

DATA SHEET

3E25 Material specification

Supersedes data of September 2004

2008 Sep 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
μ_i	25 °C; ≤ 10 kHz; 0.25 mT	$6000 \pm 20\%$	
B	25 °C; 10 kHz; 1200 A/m	≈ 390	mT
	100 °C; 10 kHz; 1200 A/m	≈ 220	
$\tan\delta/\mu_i$	25 °C; 100 kHz; 0.25 mT	$\leq 25 \times 10^{-6}$	
	25 °C; 300 kHz; 0.25 mT	$\leq 200 \times 10^{-6}$	
ρ	DC; 25 °C	≈ 0.5	Ωm
T_C		≥ 125	$^{\circ}\text{C}$
density		≈ 4900	kg/m^3

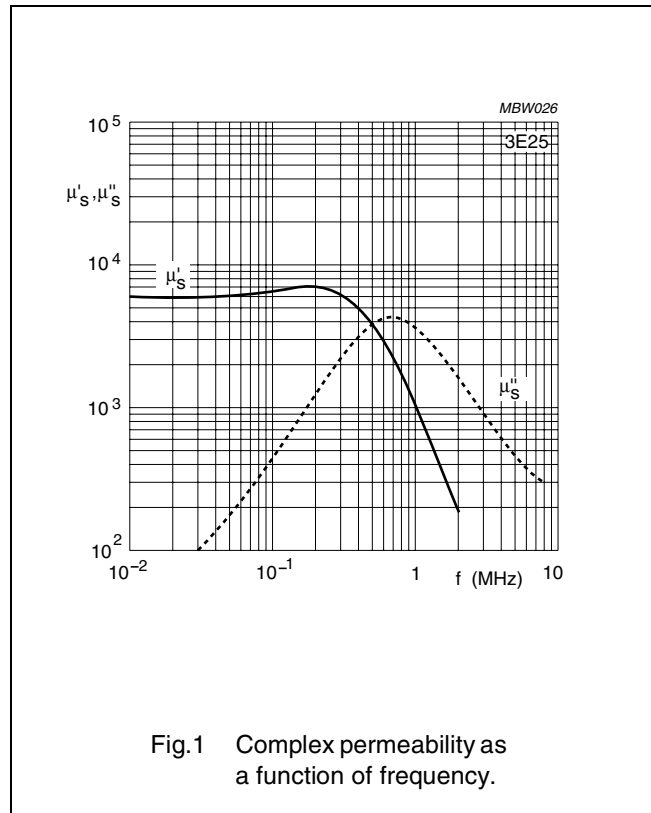


Fig.1 Complex permeability as a function of frequency.

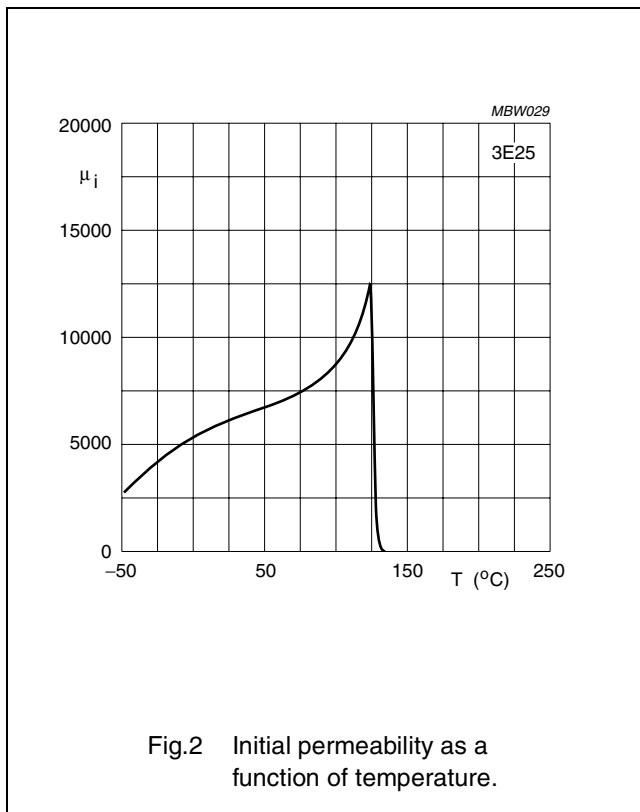


Fig.2 Initial permeability as a function of temperature.

