FERROXCUBE

DATA SHEET

U25/16/6 U, I cores and accessories

Supersedes data of September 2004

2008 Sep 01



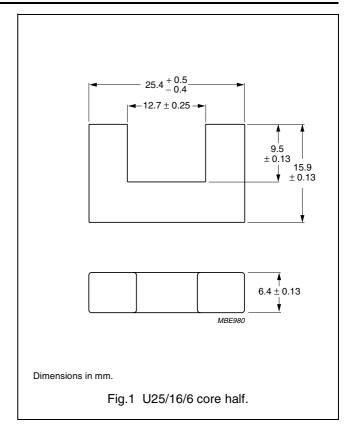
U, I cores and accessories

U25/16/6 (376U250)

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
Σ(I/A)	core factor (C1)	2.07	mm ⁻¹
V _e	effective volume	3380	mm ³
l _e	effective length	83.6	mm
A _e	effective area	40.3	mm ²
m	mass of core half	≈ 8.0	g



Core halves

A_L measured on a combination of 2 U cores.

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GRADE	A _L (nH)	μ _e	TYPE NUMBER
3C81	1400 ±25%	≈ 2300	U25/16/6-3C81
3C90	1200 ±25%	≈ 2300	U25/16/6-3C90
3C91 des	1400 ±25%	≈ 2300	U25/16/6-3C91
3C94	1200 ±25%	≈ 2300	U25/16/6-3C94
3C11	2050 ±25%	≈ 3380	U25/16/6-3C11
3E27	2500 ±25%	≈ 4130	U25/16/6-3E27

Properties of core sets under power conditions

	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	f = 400 kHz; B = 50 mT; T = 100 °C
3C81	≥320	≤ 0.78	_	_	_
3C90	≥320	≤ 0.4	≤ 0.4	_	_
3C91	≥320	_	≤ 0.23 ⁽¹⁾	≤ 1.6 ⁽¹⁾	_
3C94	≥320	_	≤ 0.3	≤ 2.0	_

Note

1. Measured at 60 °C.

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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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