

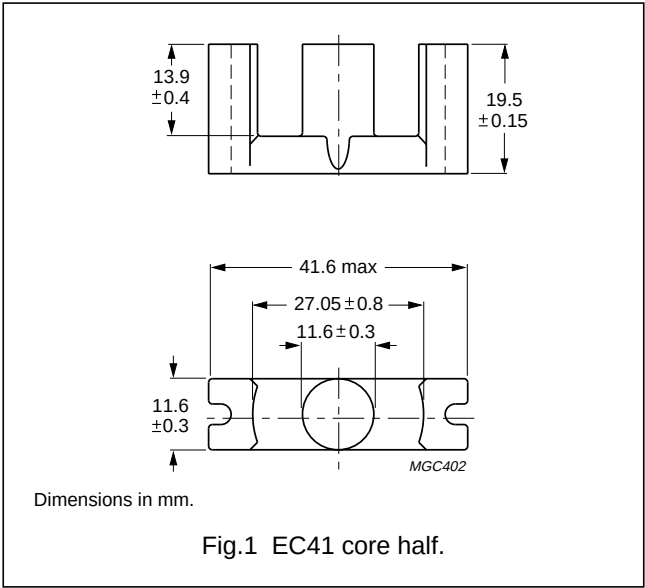
EC cores and accessories

EC41

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	0.735	mm^{-1}
V_e	effective volume	10800	mm^3
l_e	effective length	89.3	mm
A_e	effective area	121	mm^2
$A_{\min}$	minimum area	106	mm^2
m	mass of core half	≈ 30	g



Core halves

A_L measured in combination with an non-gapped core half, unless stated otherwise.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3C81 ^{sup}	$100 \pm 3\%^{(1)}$	≈ 59	≈ 2200	EC41-3C81-E100
	$160 \pm 3\%^{(1)}$	≈ 94	≈ 1220	EC41-3C81-E160
	$250 \pm 3\%^{(1)}$	≈ 147	≈ 705	EC41-3C81-E250
	$315 \pm 5\%$	≈ 186	≈ 530	EC41-3C81-A315
	$400 \pm 5\%$	≈ 236	≈ 390	EC41-3C81-A400
	≥ 2800	≥ 1640	≈ 0	EC41-3C81
3C85 ^{sup}	$100 \pm 3\%^{(1)}$	≈ 59	≈ 2200	EC41-3C81-E100
	$160 \pm 3\%^{(1)}$	≈ 94	≈ 1220	EC41-3C81-E160
	$250 \pm 3\%^{(1)}$	≈ 147	≈ 705	EC41-3C81-E250
	$315 \pm 5\%$	≈ 186	≈ 530	EC41-3C81-A315
	$400 \pm 5\%$	≈ 186	≈ 390	EC41-3C81-A400
	$2700 \pm 25\%$	≈ 1580	≈ 0	EC41-3C85

- Note
1. Measured in combination with an equal gapped core half (symmetrical air gap).

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
3C81	≥ 320	≤ 2.2	—
3C85	≥ 320	≤ 1.7	≤ 2.0

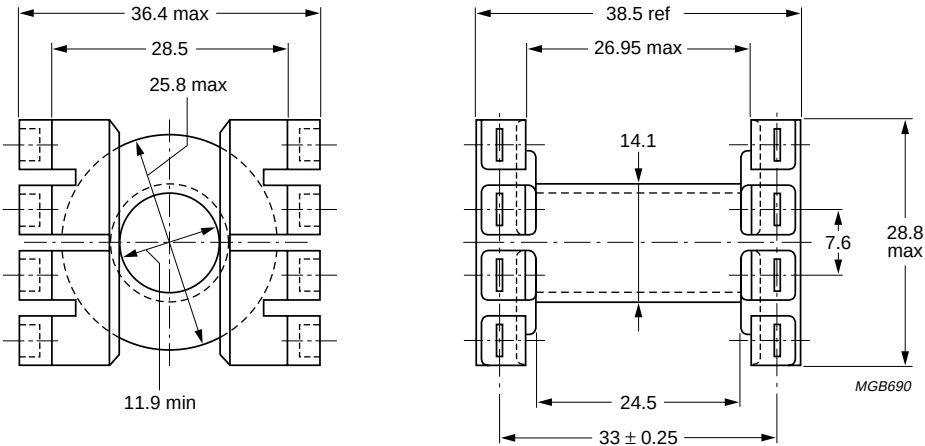
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COIL FORMERS