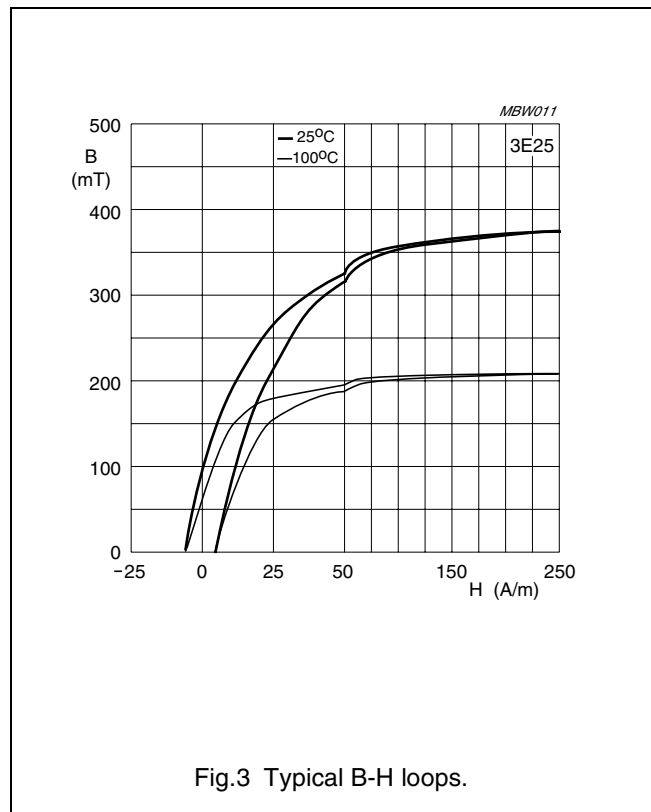


Fig.3 Typical B-H loops.

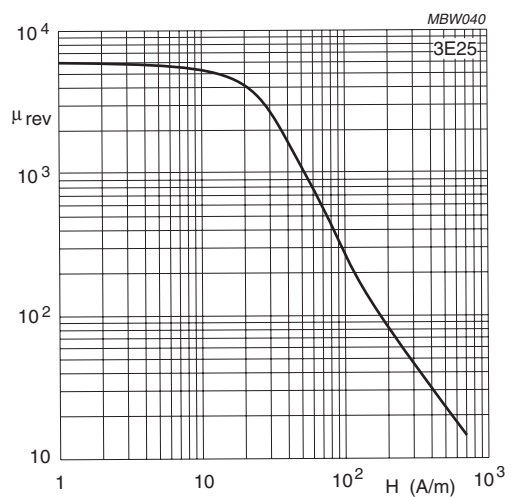


Fig.4 Reversible permeability as a function of magnetic field strength.

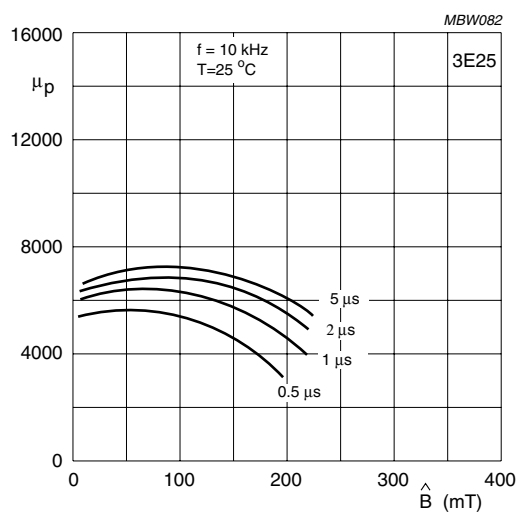


Fig.5 Pulse characteristics (unipolar pulses).

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.
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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