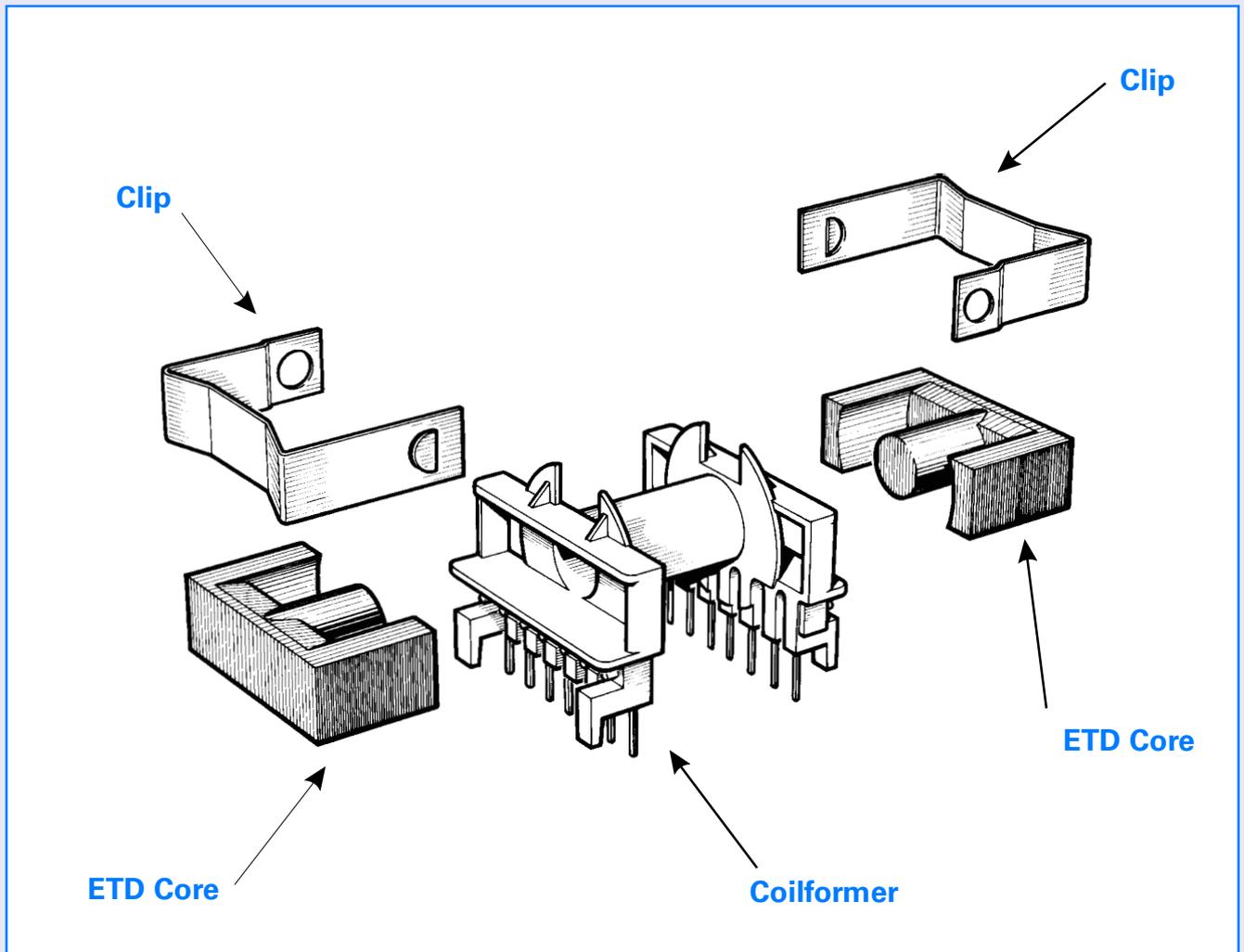


ETD Series Components



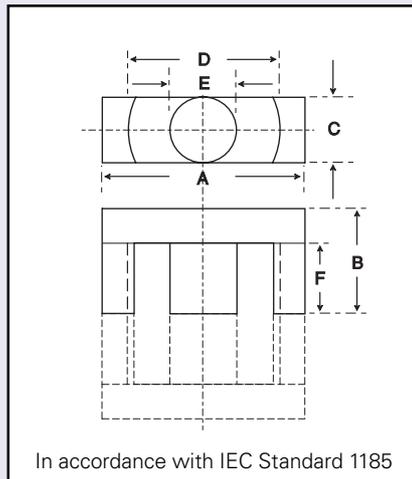
ETD Cores

ETD (**E**conomical **T**ransformer **D**esign) cores were developed specifically for Power Transformer cores used in Switched Mode power supplies. The combined cross-sectional area of the two outer limbs equals the cross-sectional area of the centre limb allowing an even flux distribution throughout the core. This ensures the absence of localised 'hot spots' that can reduce performance at high frequencies or high flux levels. Their round centre limb provides for minimal winding resistance, leakage inductance and copper eddy current losses.