General data 8-slots EC41 coil former for insertable pins

PARAMETER	SPECIFICATION
Coil former material	polyamide (PA6.6), glass-reinforced, flame retardant in accordance with “UL 94V-0”; UL file number E44716(M)
Maximum operating temperature	105 °C



Dimensions in mm.

Fig.2 EC41 coil former; 8-slots.

Winding data 8-slots EC41 coil former for insertable pins

Coil formers with inserted pins are available on request.

NUMBER OF SECTIONS	MINIMUM WINDING AREA (mm ²)	NOMINAL WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	137.5	24.5	62.4	CP-EC41-1S

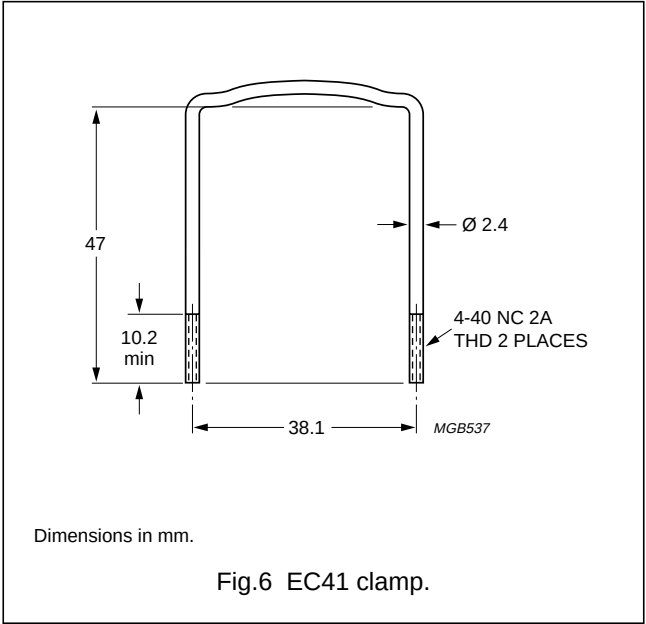
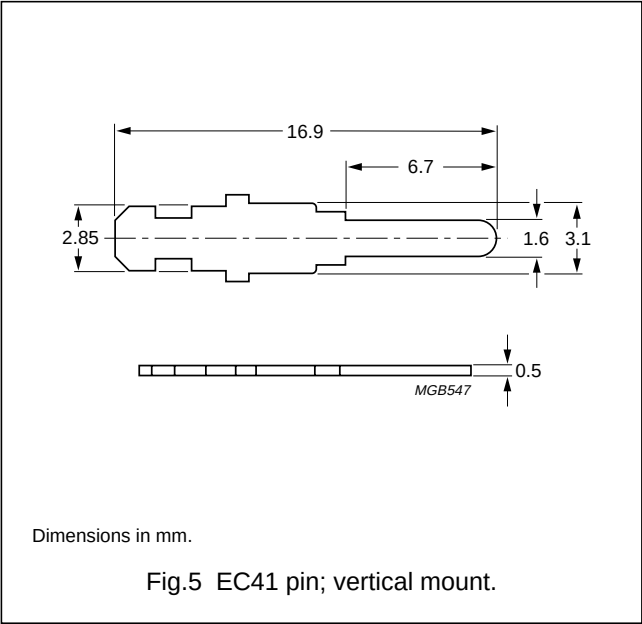
