FERROXCUBE

DATA SHEET

E30/21/11 El cores

Supersedes data of September 2004

2008 Sep 01



El cores E30/21/11

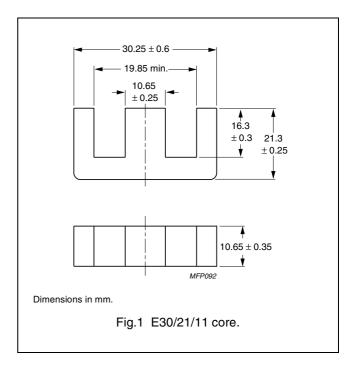
CORES

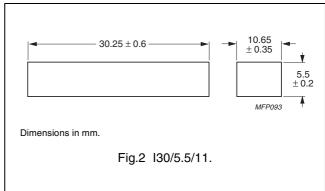
Effective core parameters of an E / I combination

SYMBOL	PARAMETER	VALUE	UNIT
Σ(I/A)	core factor (C1)	0.524	mm ⁻¹
V _e	effective volume	6720	mm ³
l _e	effective length	59.2	mm
A _e	effective area	113	mm ²
A _{min}	minimum area	104	mm ²
m	mass of E core	≈ 25	g
m	mass of I core	≈ 8.6	g

Ordering information for I cores

GRADE	TYPE NUMBER	
3C90	I30/5.5/11-3C90	





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 40 \pm 20 N;

GRADE	A _L (nH)	$\mu_{\mathbf{e}}$	AIR GAP (μm)	TYPE NUMBER
3C90	$4300\pm25~\%$	≈ 1790	≈ 0	E30/21/11-3C90

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	
E30/21/11+I30/5.5/11-3C90	≥ 330	≤ 0.8	≤ 0.8	

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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.

DISCLAIMER

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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 not 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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