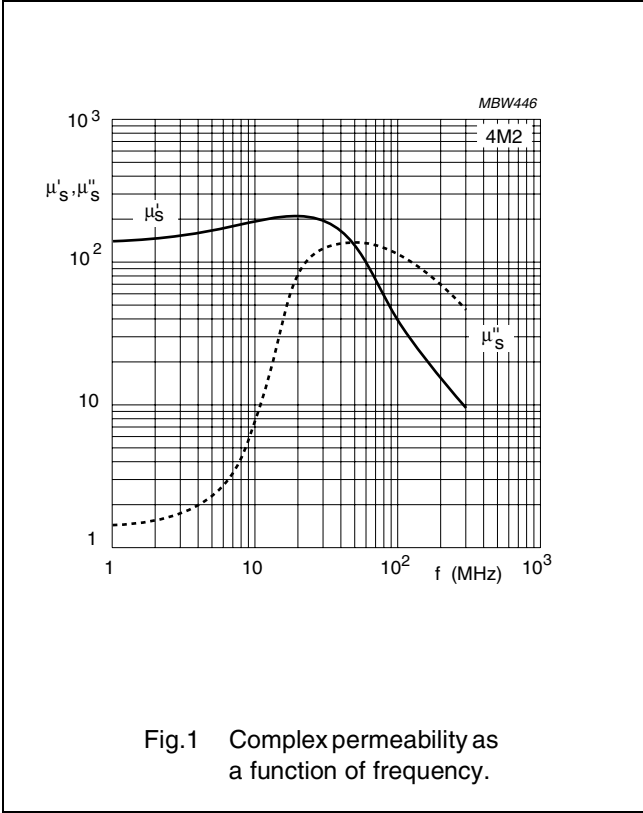


Fig.1 Complex permeability as a function of frequency.

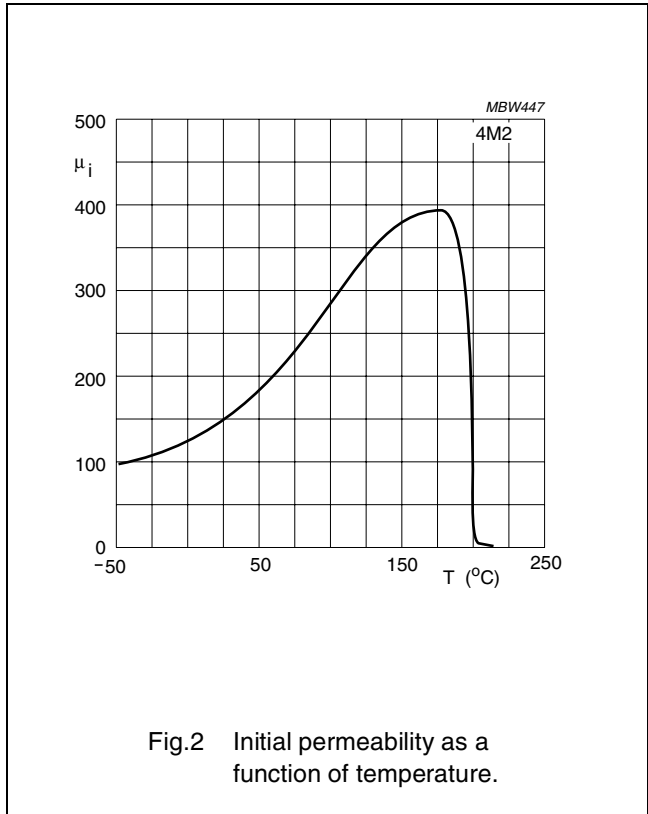


Fig.2 Initial permeability as a function of temperature.

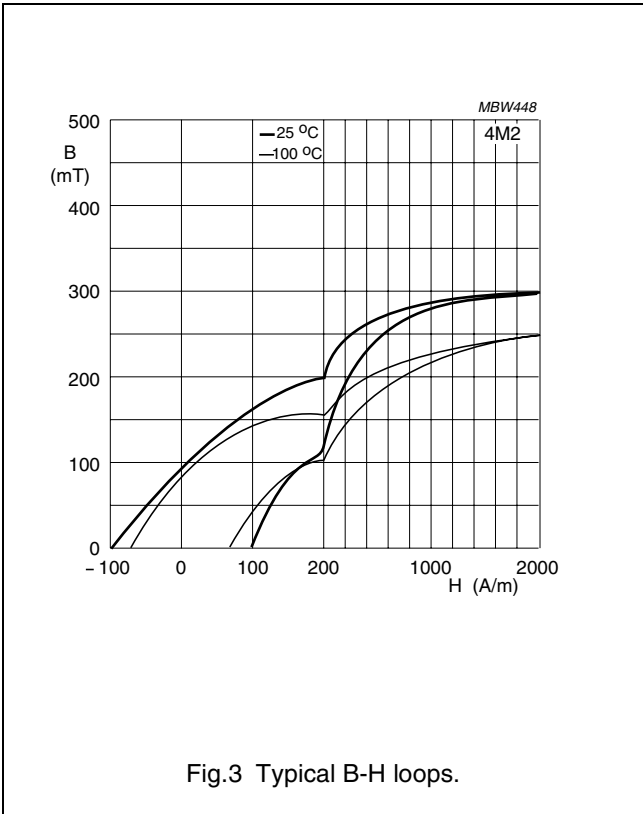


Fig.3 Typical B-H loops.




**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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**PRODUCT STATUS DEFINITIONS**

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