

DATA SHEET

**PTS18/11
(1811THS)**

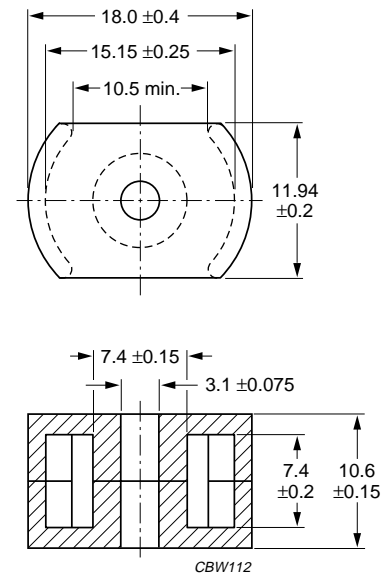
**PT, PTS, PTS/I cores and
accessories**

Supersedes data of February 2002

2004 Sep 01

CORE SETS**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.770	mm ⁻¹
V_e	effective volume	1070	mm ³
l_e	effective length	28,7	mm
A_e	effective area	37.2	mm ²
A_{min}	minimum area	31.0	mm ²
m	mass of set	≈ 5.0	g



Dimensions in mm.

Fig.1 PTS18/11 core set.

Core sets for general purpose transformers and power applicationsClamping force for A_L measurements, 20 ± 5 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3C81	100 ± 3%	≈ 61	≈ 600	PTS18/11-3C81-A100
	160 ± 3%	≈ 98	≈ 340	PTS18/11-3C81-A160
	250 ± 3%	≈ 153	≈ 200	PTS18/11-3C81-A250
	315 ± 3%	≈ 193	≈ 150	PTS18/11-3C81-A315
	400 ± 5%	≈ 245	≈ 120	PTS18/11-3C81-A400
	3000 ± 25%	≈ 1830	≈ 0	PTS18/11-3C81
3C91 <small>des</small>	3000 ± 25%	≈ 1830	≈ 0	PTS18/11-3C91
3F3	100 ± 3%	≈ 61	≈ 600	PTS18/11-3F3-A100
	160 ± 3%	≈ 98	≈ 340	PTS18/11-3F3-A160
	250 ± 3%	≈ 153	≈ 200	PTS18/11-3F3-A250
	315 ± 3%	≈ 193	≈ 150	PTS18/11-3F3-A315
	400 ± 5%	≈ 245	≈ 120	PTS18/11-3F3-A400
	2225 ± 25%	≈ 1365	≈ 0	PTS18/11-3F3

PT, PTS, PTS/I cores and accessories

PTS18/11
(1811THS)**Core sets of high permeability grades**Clamping force for A_L measurements, 15 ± 5 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3E27	$5140 \pm 25\%$	≈ 3150	≈ 0	PTS18/11-3E27

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	f = 100 kHz; B = 200 mT; T = 100 °C	f = 400 kHz; B = 50 mT; T = 100 °C
3C81	≥ 320	≤ 0.22	–	–	–
3C91	≥ 320	–	$\leq 0.055^{(1)}$	$\leq 0.4^{(1)}$	–
3F3	≥ 315	–	≤ 0.12	–	≤ 0.2

Note

1. Measured at 60 °C.

BOBBINS AND ACCESSORIES

For coil formers, winding data and mounting parts, see data sheet, "P18/11".

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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		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.