

DATA SHEET

U25/16/6
(376U250)
U cores and accessories

Supersedes data of February 2002

2004 Sep 01

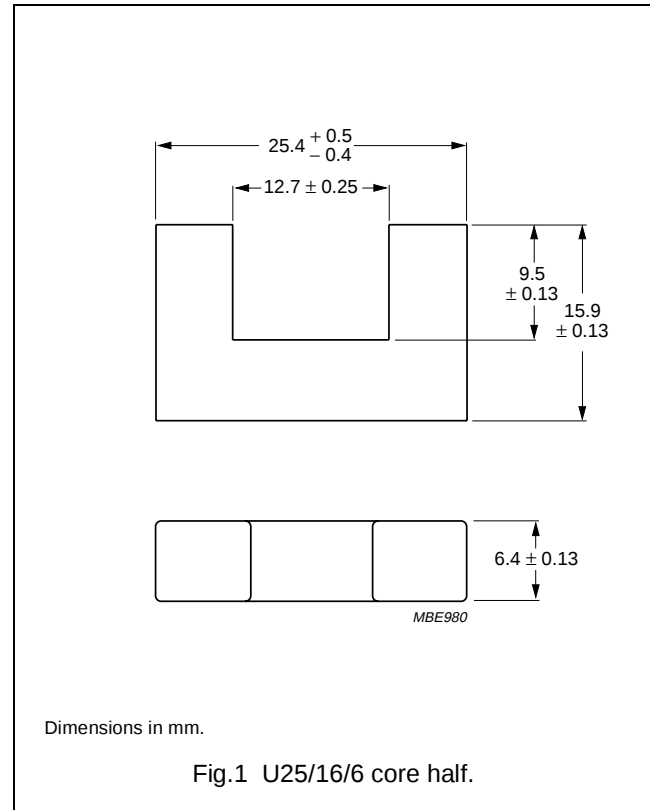
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CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	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.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C81	$1400 \pm 25\%$	≈ 2300	U25/16/6-3C81
3C90	$1200 \pm 25\%$	≈ 2300	U25/16/6-3C90
3C91 des	$1400 \pm 25\%$	≈ 2300	U25/16/6-3C91
3C94	$1200 \pm 25\%$	≈ 2300	U25/16/6-3C94
3C11	$2050 \pm 25\%$	≈ 3380	U25/16/6-3C11
3E27	$2500 \pm 25\%$	≈ 4130	U25/16/6-3E27

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Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at			
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; $\hat{B}$ = 200 mT; T = 100 °C	f = 100 kHz; $\hat{B}$ = 100 mT; T = 100 °C	f = 100 kHz; $\hat{B}$ = 200 mT; T = 100 °C	f = 400 kHz; $\hat{B}$ = 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		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		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		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.