

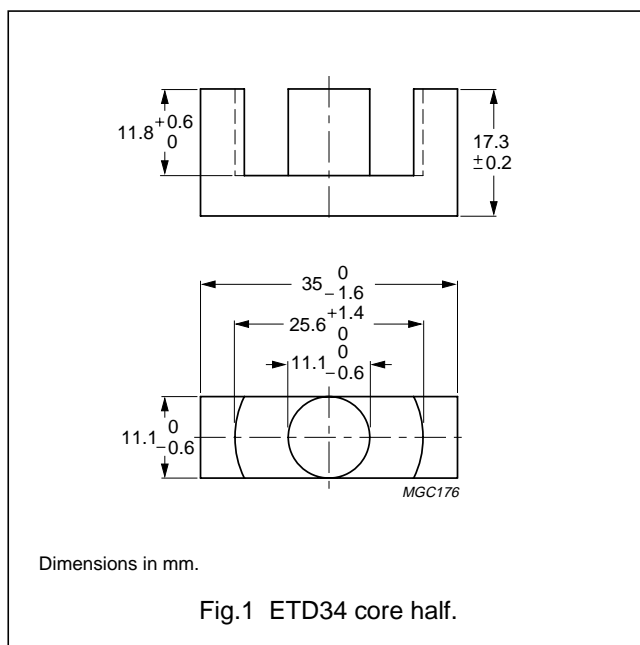
ETD cores and accessories

ETD34

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.810	mm ⁻¹
V_e	effective volume	7640	mm ³
l_e	effective length	78.6	mm
A_e	effective area	97.1	mm ²
A_{min}	minimum area	91.6	mm ²
m	mass of core half	≈20	g



Core halves

Clamping force 40 ± 20 N. Gapped cores are available on request.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3C30 <small>des</small>	$2200 \pm 25\%$	≈1500	≈0	ETD34-3C30
3C85	$2700 \pm 25\%$	≈1870	≈0	ETD34-3C85
3C90 <small>des</small>	$2700 \pm 25\%$	≈1870	≈0	ETD34-3C90
3F3 <small>des</small>	$2500 \pm 25\%$	≈1750	≈0	ETD34-3F3

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; $\hat{B} = 200$ mT; T = 100 °C	f = 100 kHz; $\hat{B} = 100$ mT; T = 100 °C	f = 400 kHz; $\hat{B} = 50$ mT; T = 100 °C
3C30	≥360	≤0.80	≤0.90	–
3C85	≥320	≤1.10	≤1.30	–
3C90	≥330	≤0.80	≤0.90	–
3F3	≥320	–	≤0.90	≤1.6

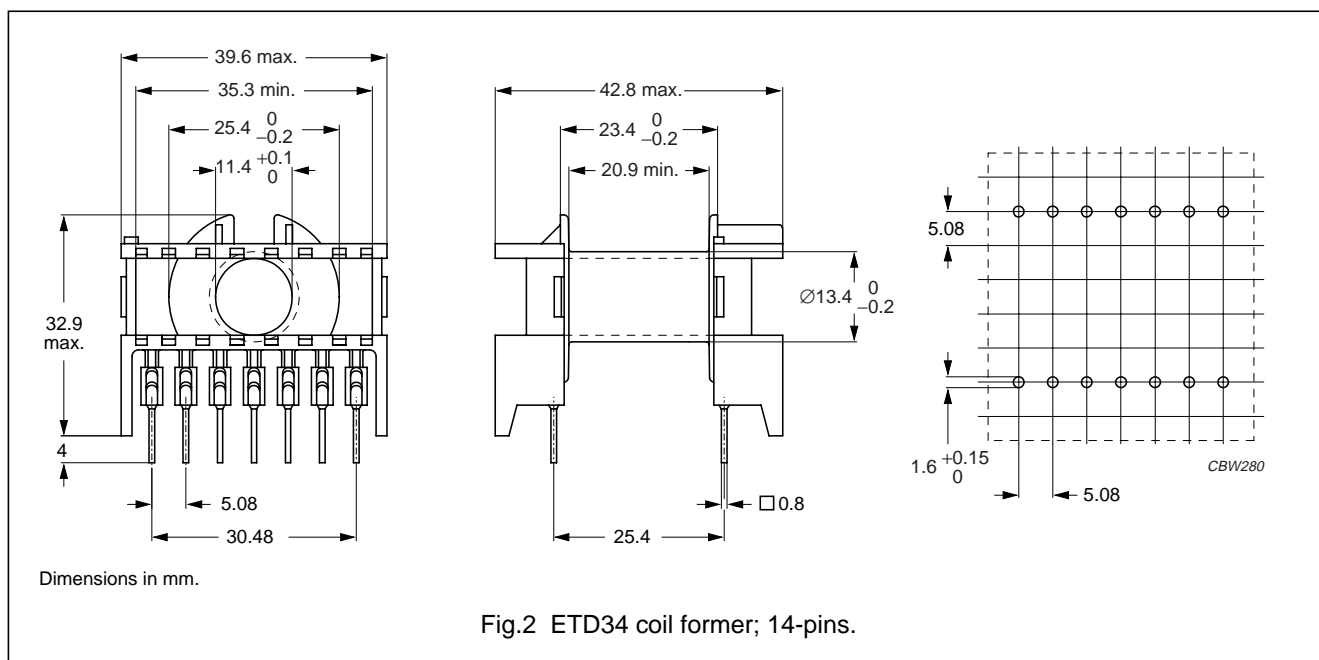
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COIL FORMERS

