



PM/P/P Cores Halves/EP/TT/PR Cores

Series/Type: **EP 13**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B65843A0000Y042	B65843A0000Y066	2002-08-02	2002-12-31	2003-03-31

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

- In accordance with IEC 61596
- For transformers featuring high inductance and low overall height
- For power applications
- EP cores are supplied in sets

Magnetic characteristics (per set)

$$\Sigma l/A = 1,24 \text{ mm}^{-1}$$

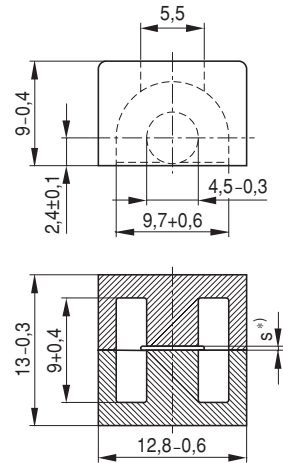
$$l_e = 24,2 \text{ mm}$$

$$A_e = 19,5 \text{ mm}^2$$

$$A_{\min} = 14,9 \text{ mm}^2$$

$$V_e = 472 \text{ mm}^3$$

Approx. weight 4,5 g/set



^{a)} gapped (one-sided)

FEP0017-A

Gapped

Material	A _L value nH	s approx. mm	μ _e	Ordering code
T38	63 ± 3 %	0,38	62	B65843-A63-A38
	100 ± 3 %	0,24	99	B65843-A100-A38
	160 ± 4 %	0,15	158	B65843-A160-B38
	200 ± 4 %	0,12	198	B65843-A200-B38
	250 ± 5 %	0,09	247	B65843-A250-J38
	315 ± 6 %	0,07	311	B65843-A315-C38
	400 ± 7 %	0,06	395	B65843-A400-E38
T57 ¹⁾	63 ± 3 %	0,38	62	B65843-A63-A57
	100 ± 3 %	0,24	99	B65843-A100-A57
	160 ± 4 %	0,15	158	B65843-A160-B57
	200 ± 4 %	0,12	198	B65843-A200-B57
	250 ± 5 %	0,09	247	B65843-A250-J57
	315 ± 6 %	0,07	311	B65843-A315-C57
	400 ± 7 %	0,06	395	B65843-A400-E57
N87	63 ± 3 %	0,37	62	B65843-A63-A87
	100 ± 3 %	0,23	99	B65843-A100-A87
	160 ± 4 %	0,14	158	B65843-A160-B87
	200 ± 4 %	0,11	198	B65843-A200-B87
	250 ± 5 %	0,09	247	B65843-A250-J87
	315 ± 6 %	0,07	311	B65843-A315-C87
	400 ± 7 %	0,05	395	B65843-A400-E87

1) Preliminary data

Ungapped

Material	A_L value nH	μ_e	A_{L1min} nH	P_V W/set	Ordering code
N30	2800 + 30/- 20 %	2765			B65843-A-R30
T57 ¹⁾	2500 + 30/- 20 %	2470			B65843-A-R57
T65	4000 + 30/- 20 %	3950			B65843-A-R65
T38	7000 + 40/- 30 %	6910			B65843-A-Y38
T42	8500 + 40/- 30 %	8300			B65843-A-Y42
N87	1600 + 30/- 20 %	1580	900	< 0,18 (200 mT, 100 kHz, 100 °C)	B65843-A-R87

1) Preliminary data

Coil former, pins squared

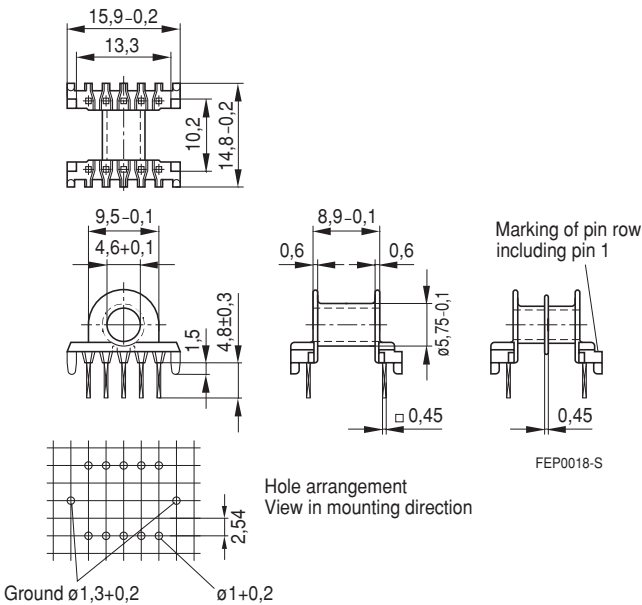
Material: GFR thermosetting plastic; UL 94 V-0, insulation class to IEC 60085:
 B65844-C: F $\triangleq$ max. operating temperature 155 °C; color code green
 B65844-W: H $\triangleq$ max. operating temperature 180 °C; color code black

Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 156

Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Terminals	Ordering code
1	14,3	23,8	57,1	10	B65844-W1010-D1
2	13,9	23,8	58,9	10	B65844-C1010-D2



Coil former with closed center flange for high-voltage applications

Material: GFR thermosetting plastic (UL 94 V-0, insulation class to IEC 60085:

H $\triangleq$ max. operating temperature 180 °C), color code black

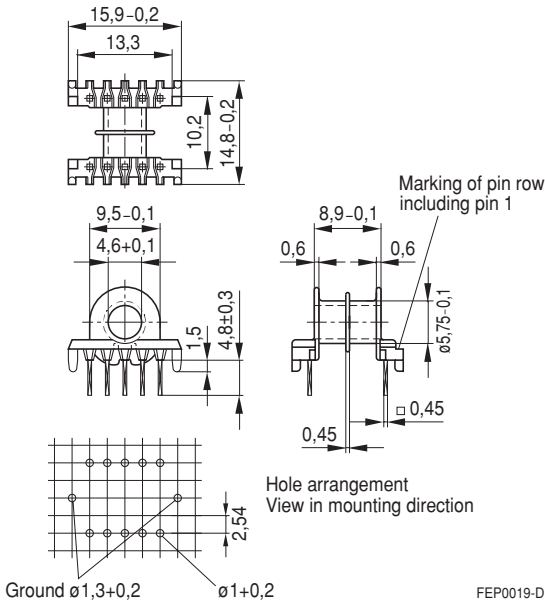
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 156

Squared pins

Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Terminals	Ordering code
2	13,9	23,8	58,9	10	B65844-X1010-D2



FEP0019-D

Mounting assembly

The set comprises a yoke and a clamp

Yoke

Made of nickel silver (0,4 mm) with ground terminal (tinned)

Clamp

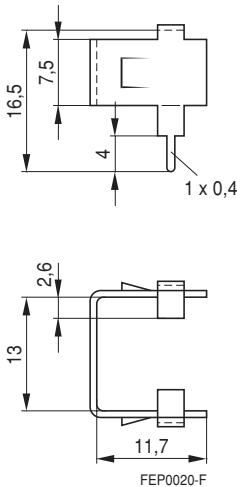
Spring clamp, made of nickel silver (0,4 mm)

Cap yoke

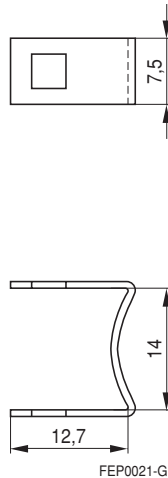
With ground terminal, made of stainless spring steel (tinned), 0,3 mm thick

	Ordering code
Complete mounting assembly	B65844-A2000
Cap yoke (only for 1-section coil former)	B65844-C2000

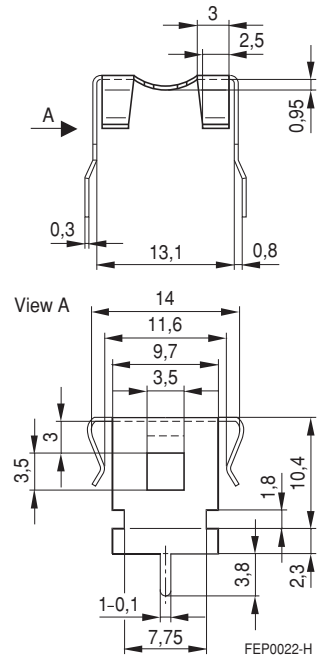
Yoke



Clamp



Cap yoke



SMD coil former with U terminals

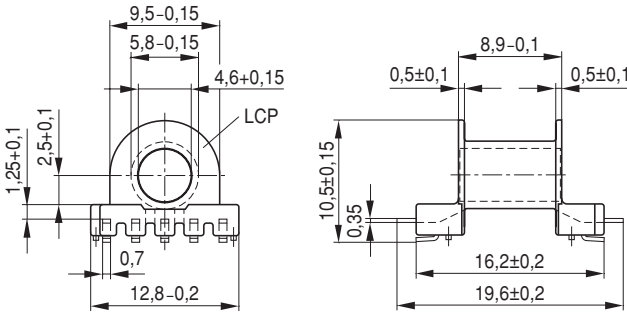
Material: GFR liquid crystal polymer (UL 94 V-0, insulation class to IEC 60085: F $\triangleq$ max. operating temperature 155 °C), color code black

Solderability: to IEC 60068-2-20, Test Ta, method 1 (aging 3): 235 °C, 2 s

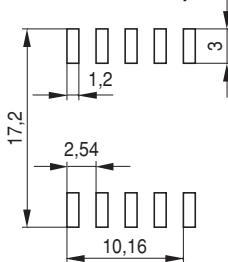
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s
permissible soldering temperature for wire-wrap connection on coil former: 400°C, 1 s

Winding: see "Processing Notes", page 160

Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Terminals	Ordering code
1	14,1	23,8	58,2	10	B65844-F1110-T1



Recommended PCB layout



FEP0024-K

Herausgegeben von EPCOS AG

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