

# DATA SHEET

**P26/16/I**  
P cores and accessories

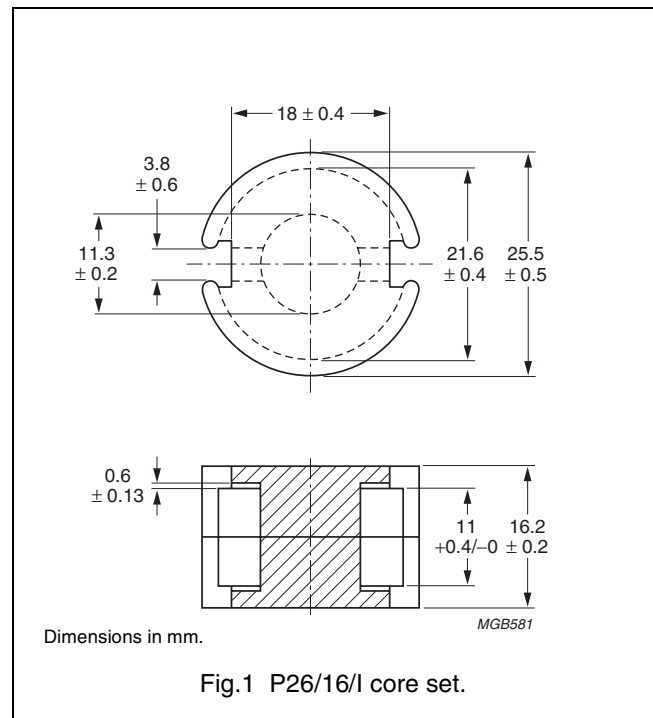
Supersedes data of September 2004

2008 Sep 01

**CORE SETS**

**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.360	mm <sup>-1</sup>
$V_e$	effective volume	4370	mm <sup>3</sup>
$l_e$	effective length	39.6	mm
$A_e$	effective area	110	mm <sup>2</sup>
$A_{min}$	minimum area	87.0	mm <sup>2</sup>
m	mass of set	≈ 21	g



**Core sets for general purpose transformers and power applications**

Clamping force for  $A_L$  measurements, 50 ± 20 N.

GRADE	$A_L$ (nH)	$\mu_e$	TOTAL AIR GAP ( $\mu\text{m}$ )	TYPE NUMBER
3C81	250 ± 3%	≈ 72	≈ 660	P26/16/I-3C81-E250
	315 ± 3%	≈ 90	≈ 500	P26/16/I-3C81-A315
	400 ± 3%	≈ 115	≈ 380	P26/16/I-3C81-A400
	630 ± 3%	≈ 180	≈ 230	P26/16/I-3C81-A630
	1000 ± 3%	≈ 286	≈ 130	P26/16/I-3C81-A1000
	7000 ± 25%	≈ 2010	≈ 0	P26/16/I-3C81
3C91 <small>des</small>	7000 ± 25%	≈ 2010	≈ 0	P26/16/I-3C91
3F3	250 ± 3%	≈ 72	≈ 660	P26/16/I-3F3-E250
	315 ± 3%	≈ 90	≈ 500	P26/16/I-3F3-A315
	400 ± 3%	≈ 115	≈ 380	P26/16/I-3F3-A400
	630 ± 3%	≈ 180	≈ 230	P26/16/I-3F3-A630
	1000 ± 3%	≈ 286	≈ 130	P26/16/I-3F3-A1000
	5250 ± 25%	≈ 1505	≈ 0	P26/16/I-3F3

## 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	≤ 1.0	–	–	–
3C91	≥315	–	≤ 0.22 <sup>(1)</sup>	≤ 1.6 <sup>(1)</sup>	–
3F3	≥315	–	≤ 0.48	–	≤ 0.83

## Note

1. Measured at 60 °C.

## BOBBINS AND ACCESSORIES

Coil formers, winding data and mounting parts are equal to those of “P26/16”, but “area product” is different.

## Winding data and area product (for P26/16/I) for CP-P26/16 coil former

NUMBER OF SECTIONS	WINDING AREA (mm <sup>2</sup> )	MINIMUM WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	AREA PRODUCT Ae x Aw (mm <sup>4</sup> )	TYPE NUMBER
1	37.1	9.3	52.6	4080	CP-P26/16-1S
2	2 × 17.5	2 × 4.35	52.6	2 x 1925	CP-P26/16-2S
3	3 × 11	3 × 2.7	52.6	3 x 1210	CP-P26/16-3S

## Winding data and area product (for P26/16/I) for 6-pins P26/16 coil former for PCB mounting

NUMBER OF SECTIONS	MINIMUM WINDING AREA (mm <sup>2</sup> )	NOMINAL WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	MINIMUM LENGTH OF PINS (mm)	AREA PRODUCT Ae x Aw (mm <sup>4</sup> )	TYPE NUMBER
1	36.7	9.7	52.7	4.4	4040	CPV-P26/16-1S-6PD
1	36.7	9.7	52.7	6.8	4040	CPV-P26/16-1S-6PDL
2	2 × 16.6	2 × 4.5	52.7	4.4	2 x 1830	CPV-P26/16-2S-6PD
2	2 × 16.6	2 × 4.5	52.7	6.8	2 x 1830	CPV-P26/16-2S-6PDL
3	3 × 10.3	3 × 2.8	52.7	4.4	3 x 1130	CPV-P26/16-3S-6PD <sup>(1)</sup>
3	3 × 10.3	3 × 2.8	52.7	6.8	3 x 1130	CPV-P26/16-3S-6PDL <sup>(1)</sup>

## Note

1. In accordance with “UL 94-HB”.

**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**

**Life support applications** — These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.

**PRODUCT STATUS DEFINITIONS**

STATUS	INDICATION	DEFINITION
<b>Prototype</b>		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.
<b>Design-in</b>		These products are recommended for new designs.
<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
<b>Support</b>		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.