General data 14-pins ETD34 coil former

PARAMETER	SPECIFICATION
Coil former material	polybutyleneterephthalate (PBT), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E45329(R)
Pin material	copper-tin alloy (CuSn), tin-lead alloy (SnPb) plated
Maximum operating temperature	155 °C, "IEC 85" class F
Resistance to soldering heat	"IEC 68-2-20", Part 2, Test Tb, method 1B, 350 °C, 3.5 s
Solderability	"IEC 68-2-20", Part 2, Test Ta, method 1



Winding data for 14-pins ETD34 coil former

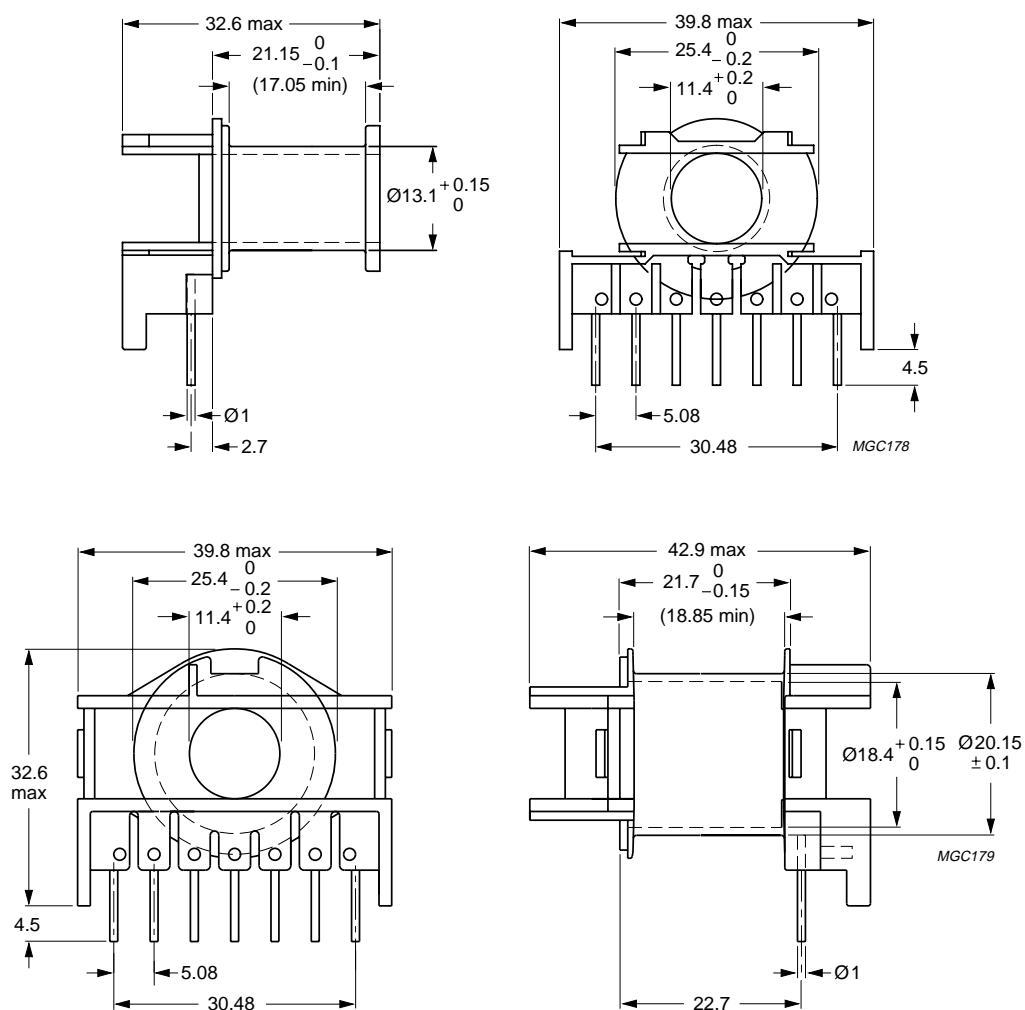
NUMBER OF SECTIONS	WINDING AREA (mm ²)	MINIMUM WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	123	20.9	60	CPH-ETD34-1S-14P

