FERROXCUBE

DATA SHEET

PQ50/50 PQ cores and accessories

Supersedes data of September 2004

2008 Sep 01



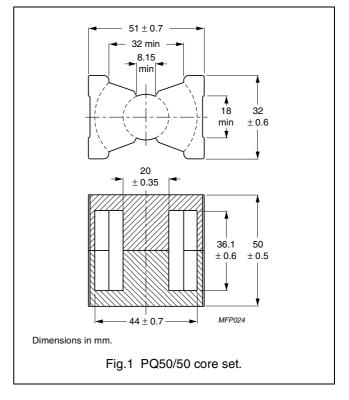
PQ cores and accessories

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CORE SETS

Effective core parameters

SYMBOL	PARAMETER VALUE		UNIT
Σ(I/A)	core factor (C1) 0.345 m		mm ⁻¹
V _e	effective volume 37100		mm ³
l _e	effective length	113	mm
A _e	effective area	328	mm ²
A _{min}	minimum area	314	mm ²
m	mass of set	s of set ≈ 195 g	



Core sets for general purpose transformers and power applications

Clamping force for A_L measurements, 80 $\pm\,20$ N.

GRADE	A _L (nH)	μ _e	AIR GAP (μm)	TYPE NUMBER
3C91 des	9200 ± 25 %	≈ 2530	≈ 0	PQ50/50-3C91
3C94	7400 ± 25 %	≈ 2030	≈ 0	PQ50/50-3C94
3C95 des	9200 ± 25 %	≈ 2530	≈ 0	PQ50/50-3C95
3C96 des	6300 ± 25 %	≈ 1730	≈ 0	PQ50/50-3C96

Properties of core sets under power conditions

	B (mT) at	CORE LOSS (W) at			
GRADE	H = 250 A/m; f = 10 kHz; T = 100 °C	f = 100 kHz; B = 100 mT; T = 100 °C	f = 100 kHz; B = 200 mT; T = 25 °C	f = 100 kHz; B = 200 mT; T = 100 °C	f = 500 kHz; B = 50 mT; T = 100 °C
3C91	≥ 320	≤ 2.9 ⁽¹⁾	_	≤ 18 ⁽¹⁾	_
3C94	≥ 320	≤ 3.8	_	≤ 23	_
3C95	≥ 320	_	≤ 23.4	≤ 22.3	_
3C96	≥ 340	≤ 2.9	_	≤ 18	≤ 14

Note

1. Measured at 60 °C.

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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 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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