

# DATA SHEET

## **3S4** Material specification

Supersedes data of February 2002

2004 Sep 01

Material specification

3S4

3S4 SPECIFICATIONS

Wideband EMI-suppression material specified on impedance and optimized for frequencies from 10 to 300 MHz.

SYMBOL	CONDITIONS	VALUE	UNIT
$\mu_i$	25 °C; $\leq 10$ kHz; 0.25 mT	$\approx 1700$	
B	25 °C; 10 kHz; 1200 A/m	$\approx 320$	mT
	100 °C; 10 kHz; 1200 A/m	$\approx 170$	
$ Z ^{(1)}$	25 °C; 3 MHz	$\geq 25$	$\Omega$
	25 °C; 30 MHz	$\geq 60$	
	25 °C; 100 MHz	$\geq 80$	
	25 °C; 300 MHz	$\geq 90$	
$\rho$	DC; 25 °C	$\approx 10^3$	$\Omega\text{m}$
$T_C$		$\geq 110$	°C
density		$\approx 4800$	$\text{kg/m}^3$

Note

1. Measured on a bead  $\varnothing 5 \times \varnothing 2 \times 10$  mm.

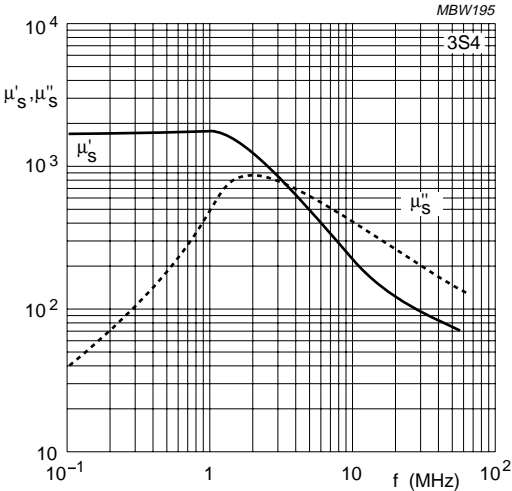


Fig.1 Complex permeability as a function of frequency.

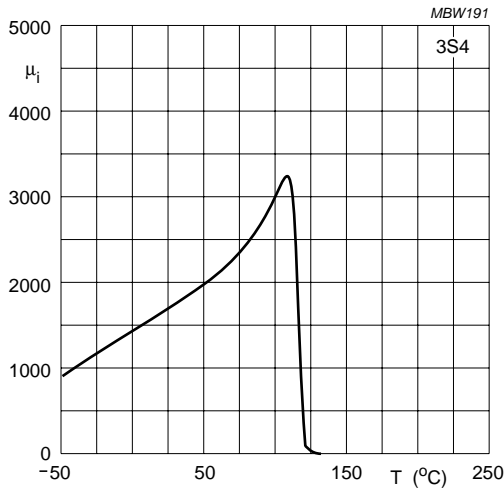


Fig.2 Initial permeability as a function of temperature.

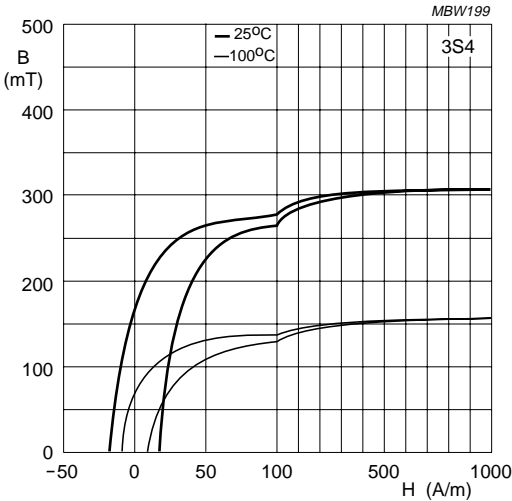


Fig.3 Typical B-H loops.

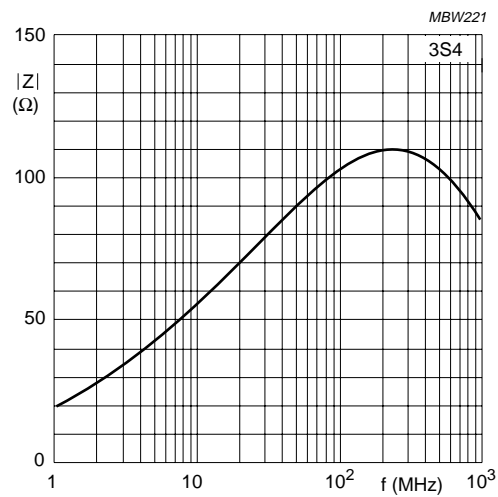


Fig.4 Impedance as a function of frequency.

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## 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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