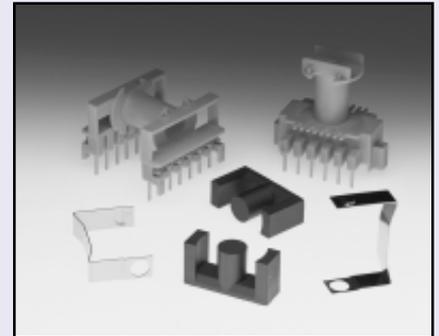
ETD Cores are available in a range of sizes and materials together with their associated coilformers (both Horizontal and Vertical mounting) and clips.

Core Dimensions (mm)

A	29.00 - 30.60	F	10.70 - 11.30
B	15.60 - 16.00		
C	9.20 - 9.80		
D	22.00 - 23.40		
E	9.20 - 9.80		



ETD 29 32-580-



Core Parameters

In accordance with IEC Document 60205.

Parameter	Σ/A	Effective Length	Effective Area	Minimum Area	Effective Volume
Symbol	C_1	l_e	A_e	A_{min}	V_e
Value	0.93mm ⁻¹	70.40mm	76.00mm ²	70.00mm ²	5376.00mm ³

Electrical Specification

Material	A_L Value	Tolerance	Gap Length	Eff. Permeability	Part Number
F47	1800	+30/-20%	-	1332	32-580-47
F44	1950	+30/-20%	-	1443	32-580-44
F45	2000	+30/-20%	-	1480	32-580-45
F5A	2350	+30/-20%	-	1739	32-580-49
F44	800 Approx.	-	0.1 ± 0.03 mm	590	32-586-44
F44	460 Approx.	-	0.2 ± 0.03 mm	340	32-587-44
F44	220 Approx.	-	0.5 ± 0.03 mm	160	32-588-44
F44	125 Approx.	-	1.0 ± 0.05 mm	92	32-589-44

Part numbers refer to half cores. Other material grades and gap lengths may be available on request.

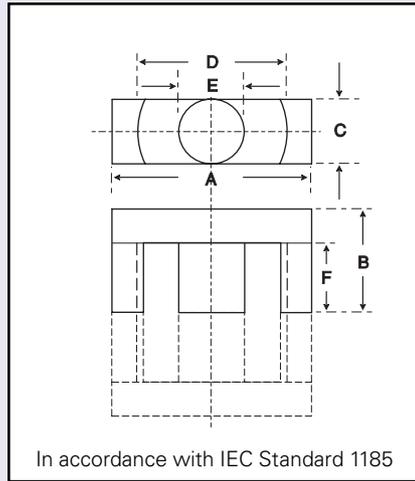
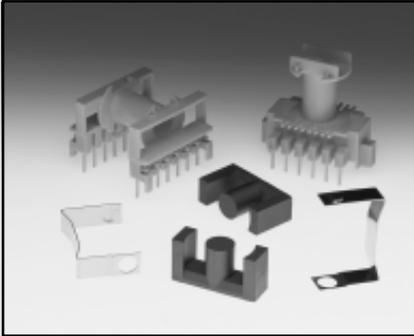
Bobbins/Coil Formers

Mounting	No. of Sections	Pins	Part Number
Horizontal	1	14	59-580-76
Vertical	1	12	59-585-76

Clips

Part Number
76-055-95
76-055-95

ETD 34 32-500-



Core Dimensions (mm)

A	33.40 - 35.00	F	11.80 min
B	17.10 - 17.50		
C	10.50 - 11.10		
D	25.60 - 27.00		
E	10.50 - 11.10		

Core Parameters

In accordance with IEC Document 60205.

