

DATA SHEET

PQ35/35

PQ cores and accessories

Supersedes data of September 2004

2008 Sep 01

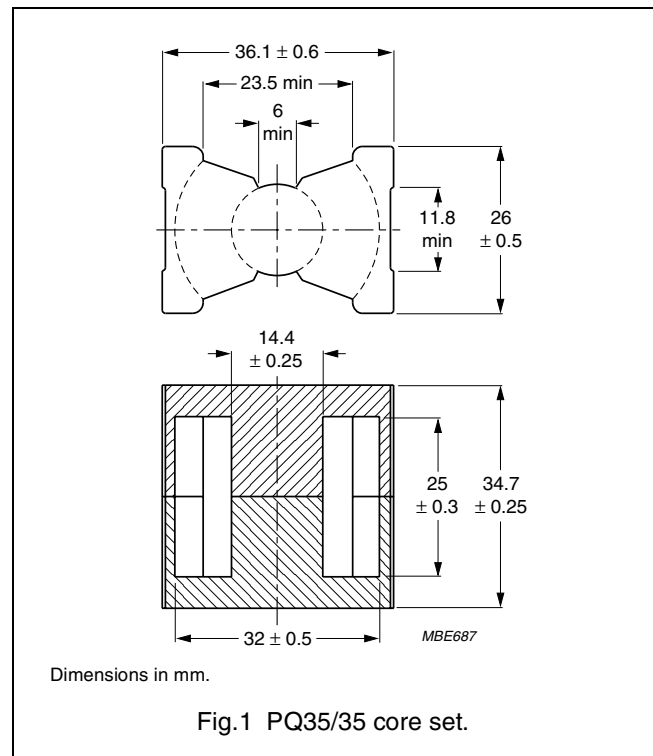


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CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.454	mm ⁻¹
V_e	effective volume	16300	mm ³
l_e	effective length	86.1	mm
A_e	effective area	190	mm ²
A_{min}	minimum area	162	mm ²
m	mass of set	≈ 73	g



Core sets for general purpose transformers and power applications

Clamping force for A_L measurements, 80 ± 20 N.

GRADE	A_L (nH)	μ_e	TOTAL AIR GAP (μm)	TYPE NUMBER
3C81	315 ±3%	≈ 114	≈ 920	PQ35/35-3C81-E315
	400 ±3%	≈ 144	≈ 690	PQ35/35-3C81-E400
	630 ±3%	≈ 227	≈ 400	PQ35/35-3C81-A630
	1000 ±3%	≈ 361	≈ 230	PQ35/35-3C81-A1000
	1600 ±5%	≈ 577	≈ 120	PQ35/35-3C81-A1600
	6000 ±25%	≈ 2160	≈ 0	PQ35/35-3C81
3C90	315 ±3%	≈ 114	≈ 920	PQ35/35-3C90-E315
	400 ±3%	≈ 144	≈ 690	PQ35/35-3C90-E400
	630 ±3%	≈ 227	≈ 400	PQ35/35-3C90-A630
	1000 ±3%	≈ 361	≈ 230	PQ35/35-3C90-A1000
	1600 ±5%	≈ 577	≈ 120	PQ35/35-3C90-A1600
	5200 ±25%	≈ 1880	≈ 0	PQ35/35-3C90
3C91 des	6000 ±25%	≈ 2160	≈ 0	PQ35/35-3C91
3C94	5200 ±25%	≈ 1880	≈ 0	PQ35/35-3C94
3C95 des	6000 ±25%	≈ 2160	≈ 0	PQ35/35-3C95
3C96 des	4700 ±25%	≈ 1700	≈ 0	PQ35/35-3C96

GRADE	A_L (nH)	μ_e	TOTAL AIR GAP (μm)	TYPE NUMBER
3F3	315 \pm 3%	\approx 114	\approx 920	PQ35/35-3F3-E315
	400 \pm 3%	\approx 144	\approx 690	PQ35/35-3F3-E400
	630 \pm 3%	\approx 227	\approx 400	PQ35/35-3F3-A630
	1000 \pm 3%	\approx 361	\approx 230	PQ35/35-3F3-A1000
	1600 \pm 5%	\approx 577	\approx 120	PQ35/35-3F3-A1600
	4570 \pm 25%	\approx 1650	\approx 0	PQ35/35-3F3

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 = 25 °C	f = 100 kHz; B = 200 mT; T = 100 °C	f = 400 kHz; B = 50 mT; T = 100 °C	f = 500 kHz; B = 50 mT; T = 100 °C
3C81	\geq 320	\leq 3.8	–	–	–	–	–
3C90	\geq 320	\leq 2.0	\leq 2.1	–	–	–	–
3C91	\geq 320	–	\leq 1.2 ⁽¹⁾	–	\leq 8.0 ⁽¹⁾	–	–
3C94	\geq 320	–	\leq 1.6	–	\leq 10	–	–
3C95	\geq 320	–	–	\leq 10.3	\leq 9.78	–	–
3C96	\geq 340	–	\leq 1.2	–	\leq 8.0	\leq 3.0	\leq 6.1
3F3	\geq 320	–	\leq 1.8	–	–	\leq 3.1	–