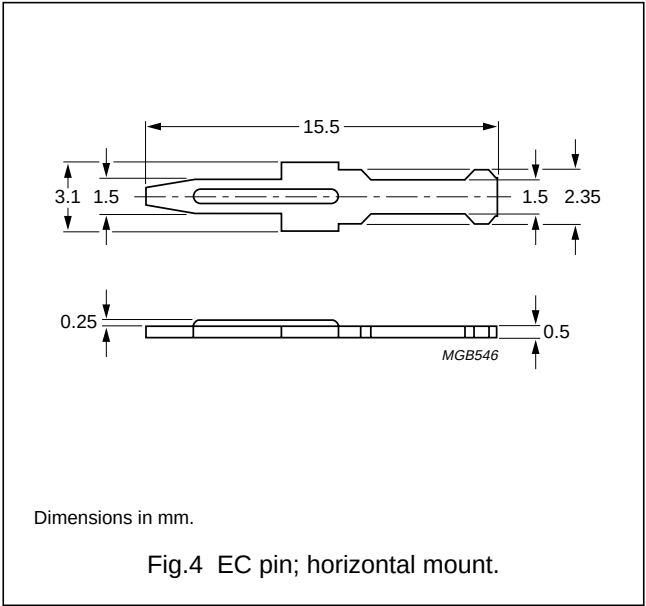
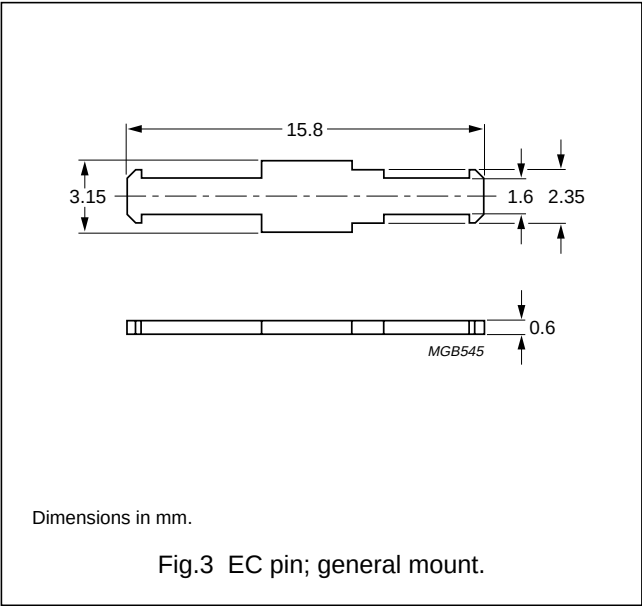
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MOUNTING PARTS

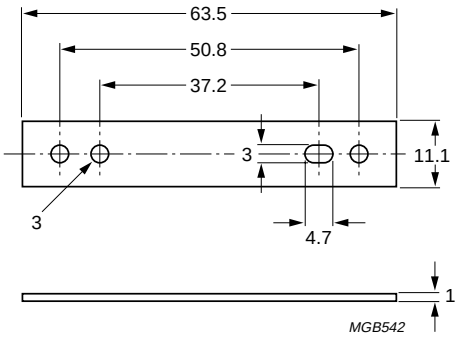
General data and ordering information

ITEM	REMARKS	MOUNT	FIGURE	TYPE NUMBER
Insertable pins	solderability: "IEC 68-2-20", Part 2, Test Ta, method 1 material: copper-zinc alloy (CuZn), tin-lead alloy (SnPb) plated	general	3	PIN-EC
		horizontal	4	PIN/H-EC
		vertical	5	PIN/V-EC41
Clamp	copper-zinc alloy (CuZn)		6	CLM/U-EC41
Base plate 4-holes	aluminium (Al)		7	BPL4-EC41



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Dimensions in mm.

Fig.7 EC41 base plate; 4-holes.