

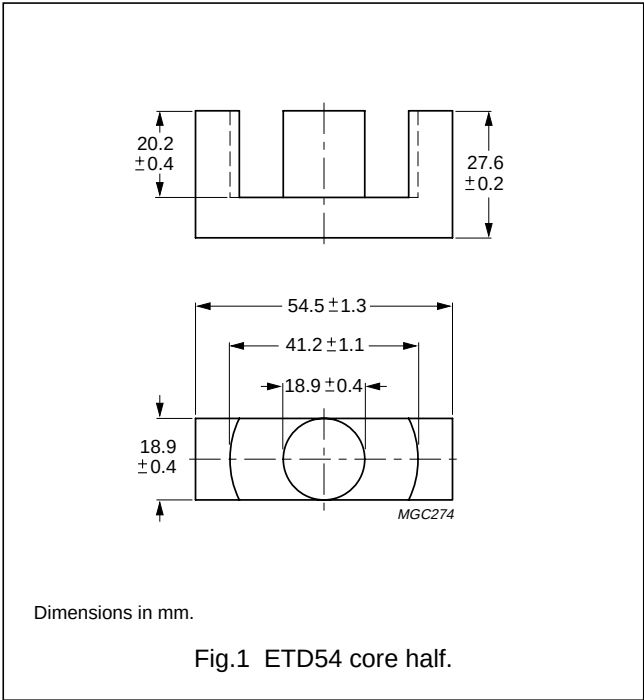
ETD cores and accessories

ETD54

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.454	mm^{-1}
V_e	effective volume	35500	mm^3
l_e	effective length	127	mm
A_e	effective area	280	mm^2
$A_{\min}$	minimum area	270	mm^2
m	mass of core half	≈ 90	g



Core halves

Clamping force 50 ±20 N. Gapped cores are available on request.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3C30 des	4100 ±25%	≈ 1580	≈ 0	ETD54-3C30
3C85	5000 ±25%	≈ 1950	≈ 0	ETD54-3C85
3C90 des	5000 ±25%	≈ 1950	≈ 0	ETD54-3C90
3F3 des	4600 ±25%	≈ 1800	≈ 0	ETD54-3F3

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	≤ 4.0	≤ 4.8	—
3C85	≥ 320	≤ 5.0	≤ 6.2	—
3C90	≥ 330	≤ 4.0	≤ 4.8	—
3F3	≥ 320	—	≤ 4.5	≤ 8.5

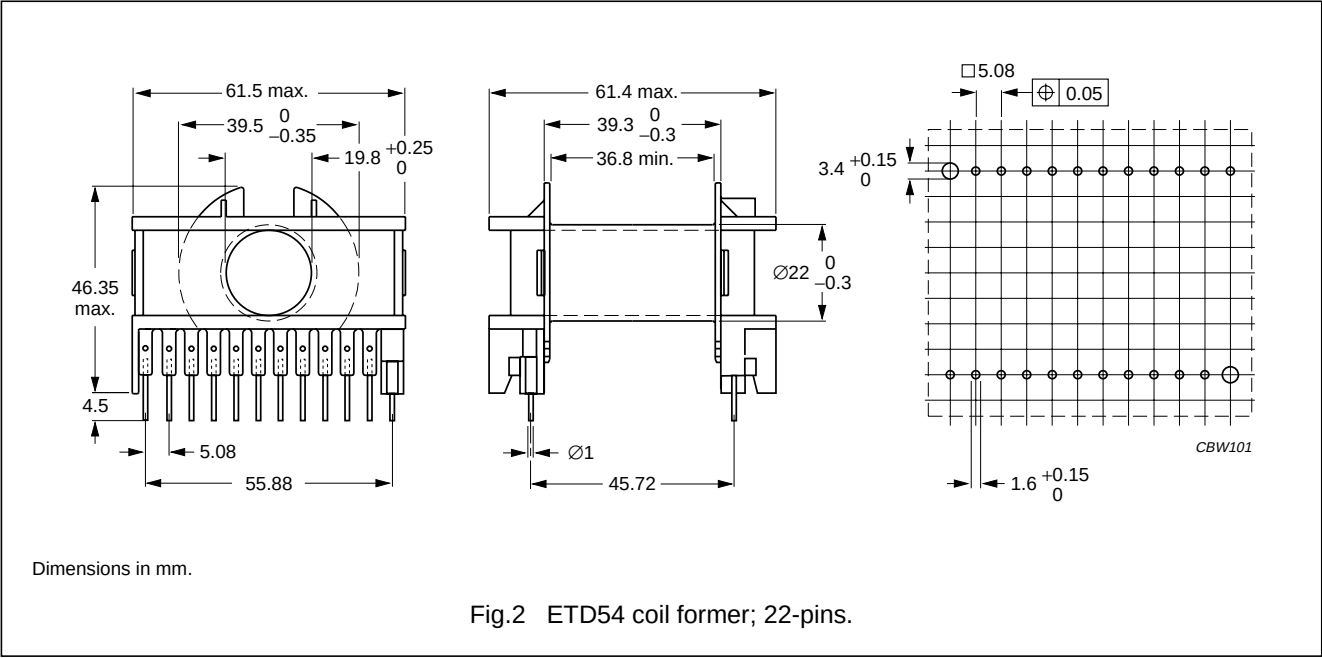
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COIL FORMERS

General data 22-pins ETD54 coil former

PARAMETER	SPECIFICATION
Coil former material	polybutyleneterephthalate (PBT), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E41613(M)
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 22-pins ETD54 coil former

NUMBER OF SECTIONS	WINDING AREA (mm ²)	MINIMUM WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	TYPE NUMBER
1	316	36.8	96	CPH-ETD54-1S-22P

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MOUNTING PARTS

General data

ITEM	REMARKS	FIGURE	TYPE NUMBER
Mounting clip	material: stainless steel	3	CLI-ETD54

