

# DATA SHEET

**P22/13/I**

P cores and accessories

Supersedes data of February 2002

2004 Sep 01

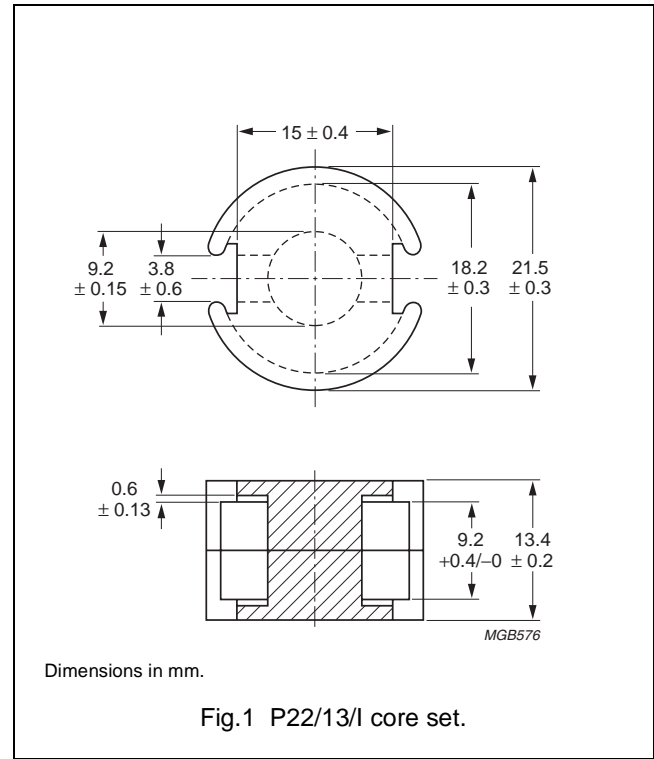
## P cores and accessories

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## CORE SETS

## Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.450	mm <sup>-1</sup>
$V_e$	effective volume	2460	mm <sup>3</sup>
$l_e$	effective length	33.3	mm
$A_e$	effective area	73.4	mm <sup>2</sup>
$A_{min}$	minimum area	58.1	mm <sup>2</sup>
m	mass of set	≈ 13	g



## Core sets for general purpose transformers and power applications

Clamping force for  $A_L$  measurements, 40 ± 10 N.

GRADE	$A_L$ (nH)	$\mu_e$	AIR GAP (μm)	TYPE NUMBER
3C81	250 ± 3%	≈ 90	≈ 420	P22/13/I-3C81-A250
	315 ± 3%	≈ 114	≈ 320	P22/13/I-3C81-A315
	400 ± 3%	≈ 144	≈ 250	P22/13/I-3C81-A400
	630 ± 3%	≈ 227	≈ 145	P22/13/I-3C81-A630
	1000 ± 5%	≈ 361	≈ 85	P22/13/I-3C81-A1000
	5330 ± 25%	≈ 1920	≈ 0	P22/13/I-3C81
3C91 <small>des</small>	5330 ± 25%	≈ 1920	≈ 0	P22/13/I-3C91
3F3	250 ± 3%	≈ 90	≈ 420	P22/13/I-3F3-A250
	315 ± 3%	≈ 114	≈ 320	P22/13/I-3F3-A315
	400 ± 3%	≈ 144	≈ 250	P22/13/I-3F3-A400
	630 ± 3%	≈ 227	≈ 145	P22/13/I-3F3-A630
	1000 ± 5%	≈ 361	≈ 85	P22/13/I-3F3-A1000
	4070 ± 25%	≈ 1470	≈ 0	P22/13/I-3F3

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## 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; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C	f = 100 kHz; B̂ = 200 mT; T = 100 °C	f = 400 kHz; B̂ = 50 mT; T = 100 °C
3C81	≥320	≤ 0.57	–	–	–
3C91	≥315	–	≤ 0.13 <sup>(1)</sup>	≤ 0.92 <sup>(1)</sup>	–
3F3	≥315	–	≤ 0.27	–	≤ 0.47

## Note

1. Measured at 60 °C.

## BOBBINS AND ACCESSORIES

For coil formers, winding data and mounting parts, see data sheet, "P22/13".

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## DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
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