FERROXCUBE

DATA SHEET

3E8Material specification

Supersedes data of September 2004

2008 Sep 01



Material specification

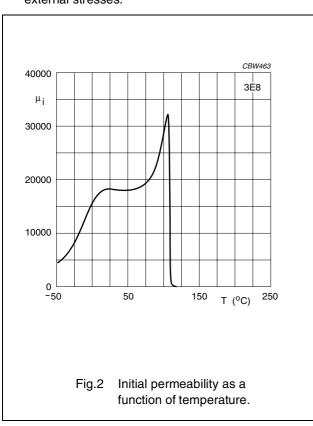
3E8 SPECIFICATIONS

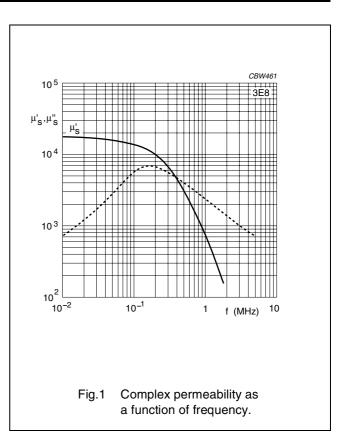
A high permeability material optimized for use in wideband transformers and delay lines where small size or a low number of turns are important design parameters.

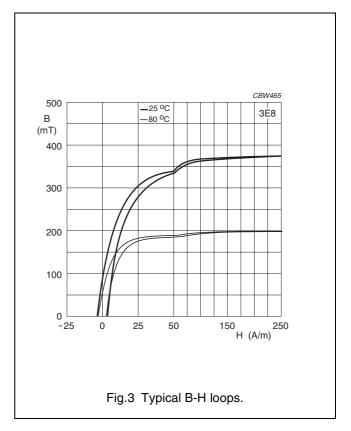
	CONDITIONS	VALUE ⁽¹⁾	UNIT
μ_{i}	25 °C; ≤10 kHz;0.25 mT	18000 ± 20%	
В	25 °C; 10 kHz; 1200 A/m	≈ 380	mT
	80 °C; 10 kHz; 1200 A/m	≈ 210	
$tan\delta/\mu_i$	25 °C; 10 kHz; 0.25 mT	≤ 10 × 10 ⁻⁶	
	25 °C; 30 kHz; 0.25 mT	$\leq 30 \times 10^{-6}$	
ηΒ	25 °C; 10 kHz; 1.5 to 3 mT	≤ 1 × 10 ⁻³	T-1
ρ	DC; 25 °C	≈ 0.1	Ωm
T _C		≥ 100	°C
density		≈ 5000	kg/m ³

Note

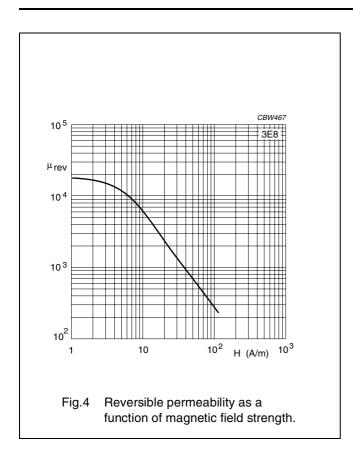
1. Measured on sintered, non-ground ring cores of dimensions \emptyset 14 \times \emptyset 9 \times 5 which are not subjected to external stresses.







2008 Sep 01 169



2008 Sep 01 170

Material specification

3E8

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.

DISCLAIMER

Life support applications — These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.

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.

2008 Sep 01 171