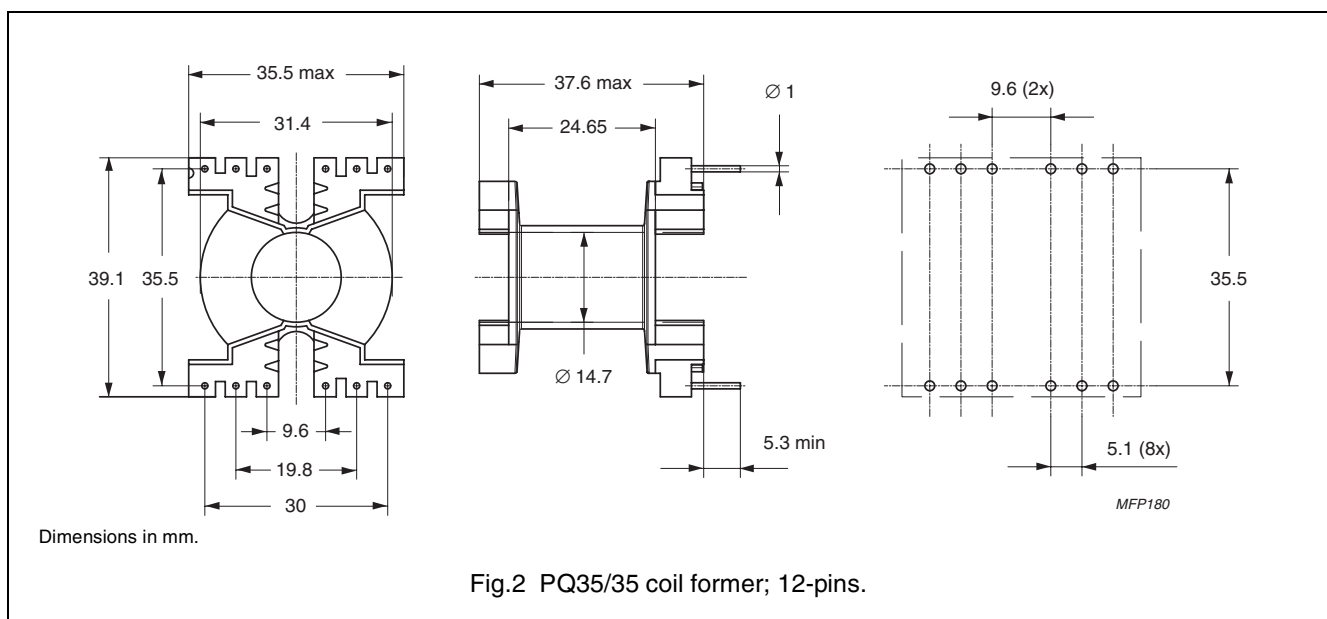
Note

1. Measured at 60 °C.

COIL FORMER

General data 12-pins PQ35/35 coil former

PARAMETER	SPECIFICATION
Coil former material	Polyethylene terephthalate (PET), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E41938
Pin material	copper-plated steel wire, tin (Sn) plated
Maximum operating temperature	180 °C, "IEC 60085", class H
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



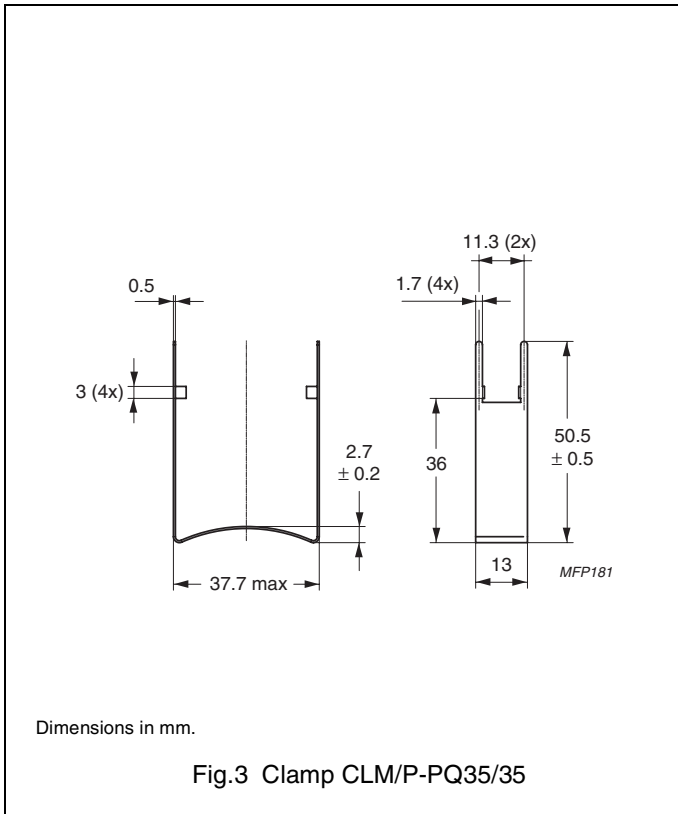
Winding data for 12-pins PQ35/35 coil former

NUMBER OF SECTIONS	MINIMUM WINDING AREA (mm ²)	NOMINAL WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	152	20.8	75	CPV-PQ35/35-1S-12P-Z

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-PQ35/35



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DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
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