

DATA SHEET

PQ26/25

PQ cores and accessories

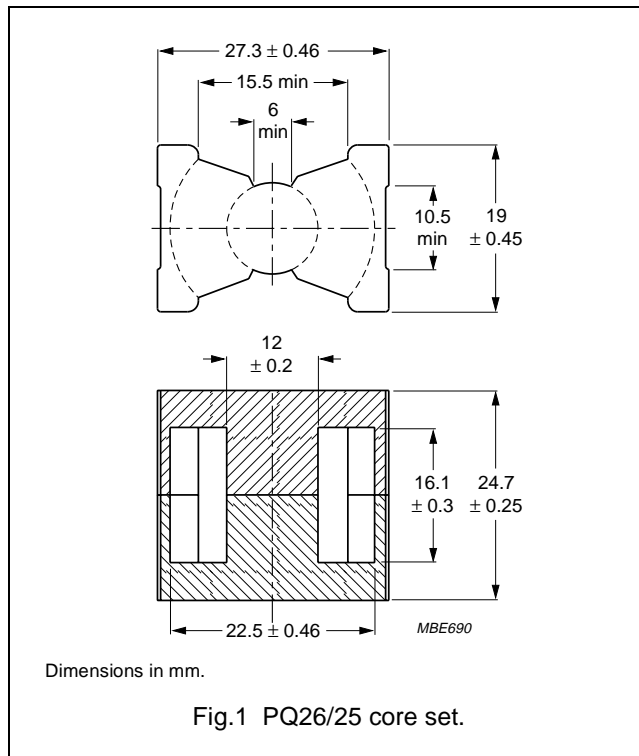
Supersedes data of February 2002

2004 Sep 01

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.451	mm ⁻¹
V_e	effective volume	6530	mm ³
l_e	effective length	54.3	mm
A_e	effective area	120	mm ²
A_{min}	minimum area	108	mm ²
m	mass of set	≈ 36	g



Core sets for general purpose transformers and power applications

Clamping force for A_L measurements, 60 ± 15 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3C81	250 ± 3%	≈ 90	≈ 730	PQ26/25-3C81-E250
	315 ± 3%	≈ 113	≈ 550	PQ26/25-3C81-A315
	400 ± 3%	≈ 144	≈ 420	PQ26/25-3C81-A400
	630 ± 3%	≈ 227	≈ 240	PQ26/25-3C81-A630
	1000 ± 5%	≈ 360	≈ 140	PQ26/25-3C81-A1000
	6010 ± 25%	≈ 2160	≈ 0	PQ26/25-3C81
3C90	250 ± 3%	≈ 90	≈ 730	PQ26/25-3C90-E250
	315 ± 3%	≈ 113	≈ 550	PQ26/25-3C90-A315
	400 ± 3%	≈ 144	≈ 420	PQ26/25-3C90-A400
	630 ± 3%	≈ 227	≈ 240	PQ26/25-3C90-A630
	1000 ± 5%	≈ 360	≈ 140	PQ26/25-3C90-A1000
	4700 ± 25%	≈ 1690	≈ 0	PQ26/25-3C90
3C91 des	6010 ± 25%	≈ 2160	≈ 0	PQ26/25-3C91
3C94	5250 ± 25%	≈ 1890	≈ 0	PQ26/25-3C94
3C96 des	4700 ± 25%	≈ 1690	≈ 0	PQ26/25-3C96

PQ cores and accessories

PQ26/25

GRADE		A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3F3		250 \pm 3%	\approx 90	\approx 730	PQ26/25-3F3-E250
		315 \pm 3%	\approx 113	\approx 550	PQ26/25-3F3-A315
		400 \pm 3%	\approx 144	\approx 420	PQ26/25-3F3-A400
		630 \pm 3%	\approx 227	\approx 240	PQ26/25-3F3-A630
		1000 \pm 5%	\approx 360	\approx 140	PQ26/25-3F3-A1000
		4390 \pm 25%	\approx 1574	\approx 0	PQ26/25-3F3

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	\geq 320	\leq 1.5	–	–	–
3C90	\geq 320	\leq 0.79	\leq 0.83	–	–
3C91	\geq 320	–	\leq 0.5 ⁽¹⁾	\leq 3.2 ⁽¹⁾	–
3C94	\geq 320	–	\leq 0.62	\leq 4.0	–
3C96	\geq 340	–	\leq 0.5	\leq 3.2	\leq 1.15
3F3	\geq 320	–	\leq 0.72	–	\leq 1.2

Properties of core sets under power conditions (continued)

GRADE	B (mT) at	CORE LOSS (W) at			
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 500 kHz; B = 50 mT; T = 100 °C	f = 500 kHz; B = 100 mT; T = 100 °C	f = 1 MHz; B = 30 mT; T = 100 °C	f = 3 MHz; B = 10 mT; T = 100 °C
3C81	\geq 320	–	–	–	–
3C90	\geq 320	–	–	–	–
3C91	\geq 320	–	–	–	–
3C94	\geq 320	–	–	–	–
3C96	\geq 340	\leq 2.5	–	–	–
3F3	\geq 320	–	–	–	–

