

DATA SHEET

I93/28/30

I cores and accessories

Supersedes data of February 2002

2004 Sep 01

I cores and accessories

I93/28/30

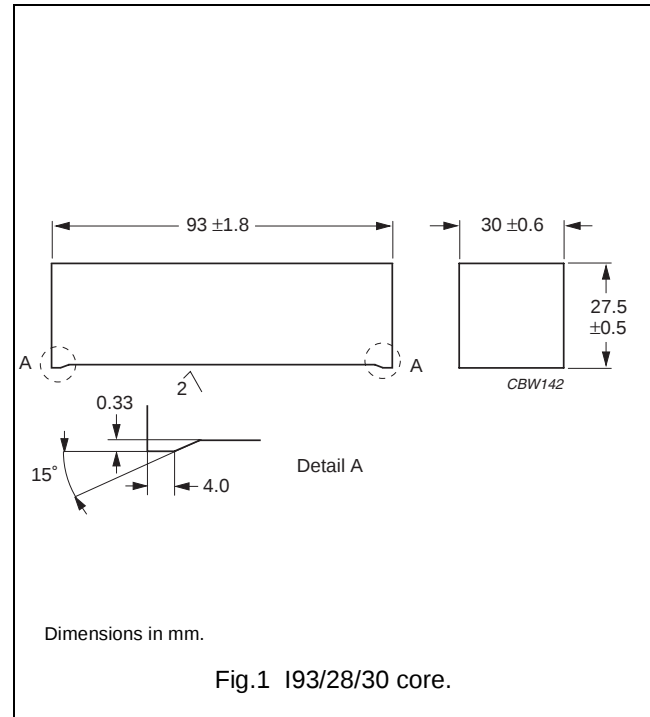
CORE SETS

Effective core parameters in combination with U93/52/30

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	0.251	mm ⁻¹
V_e	effective volume	175000	mm ³
l_e	effective length	210	mm
A_e	effective area	836	mm ²
m	mass of core	≈ 370	g

Effective core parameters in combination with U93/76/30

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	0.307	mm ⁻¹
V_e	effective volume	217000	mm ³
l_e	effective length	258	mm
A_e	effective area	840	mm ²
m	mass of core	≈ 370	g



Core data

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	10700 ± 25% ⁽¹⁾	≈ 2150	I93/28/30-3C90
	8700 ± 25% ⁽²⁾	≈ 2150	
3C94	10700 ± 25% ⁽¹⁾	≈ 2150	I93/28/30-3C94
	8700 ± 25% ⁽²⁾	≈ 2150	

Notes

1. Measured in combination with "U93/52/30".
2. Measured in combination with "U93/76/30".

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; B = 200 mT; T = 100 °C	f = 100 kHz; B = 100 mT; T = 100 °C
3C90	≥ 330	≤ 24 ⁽¹⁾	≤ 31 ⁽¹⁾
	≥ 330	≤ 28 ⁽²⁾	≤ 38 ⁽²⁾
3C94	≥ 330	—	≤ 24 ⁽¹⁾
	≥ 330	—	≤ 30 ⁽²⁾

Notes

1. Measured in combination with "U93/52/30".
2. Measured in combination with "U93/76/30".

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.