### **FERROXCUBE**

# DATA SHEET

## I25/6/6 U, I cores and accessories

Supersedes data of September 2004

2008 Sep 01



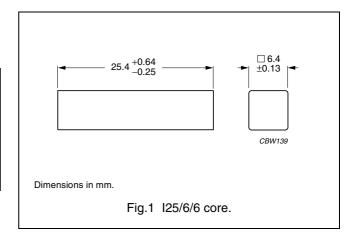
## U, I cores and accessories

I25/6/6 (376B250)

#### **CORE SETS**

## Effective core parameters measured in combination with U25/16/6

SYMBOL	PARAMETER	VALUE	UNIT
Σ(I/A)	core factor (C1)	1.59	mm <sup>-1</sup>
V <sub>e</sub>	effective volume	2590	mm <sup>3</sup>
I <sub>e</sub>	effective length	64.3	mm
A <sub>e</sub>	effective area	40.3	mm <sup>2</sup>
m	mass of I core	≈ 4.5	g



#### **Core halves**

 $A_L$  measured in combination with "U25/16/6".

GRADE	A <sub>L</sub> (nH)	μe	TYPE NUMBER
3C81	1750 ±25%	≈ 2210	I25/6/6-3C81
3C90	1500 ±25%	≈ 1900	I25/6/6-3C90
3C91 des	1750 ±25%	≈ 2210	I25/6/6-3C91
3C94	1500 ±25%	≈ 1900	I25/6/6-3C94
3C11	2500 ±25%	≈ 3160	I25/6/6-3C11
3E27	3000 ±25%	≈ 3800	I25/6/6-3E27

#### Properties of core sets under power conditions

Measured in combination with "U25/16/6".

	B (mT) at		CORE LOSS (W) at	
GRADE	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B = 200 mT; T = 100 °C	f = 100 kHz; B = 100 mT; T = 100 °C	f = 100 kHz; B = 200 mT; T = 100 °C
3C81	≥320	≤ 0.6	_	-
3C90	≥320	≤ 0.3	≤ 0.3	-
3C91	≥320	_	≤ 0.18 <sup>(1)</sup>	≤ 1.2 <sup>(1)</sup>
3C94	≥320	_	≤ 0.23	≤ 1.6

#### Note

1. Measured at 60 °C.

2008 Sep 01 1322

## U, I cores and accessories

I25/6/6 (376B250)

#### **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 <b>not</b> 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 1323