

# DATA SHEET

## **PQ40/40** PQ cores and accessories

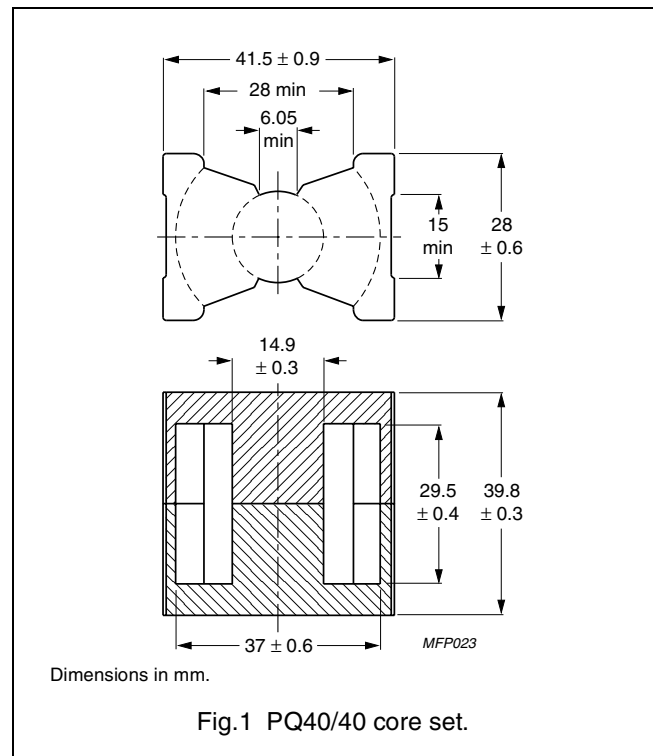
Supersedes data of September 2004

2008 Sep 01

**CORE SETS**

**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.507	mm <sup>-1</sup>
$V_e$	effective volume	20500	mm <sup>3</sup>
$l_e$	effective length	102	mm
$A_e$	effective area	201	mm <sup>2</sup>
$A_{min}$	minimum area	175	mm <sup>2</sup>
m	mass of set	≈ 97	g



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

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

GRADE	$A_L$ (nH)	$\mu_e$	AIR GAP ( $\mu$ m)	TYPE NUMBER
3C91 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	$6100 \pm 25 \%$	≈ 2460	≈ 0	PQ40/40-3C91
3C94	$4900 \pm 25 \%$	≈ 1980	≈ 0	PQ40/40-3C94
3C95 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	$6100 \pm 25 \%$	≈ 2460	≈ 0	PQ40/40-3C95
3C96 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	$4200 \pm 25 \%$	≈ 1690	≈ 0	PQ40/40-3C96

**Properties of core sets under power conditions**

GRADE	B (mT) at	CORE LOSS (W) at			
	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	≤ 1.65 <sup>(1)</sup>	–	≤ 10 <sup>(1)</sup>	–
3C94	≥320	≤ 2.1	–	≤ 12.6	–
3C95	≥320	–	≤ 12.9	≤ 12.3	–
3C96	≥340	≤ 1.65	–	≤ 10	≤ 8.0

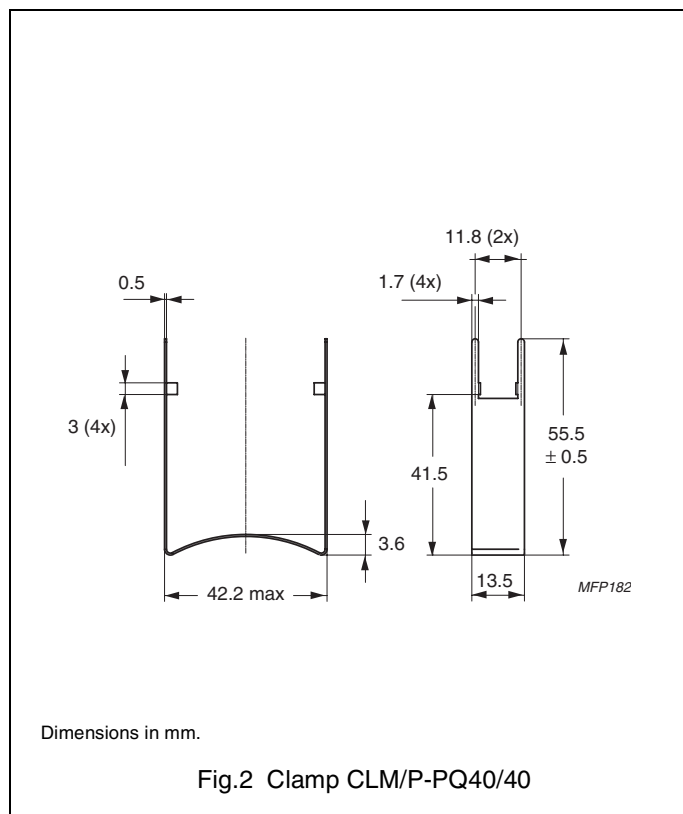
**Note**

1. Measured at 60 °C.

**MOUNTING PARTS**

**General data**

ITEM	REMARKS	TYPE NUMBER
Clamp	phosphorbronze, Sn plated, earth pins solderability acc. to "IEC 60068-2-20", Part 2, Test Ta, method 1: 235 °C, 2 s	CLM/P-PQ40/40



**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**

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<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.
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