Parameter	Σ/A	Effective Length	Effective Area	Minimum Area	Effective Volume
Symbol	C_1	l_e	A_e	A_{min}	V_e
Value	0.81mm ⁻¹	78.60mm	97.10mm ²	91.60mm ²	7640.00mm ³

Electrical Specification

Material	A_L Value	Tolerance	Gap Length	Eff. Permeability	Part Number
F44	2250	+30/-20%	-	1450	32-500-44
F45	2400	+30/-20%	-	1546	32-500-45
F5A	2840	+30/-20%	-	1830	32-500-49
F44	1000 Approx.	-	0.1 ± 0.03 mm	645	32-506-44
F44	580 Approx.	-	0.2 ± 0.03 mm	375	32-507-44
F44	275 Approx.	-	0.5 ± 0.03 mm	175	32-508-44
F44	160 Approx.	-	1.0 ± 0.05 mm	100	32-509-44

Part numbers refer to half cores. Other material grades and gap lengths may be available on request.

Bobbins/Coil Formers

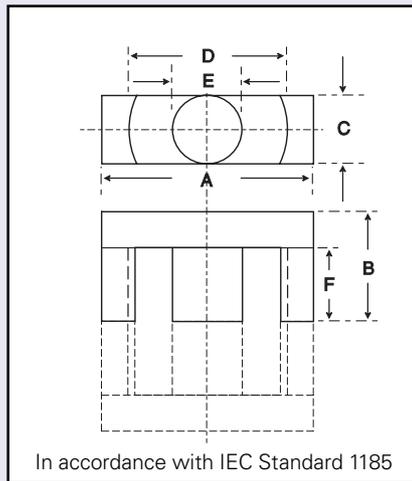
Mounting	No. of Sections	Pins	Part Number
Horizontal	1	14	59-500-76
Vertical	1	14	59-505-76

Clips

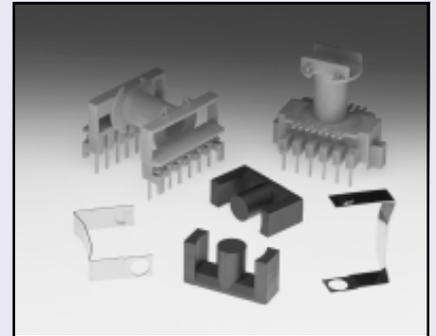
Part Number
76-050-95
76-050-95

Core Dimensions (mm)

A	38.20 - 40.00	F	14.20 min
B	19.60 - 20.00		
C	12.20 - 12.80		
D	29.30 - 30.90		
E	12.20 - 12.80		



ETD 39 32-520-



Core Parameters

In accordance with IEC Document 60205.

Parameter	Σ/A	Effective Length	Effective Area	Minimum Area	Effective Volume
Symbol	C_1	l_e	A_e	A_{min}	V_e
Value	0.74mm ⁻¹	92.20mm	125.00mm ²	123.00mm ²	11500.00mm ³

Electrical Specification

Material	A_L Value	Tolerance	Gap Length	Eff. Permeability	Part Number
F44	2470	+30/-20%	-	1455	32-520-44
F5A	3210	+30/-20%	-	1890	32-520-49
F44	1250 Approx.	-	0.1 ± 0.03 mm	735	32-526-44
F44	720 Approx.	-	0.2 ± 0.03 mm	425	32-527-44
F44	350 Approx.	-	0.5 ± 0.03 mm	205	32-528-44
F44	200 Approx.	-	1.0 ± 0.05 mm	120	32-529-44

Part numbers refer to half cores. Other material grades and gap lengths may be available on request.

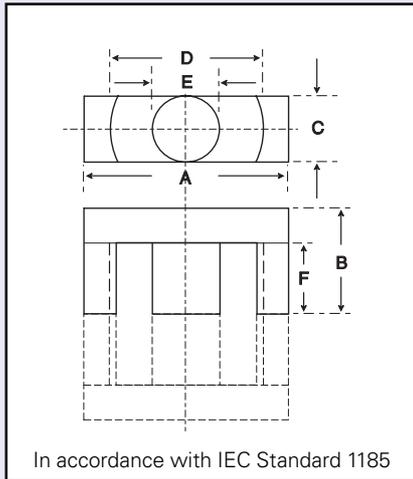
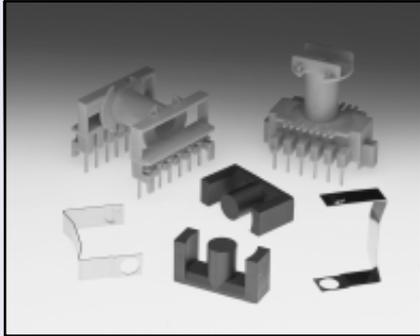
Bobbins/Coil Formers

Mounting	No. of Sections	Pins	Part Number
Horizontal	1	16	59-520-76
Vertical	1	16	59-525-76

Clips

Part Number
76-051-95
76-051-95

ETD 44 32-540-



Core Dimensions (mm)

A	43.00 - 45.00	F	16.10 min
B	22.10 - 22.50		
C	14.40 - 15.20		
D	32.50 - 34.10		
E	14.40 - 15.20		

Core Parameters

In accordance with IEC Document 60205.

