

# DATA SHEET

## **3E25** Material specification

Supersedes data of November 2000

2002 Feb 01

Material specification

3E25

3E25 SPECIFICATIONS

A medium permeability material mainly for use in current compensated chokes in EMI-suppression filters.

SYMBOL	CONDITIONS	VALUE	UNIT
$\mu_i$	25 °C; $\leq 10$ kHz; 0.1 mT	$6000 \pm 20\%$	
B	25 °C; 10 kHz; 250 A/m 100 °C; 10 kHz; 250 A/m	$\approx 350$ $\approx 180$	mT
$\tan\delta/\mu_i$	25 °C; 100 kHz; 0.1 mT 25 °C; 300 kHz; 0.1 mT	$\leq 25 \times 10^{-6}$ $\leq 200 \times 10^{-6}$	
$\rho$	DC; 25 °C	$\approx 0.5$	$\Omega\text{m}$
$T_C$		$\geq 125$	°C
density		$\approx 4900$	$\text{kg/m}^3$

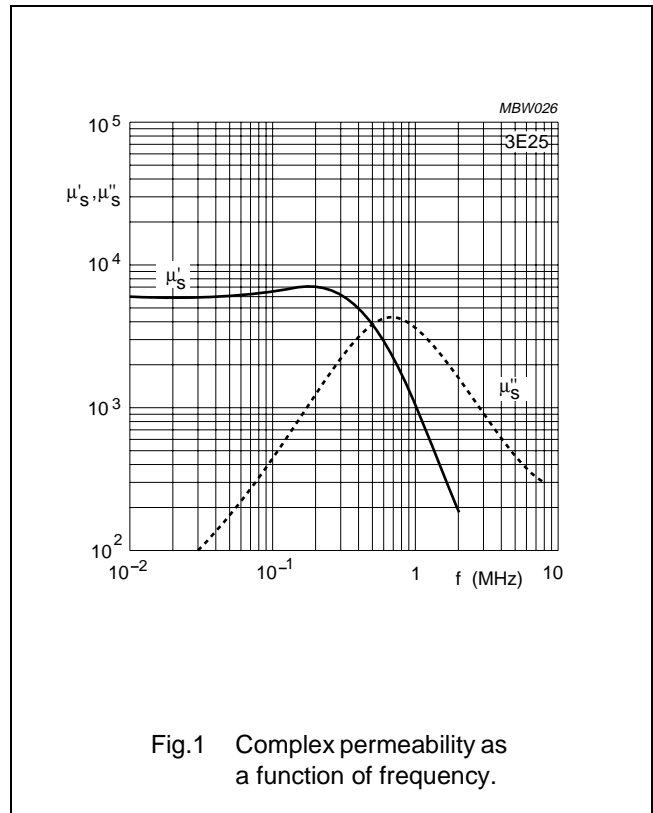


Fig.1 Complex permeability as a function of frequency.

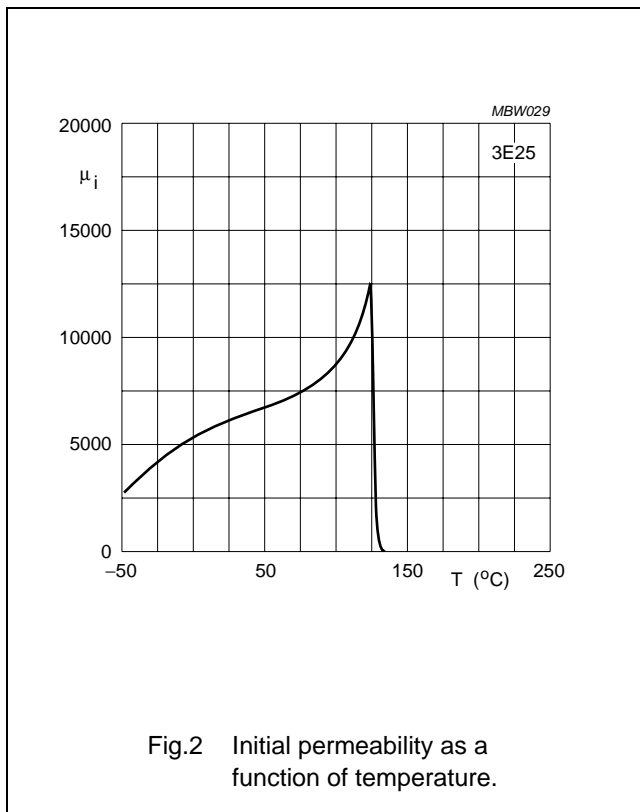


Fig.2 Initial permeability as a function of temperature.

