



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The following products presented in this data sheet are being withdrawn.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

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- 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)**

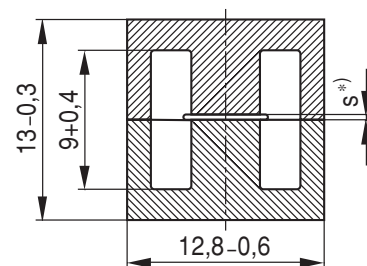
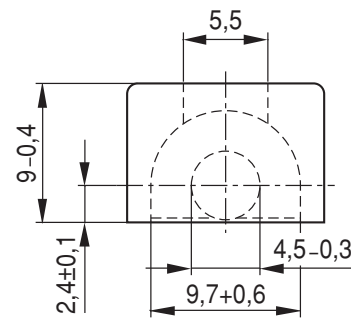
$$\Sigma/A = 1,24 \text{ mm}^{-1}$$

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

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

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

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

**Approx. weight** 4,5 g/set


\*) gapped (one-sided)

FEP0017-A

**Gapped**

Material	$A_L$ value nH	s approx. mm	$\mu_e$	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 <sup>1)</sup>	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	$\mu_e$	$A_{L1min}$ nH	$P_V$ W/set	Ordering code
N30	2800 + 30/- 20 %	2765			B65843-A-R30
T57 <sup>1)</sup>	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

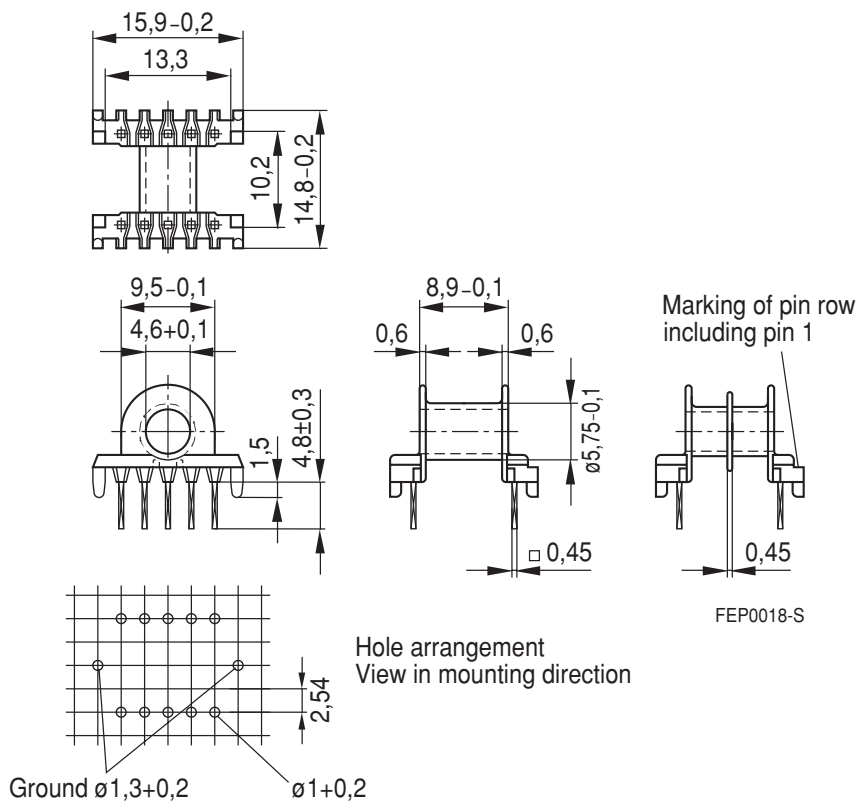
1) Preliminary data

**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 <sup>2</sup>	$l_N$ 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  $\hat{=}$  max. operating temperature 180 °C), color code black

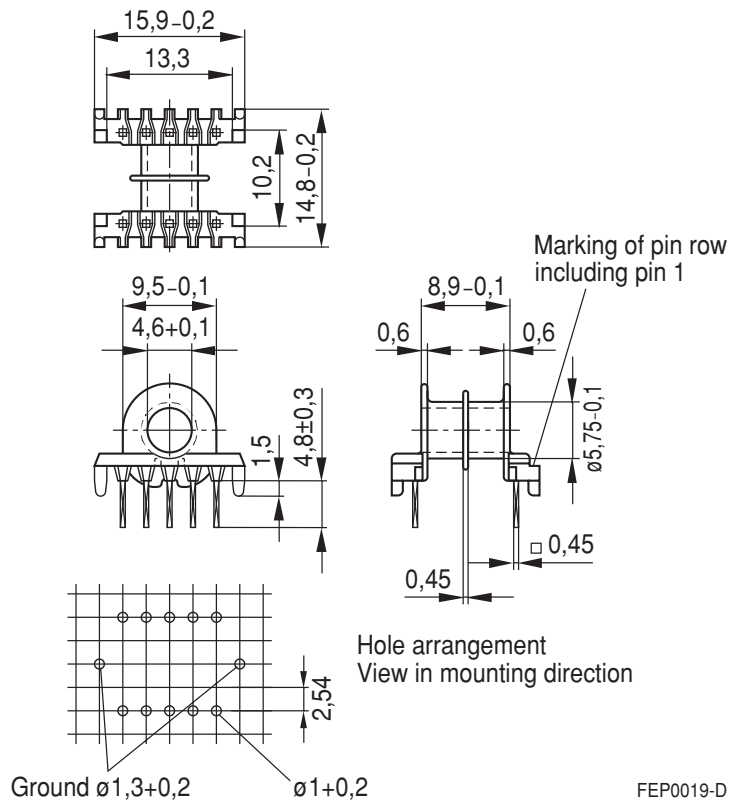
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