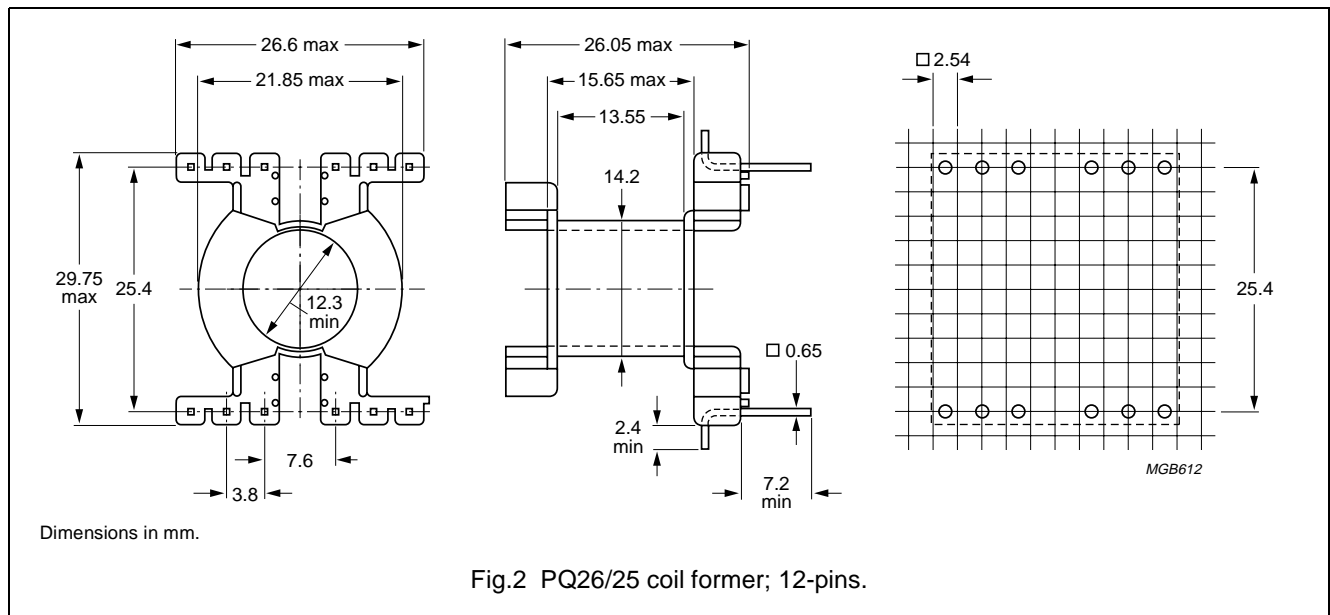
Note

1. Measured at 60 °C.

COIL FORMER

General data 12-pins PQ26/25 coil former

PARAMETER	SPECIFICATION
Coil former material	thermoplastic polyester, glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E69578(M)
Pin material	copper-tin alloy (CuSn), tin-lead alloy (SnPb) plated, transition to lead-free (Sn) ongoing
Maximum operating temperature	155 °C, "IEC 60085", class F
Resistance to soldering heat	"IEC 60068-2-20", Part 2, Test Tb, method 1B, 350 °C, 3.5 s
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1



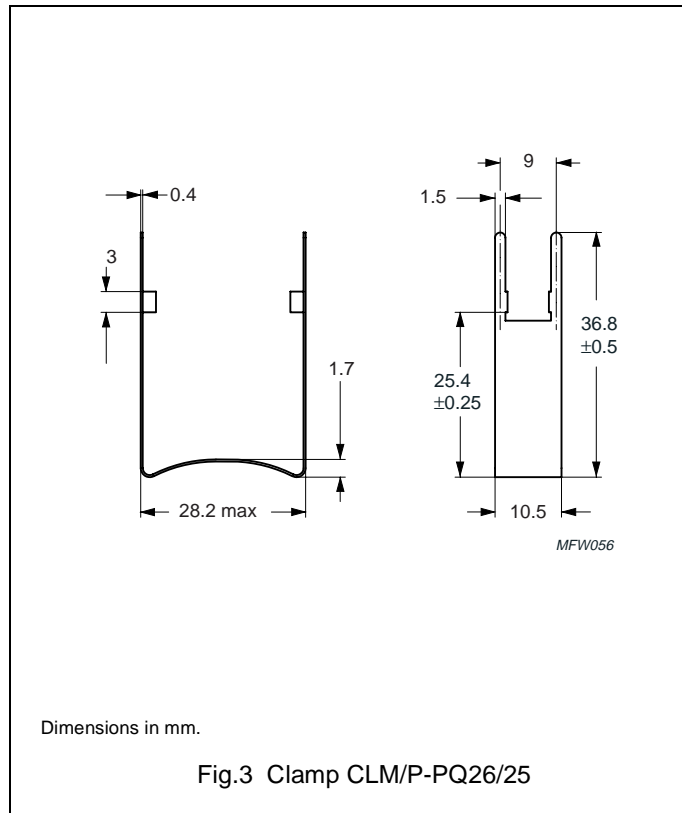
Winding data for 12-pins PQ26/25 coil former

NUMBER OF SECTIONS	MINIMUM WINDING AREA (mm ²)	NOMINAL WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	47.5	13.6	56.4	CPV-PQ26/25-1S-12P
1	47.5	13.6	56.4	CPV-PQ26/25-1S-12PD

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-PQ26/25






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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