MEGATRON AG
FERROXCUBE DISTRIBUTOR FOR MAGNETIC COMPONENTS

DATA SHEET

4E1
Material specification

Supersedes data of September 2004 2008 Sep 01

FERROXCUBE
A YAGEO COMPANY

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Material specification 4E1

4E1 SPECIFICATIONS

Low permeability NiZn ferrite for use in RF tuning, wideband and balun transformers.

SYMBOL	CONDITIONS	VALUE	UNIT
μ_i	25 °C; ≤10 kHz; 0.25 mT	15 ±20%	
B	25 °C; 10 kHz; 20 kA/m	≈ 220	mT
	100 °C; 10 kHz; 20 kA/m	≈ 210	
$\tan\delta/\mu_i$	25 °C; 10 MHz; 0.25 mT	$\leq 300 \times 10^{-6}$	
	25 °C; 30 MHz; 0.25 mT	$\leq 350 \times 10^{-6}$	
ρ	DC; 25 °C	$\approx 10^5$	Ωm
T_C		≥ 500	°C
density		≈ 3700	kg/m^3

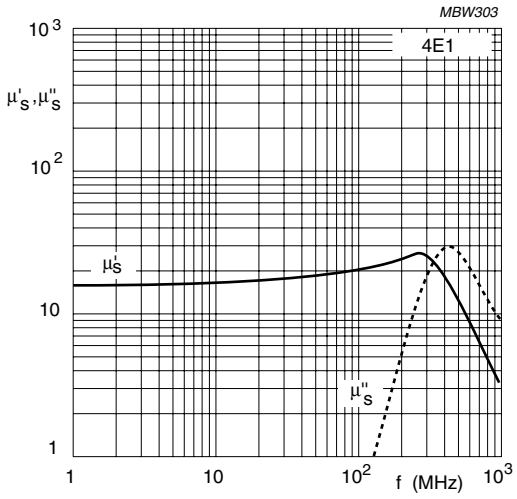

Fig.1 Complex permeability as a function of frequency.

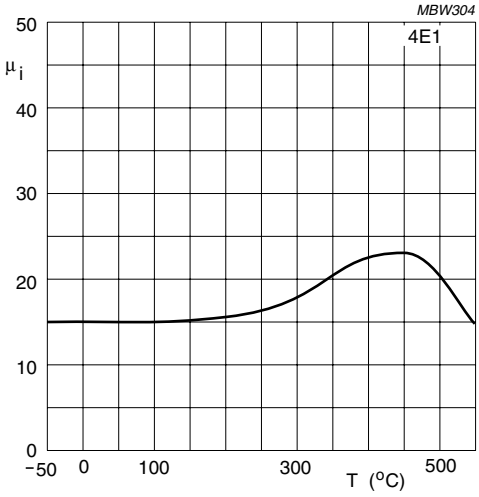

Fig.2 Initial permeability as a function of temperature.

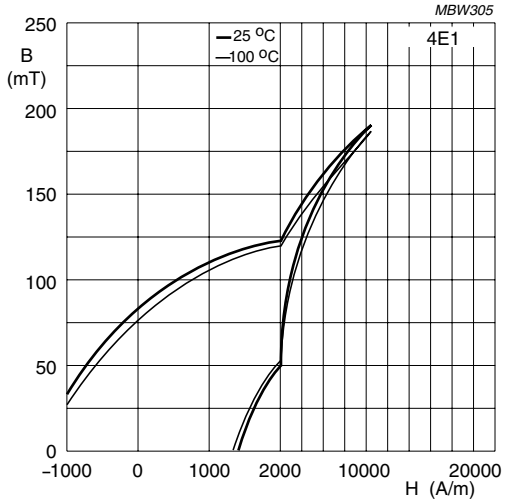

Fig.3 Typical B-H loops.

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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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PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
Prototype	prot	These are products that have been made as development samples for the purposes of technical evaluation only. The data for these types is provisional and is subject to change.
Design-in	des	These products are recommended for new designs.
Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support	sup	These products are **not** recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.

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