Parameter	Σ/A	Effective Length	Effective Area	Minimum Area	Effective Volume
Symbol	C_1	l_e	A_e	A_{min}	V_e
Value	0.60mm ⁻¹	103.00mm	173.00mm ²	172.00mm ²	17800.00mm ³

Electrical Specification

Material	A_L Value	Tolerance	Gap Length	Eff. Permeability	Part Number
F44	3100	+30/-20%	-	1480	32-540-44
F5A	3920	+30/-20%	-	1870	32-540-49
F44	1670 Approx.	-	0.1 ± 0.03 mm	800	32-546-44
F44	970 Approx.	-	0.2 ± 0.03 mm	460	32-547-44
F44	470 Approx.	-	0.5 ± 0.03 mm	225	32-548-44
F44	270 Approx.	-	1.0 ± 0.05 mm	130	32-549-44

Part numbers refer to half cores. Other material grades and gap lengths may be available on request.

Bobbins/Coil Formers

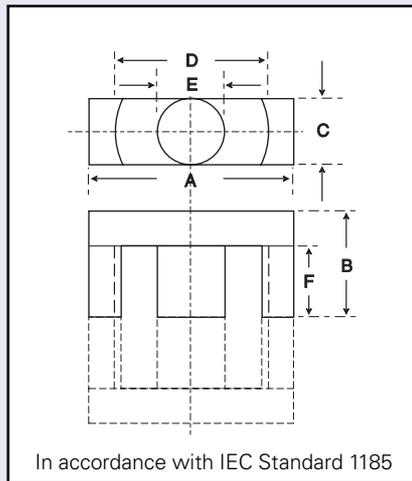
Mounting	No. of Sections	Pins	Part Number
Horizontal	1	18	59-540-76
Vertical	1	18	59-545-76

Clips

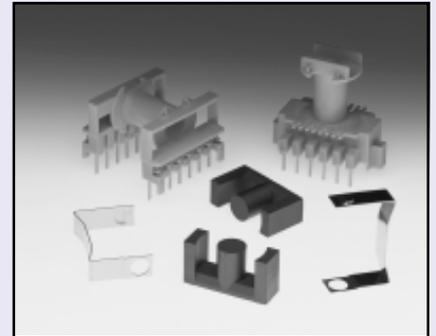
Part Number
76-052-95
76-052-95

Core Dimensions (mm)

A	47.60 - 49.80	F	17.70 min
B	24.50 - 24.90		
C	15.90 - 16.70		
D	36.10 - 37.90		
E	15.90 - 16.70		



ETD 49 32-560-



Core Parameters

In accordance with IEC Document 60205.

Parameter	Σ/A	Effective Length	Effective Area	Minimum Area	Effective Volume
Symbol	C_1	l_e	A_e	A_{min}	V_e
Value	0.54mm ⁻¹	114.00mm	211.00mm ²	209.00mm ²	24000.00mm ³

Electrical Specification

Material	A_L Value	Tolerance	Gap Length	Eff. Permeability	Part Number
F44	3525	+30/-20%	-	1515	32-560-44
F5A	4400	+30/-20%	-	1890	32-560-49
F44	2000 Approx.	-	0.1 ± 0.03 mm	860	32-566-44
F44	1165 Approx.	-	0.2 ± 0.03 mm	500	32-567-44
F44	570 Approx.	-	0.5 ± 0.03 mm	245	32-568-44
F44	335 Approx.	-	1.0 ± 0.05 mm	145	32-569-44

Part numbers refer to half cores. Other material grades and gap lengths may be available on request.

Bobbins/Coil Formers

Mounting	No. of Sections	Pins	Part Number
Horizontal	1	20	59-560-76
Vertical	1	20	59-565-76

Clips

Part Number
76-053-95
76-053-95