

- In accordance with IEC 61246
- E cores with high permeability for common-mode chokes and broadband applications
- E cores are supplied as single units

Magnetic characteristics (per set)

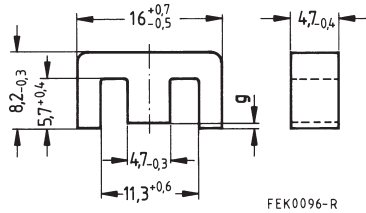
$$\Sigma/A = 1,87 \text{ mm}^{-1}$$

$$l_e = 37,6 \text{ mm}$$

$$A_e = 20,1 \text{ mm}^2$$

$$A_{\min} = 19,4 \text{ mm}^2$$

$$V_e = 756 \text{ mm}^3$$


Approx. weight 3,6 g/set
Ungapped

Material	A_L -Wert nH	μ_e	$A_{L1\min}$ nH	P_V W/set	Ordering code
N30	1400 + 30/- 20 %	2080			B66307-G-X130
N27	950 + 30/- 20 %	1410	670	< 0,14 (200 mT, 25 kHz, 100 °C)	B66307-G-X127
N87	1000 + 30/- 20 %	1490	670	< 0,36 (200 mT, 100 kHz, 100 °C)	B66307-G-X187
T42	5100 ± 30 %	7570			B66307-F-X142

Gapped

Material	g mm	A_L value approx. nH	μ_e	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,06 ± 0,01	303	450	B66307-G60-X1**
N87	0,10 ± 0,02	212	315	B66307-G100-X1**
	0,50 ± 0,05	69	102	B66307-G500-X1**

The A_L value in the table applies to a core set comprising one ungapped core (dimension $g = 0$) and one gapped core (dimension $g > 0$).

Calculation factors (for formulas, see “*E cores: general information*”, page 382)

Material	Relationship between air gap – A_L value		Calculation of saturation current			
	$K1$ (25 °C)	$K2$ (25 °C)	$K3$ (25 °C)	$K4$ (25 °C)	$K3$ (100 °C)	$K4$ (100 °C)
N27	42,2	– 0,701	57,0	– 0,847	52,1	– 0,865
N87	42,2	– 0,701	57,8	– 0,796	50,4	– 0,873

Validity range: $K1, K2$: 0,05 mm < s < 1,50 mm
 $K3, K4$: 30 nH < A_L < 330 nH

Coil former (magnetic axis horizontal or vertical)

Material: GFR polyterephthalate (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

Winding: see "Processing Notes", page 159

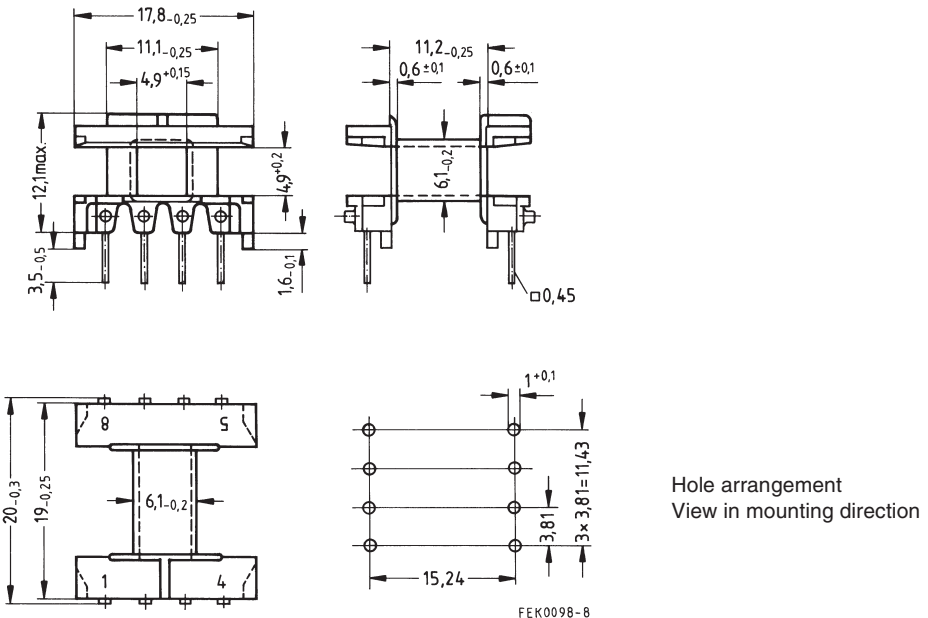
Squared pins

Yoke

Material: Stainless spring steel (0,2 mm)

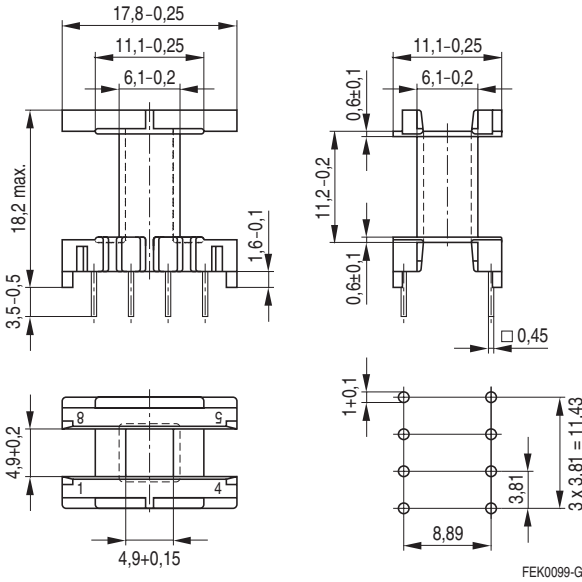
Coil former						Ordering code
Figure	Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	
1	1	22,3	34	52,4	8	B66308-A1108-T1
2	1	22,3	34	52,4	8	B66308-J1108-T1
Yoke (ordering code per piece, 2 are required)						B66308-A2010

Figure 1, horizontal version



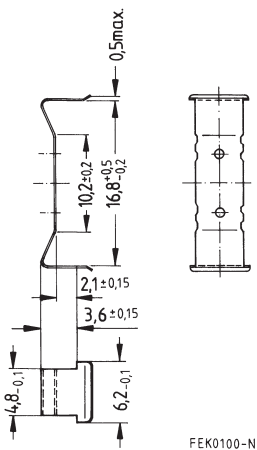
Hole arrangement
View in mounting direction

Figure 2, vertical version



Hole arrangement
View in mounting direction

Yoke



Herausgegeben von EPCOS AG

Marketing Kommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND

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