

# DATA SHEET

## **8C11** Material specification

Supersedes data of September 2004

2008 Sep 01

8C11 SPECIFICATIONS

High permeability specialty NiZn ferrite only used in large toroids and machined products mainly for scientific particle accelerators operating at frequencies up to 1 MHz.

SYMBOL	CONDITIONS	VALUE	UNIT
$\mu_i$	25 °C; $\leq 10$ kHz; 0.25 mT	1200 $\pm 20\%$	
B	25 °C; 10 kHz; 1200 A/m 100 °C; 10 kHz; 1200 A/m	$\approx 310$ $\approx 210$	mT
$\rho$	DC; 25 °C	$\approx 10^5$	$\Omega\text{m}$
$T_C$		$\geq 125$	°C
density		$\approx 5100$	kg/m <sup>3</sup>

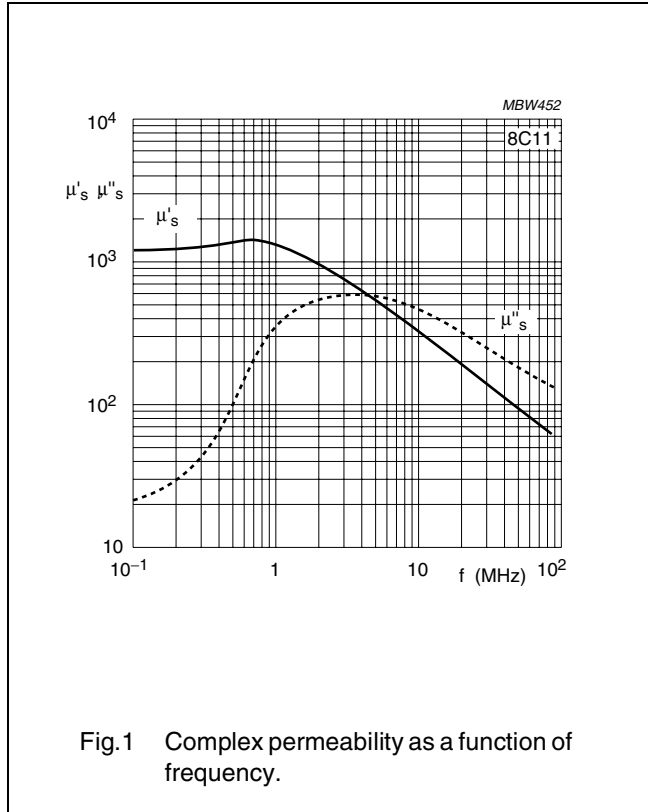


Fig. 1 Complex permeability as a function of frequency.

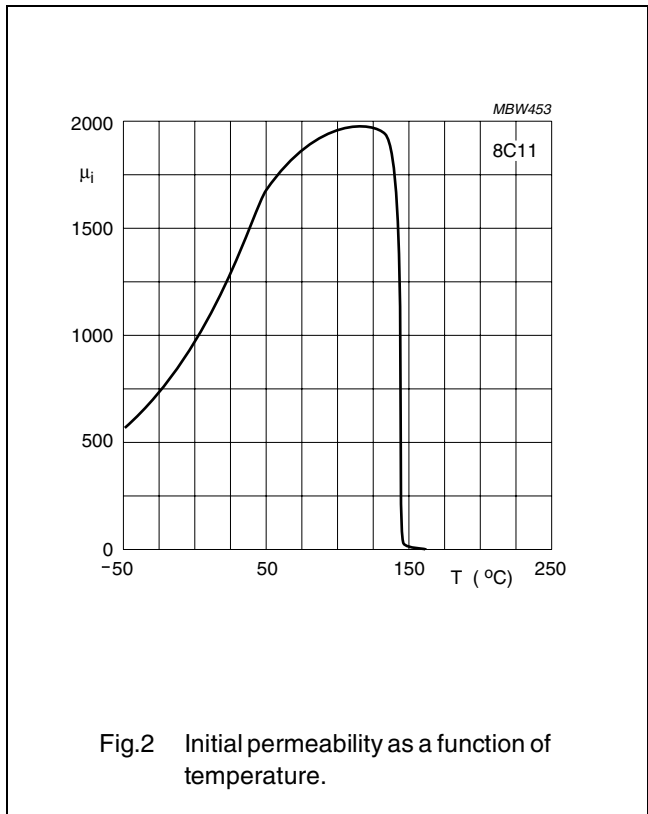


Fig. 2 Initial permeability as a function of temperature.

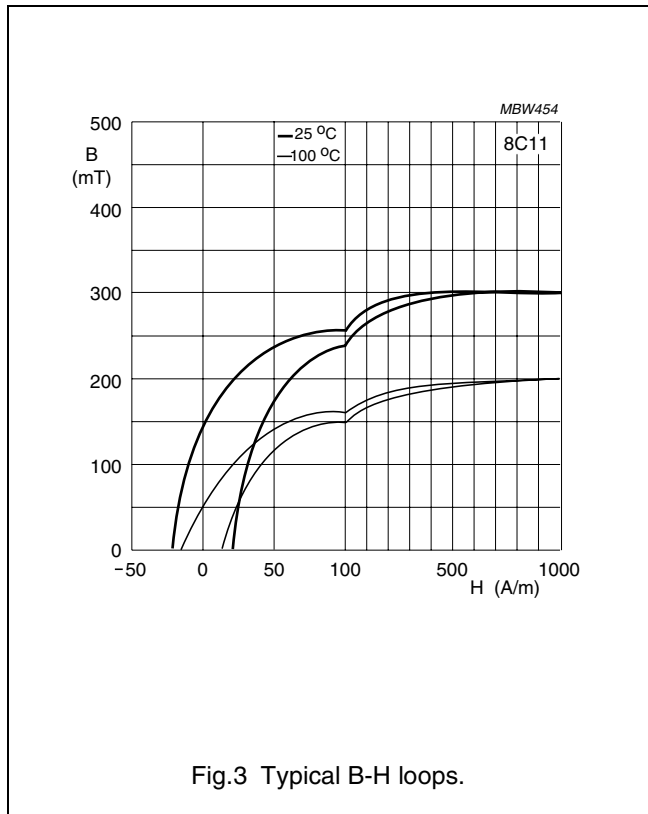


Fig. 3 Typical B-H loops.




**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
<b>Prototype</b>		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.
<b>Design-in</b>		These products are recommended for new designs.
<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
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