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General data 7-pins coaxial ETD34 coil former

PARAMETER	SPECIFICATION
Coil former material	phenolformaldehyde (PF), glass-reinforced, flame retardant in accordance with "UL 94V-0", UL file number E63312(M)
Pin material	copper-tin alloy (CuSn), tin-lead alloy (SnPb) plated
Maximum operating temperature	180 °C, "IEC 85" class H
Resistance to soldering heat	"IEC 68-2-20", Part 2, Test Tb, method 1B, 350 °C, 3.5 s
Solderability	"IEC 68-2-20", Part 2, Test Ta, method 1



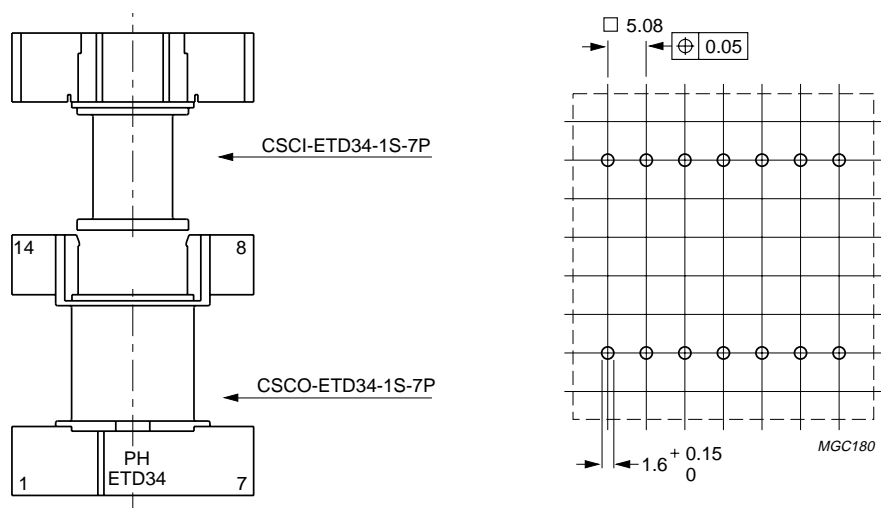
Dimensions in mm.

For mounting grid and method of fitting, see Fig.4.

Fig.3 Coaxial ETD34 coil former; 7-pins.

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Dimensions in mm.

This coil former incorporates 8 mm creepage distance between primary and secondary windings, as well as between primary and all other conductive parts (in accordance with IEC 380 safety regulations).

Fig.4 Mounting grid and method of fitting.

Winding data for coaxial ETD34 coil former

NUMBER OF SECTIONS	WINDING AREA (mm ²)	MINIMUM WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	44.5	17	49.5	CSCI-ETD34-1S-7P
1	49	18.9	71	CSCO-ETD34-1S-7P

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MOUNTING PARTS

General data

ITEM	REMARKS	FIGURE	TYPE NUMBER
Mounting clip	material: stainless steel	5	CLI-ETD34