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 <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Terminals	Ordering code
2	13,9	23,8	58,9	10	B65844-X1010-D2



### Mounting assembly

The set comprises a yoke and a clamp

#### Yoke

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

#### Clamp

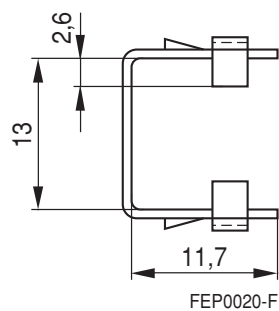
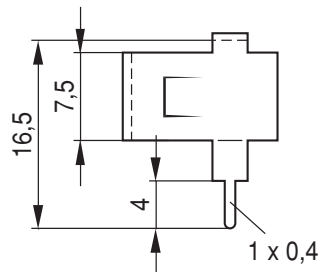
Spring clamp, made of nickel silver (0,4 mm)

#### Cap yoke

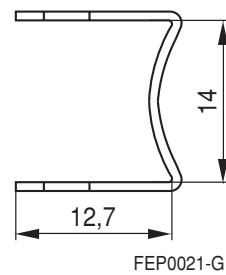
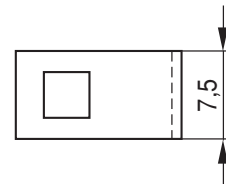
With ground terminal, made of stainless spring steel (tinned), 0,3 mm thick

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

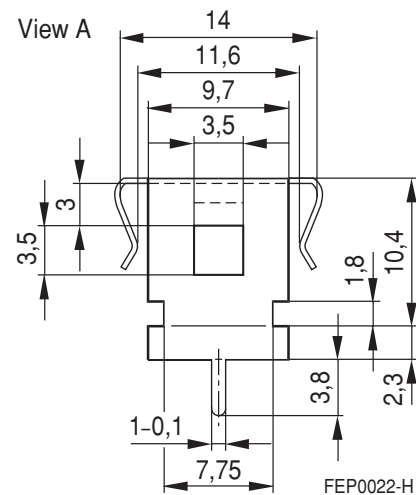
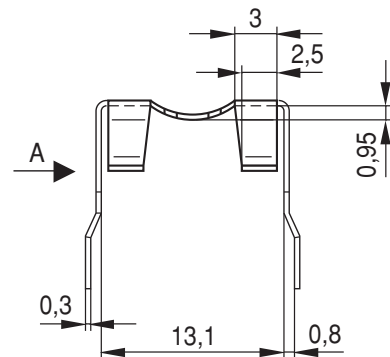
#### Yoke



#### Clamp



#### Cap yoke



**SMD**

**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

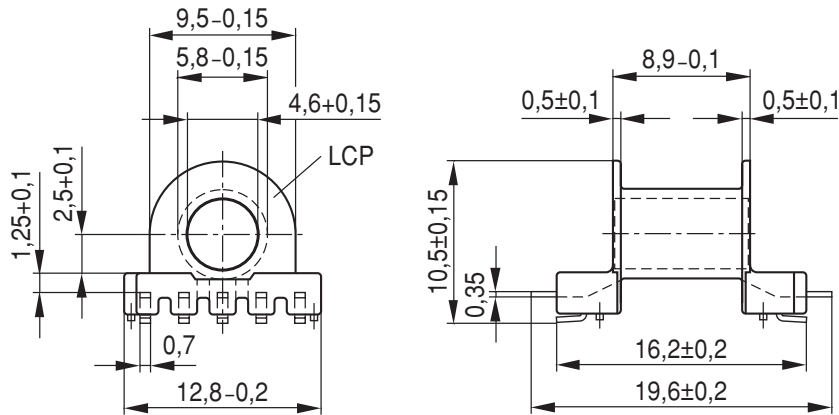
Solderability: to IEC 60068-2-20, Test Ta, method 1 (aging 3): 235 °C, 2 s

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

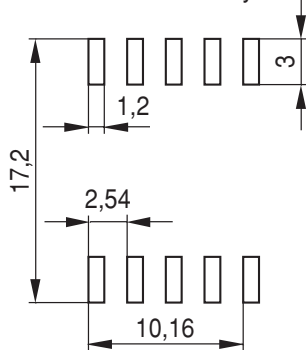
Winding: see "Processing Notes", page 160

Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Terminals	Ordering code
1	14,1	23,8	58,2	10	B65844-F11110-T1



FEP0024-K

Recommended PCB layout



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