

# DATA SHEET

**U20/16/7**

U cores and accessories

Supersedes data of February 2002

2004 Sep 01

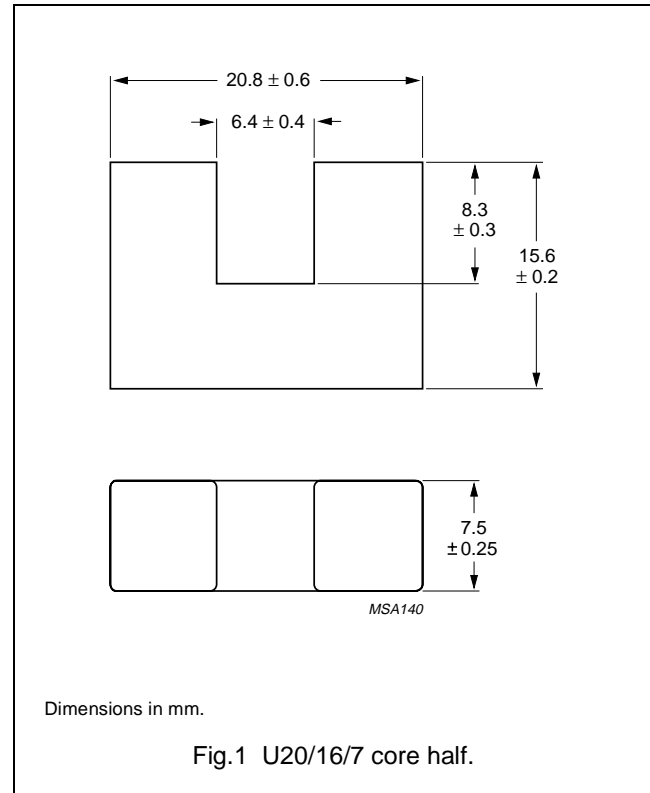
## U cores and accessories

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## CORE SETS

## Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.21	$\text{mm}^{-1}$
$V_e$	effective volume	3800	$\text{mm}^3$
$l_e$	effective length	68	mm
$A_e$	effective area	56	$\text{mm}^2$
m	mass of core half	$\approx 9$	g



## Core halves

$A_L$  measured on a combination of 2 U cores.

GRADE	$A_L$ (nH)	$\mu_e$	TYPE NUMBER
3C90	$1900 \pm 25\%$	$\approx 1950$	U20/16/7-3C90
3C94	$1900 \pm 25\%$	$\approx 1950$	U20/16/7-3C94
3C11	$3100 \pm 25\%$	$\approx 3000$	U20/16/7-3C11
3E27	$4800 \pm 25\%$	$\approx 4600$	U20/16/7-3E27

## 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; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C	f = 100 kHz; B̂ = 200 mT; T = 100 °C
3C90	$\geq 320$	$\leq 0.46$	$\leq 0.48$	—
3C94	$\geq 320$	—	$\leq 0.36$	$\leq 2.3$

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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
<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.
<b>Support</b>		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.