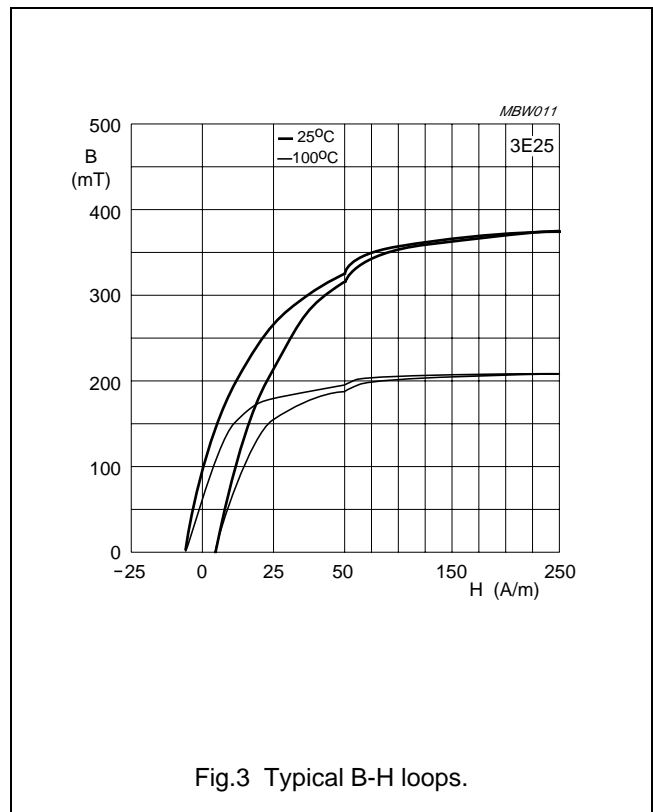


Fig.3 Typical B-H loops.

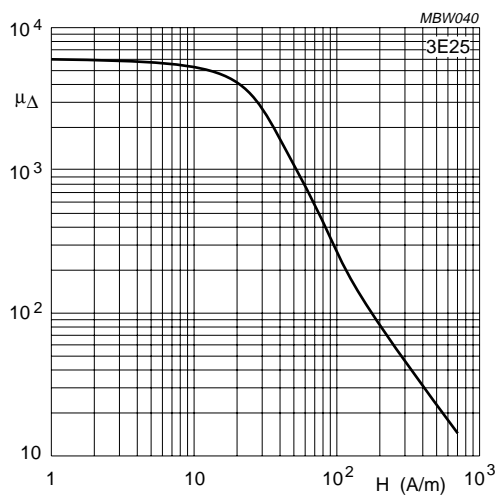


Fig.4 Incremental permeability as a function of magnetic field strength.

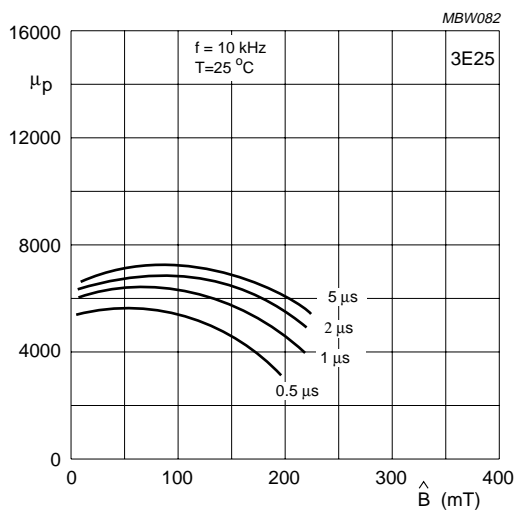


Fig.5 Pulse characteristics (unipolar pulses).




**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.
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