

# DATA SHEET

**E20/14/5**  
EI cores

New data

2004 Sep 01

# EI cores

E20/14/5

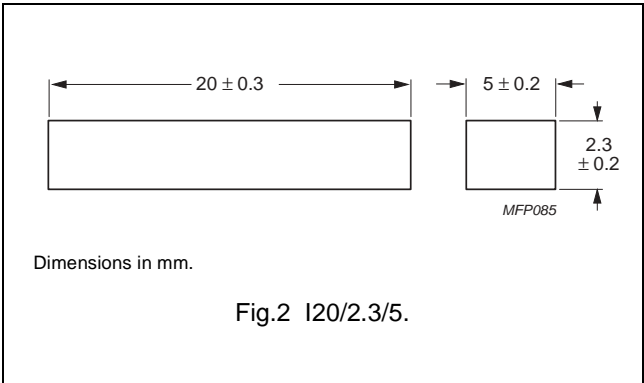
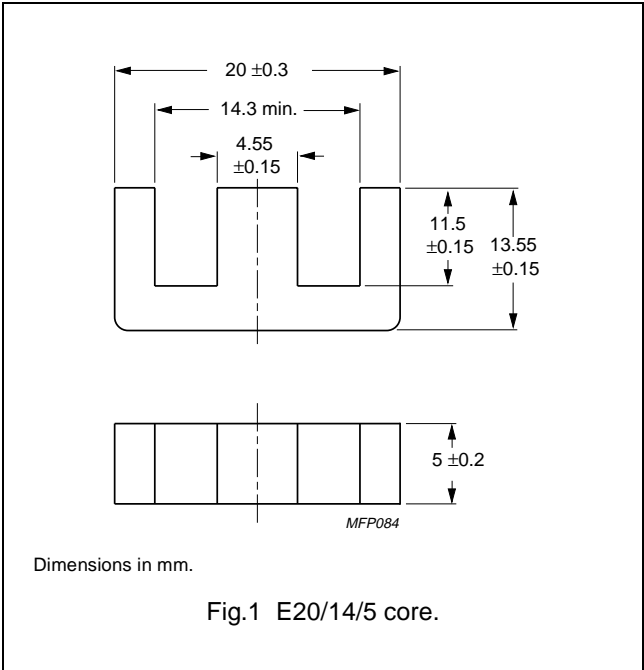
## CORES

### Effective core parameters of an E / I combination

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.76	mm <sup>-1</sup>
$V_e$	effective volume	913	mm <sup>3</sup>
$l_e$	effective length	40.1	mm
$A_e$	effective area	22.8	mm <sup>2</sup>
$A_{min}$	minimum area	22.0	mm <sup>2</sup>
m	mass of E core	≈ 3.8	g
m	mass of I core	≈ 1.1	g

### Ordering information for I cores

GRADE	TYPE NUMBER
3C90	I20/2.3/5-3C90



### Core halves for use in combination with an I core

$A_L$  measured in combination with an I core, clamping force for  $A_L$  measurements  $20 \pm 10$  N;

GRADE	$A_L$ (nH)	$\mu_e$	AIR GAP ( $\mu$ m)	TYPE NUMBER
3C90	$1290 \pm 25 \%$	≈ 1810	≈ 0	E20/14/5-3C90

### 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
E20/14/5+I20/2.3/5-3C90	≥ 320	≤ 0.11	≤ 0.11




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DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
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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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