## **FERROXCUBE**

# DATA SHEET

# **E22/16/10**E cores and accessories

Supersedes data of February 2002

2004 Sep 01



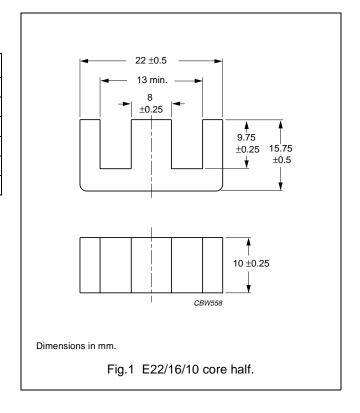
# E cores and accessories

E22/16/10

#### **CORE SETS**

#### **Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
Σ(I/A)	core factor (C1) 0.695		mm <sup>-1</sup>
V <sub>e</sub>	effective volume 5143		mm <sup>3</sup>
l <sub>e</sub>	effective length	59.8	mm
A <sub>e</sub>	effective area	86	mm <sup>2</sup>
A <sub>min</sub>	minimum area	80	mm <sup>2</sup>
m	mass of core half	≈ 14	g



#### **Core halves**

Clamping force for  $A_L$  measurements, 20  $\pm 10\ N.$ 

GRADE	A <sub>L</sub> (nH)	$\mu_{\mathbf{e}}$	AIR GAP (μm)	TYPE NUMBER
3C90	63 ±5%	≈ 35	≈ 3100	E22/16/10-3C90-A63
	100 ±8%	≈ 55	≈ 1650	E22/16/10-3C90-A100
	160 ±8%	≈ 89	≈ 880	E22/16/10-3C90-A160
	250 ±15%	≈ 138	≈ 500	E22/16/10-3C90-A250
	315 ±15%	≈ 174	≈ 380	E22/16/10-3C90-A315
	3090 ±25%	≈1710	≈ 0	E22/16/10-3C90
3C92 des	2300 ±25%	≈1270	≈ 0	E22/16/10-3C92

#### 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
3C90	≥330	≤ 0.55	≤ 0.6	-
3C92	≥370	_	≤ 0.4	≤ 3.0

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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 <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.

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