FERROXCUBE

DATA SHEET

P11/7/IP cores and accessories

Supersedes data of February 2002

2004 Sep 01



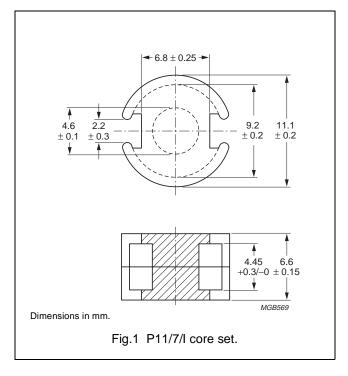
P11/7/I

P cores and accessories

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
Σ(I/A)	core factor (C1)	0.860	mm ⁻¹
V _e	effective volume	309	mm ³
l _e	effective length	16.3	mm
A _e	effective area 19.0		mm ²
A _{min}	minimum area 13.7		mm ²
m	mass of set ≈ 1.9 g		g



Core sets for general purpose transformers and power applications

Clamping force for A_L measurements, 10 $\pm 5\ N.$

GRADE	A _L (nH)	$\mu_{\mathbf{e}}$	AIR GAP (μm)	TYPE NUMBER
3C81	63 ±3%	≈ 43	≈ 500	P11/7/I-3C81-A63
	100 ±3%	≈ 68	≈ 290	P11/7/I-3C81-A100
	160 ±3%	≈ 109	≈ 170	P11/7/I-3C81-A160
	250 ±5%	≈ 171	≈ 100	P11/7/I-3C81-A250
	315 ±5%	≈ 215	≈ 75	P11/7/I-3C81-A315
	2100 ±25%	≈ 1430	≈ 0	P11/7/I-3C81
3C91 des	2100 ±25%	≈ 1430	≈ 0	P11/7/I-3C91
3F3	63 ±3%	≈ 43	≈ 500	P11/7/I-3F3-A63
	100 ±3%	≈ 68	≈ 290	P11/7/I-3F3-A100
	160 ±3%	≈ 109	≈ 170	P11/7/I-3F3-A160
	250 ±5%	≈ 171	≈ 100	P11/7/I-3F3-A250
	315 ±5%	≈ 215	≈ 75	P11/7/I-3F3-A315
	1750 ±25%	≈ 1195	≈ 0	P11/7/I-3F3

Core sets for filter applications

Clamping force for A_L measurements, 10 ± 5 N.

GRADE	A _L (nH)	$\mu_{\mathbf{e}}$	AIR GAP (μm)	TYPE NUMBER
3B46 des	2500 ±25%	≈ 1700	≈ 0	P11/7/I-3B46

2004 Sep 01 2

P cores and accessories

P11/7/I

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	f = 400 kHz; B = 50 mT; T = 100 °C
3C81	≥320	≤ 0.07	_	_	_
3C91	≥315	_	≤ 0.016 ⁽¹⁾	≤ 0.12 ⁽¹⁾	_
3F3	≥315	_	≤ 0.04	_	≤ 0.06

Note

1. Measured at 60 °C.

BOBBINS AND ACCESSORIES

For coil formers, winding data and mounting parts, see data sheet, "P11/7".

P cores and accessories

P11/7/I

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.

4

2004 Sep 01