

ETD 49/25/16

Core

B66367

- In accordance with IEC 61185
- Quality assurance per UTE 83313-004/CECC 25 301-004 (material N27)
- For SMPS transformers with optimum weight/performance ratio at small volume
- ETD cores are supplied as single units

Magnetic characteristics (per set)

$$\Sigma l/A = 0,54 \text{ mm}^{-1}$$

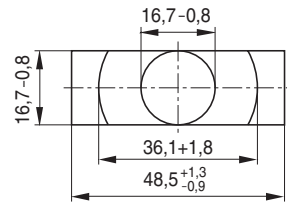
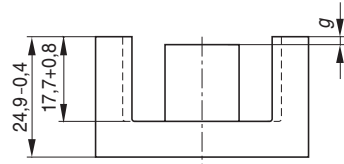
$$l_e = 114 \text{ mm}$$

$$A_e = 211 \text{ mm}^2$$

$$A_{\min} = 209 \text{ mm}^2$$

$$V_e = 24\,100 \text{ mm}^3$$

Approx. weight 124 g/set



FEK0061-Y

Ungapped

Material	A_L value nH	μ_e	$A_{L1\min}$ nH	P_V W/set	Ordering code
N27	3700 + 30/- 20 %	1590	2910	< 4,59 (200 mT, 25 kHz, 100 °C)	B66367-G-X127
N87	3800 + 30/- 20 %	1630	2910	< 12,40 (200 mT, 100 kHz, 100 °C)	B66367-G-X187
N97 ¹⁾	3900 + 30/- 20 %	1680	2910	< 10,60 (200 mT, 100 kHz, 100 °C)	B66367-G-X197

Gapped

Material	g mm	A_L value approx. nH	μ_e	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,20 ± 0,02	1035	444	B66367-G200-X1**
N87	0,50 ± 0,05	525	225	B66367-G500-X1**
	1,00 ± 0,05	314	135	B66367-G1000-X1**
	2,00 ± 0,05	188	81	B66367-G2000-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 $g > 0$).

1) Preliminary data

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	314	– 0,741	504	– 0,847	470	– 0,865
N87	314	– 0,741	485	– 0,796	460	– 0,873

Validity range: $K1, K2$: 0,10 mm < s < 3,50 mm
 $K3, K4$: 120 nH < A_L < 1160 nH

Coil former

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

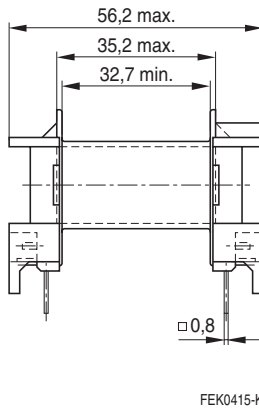
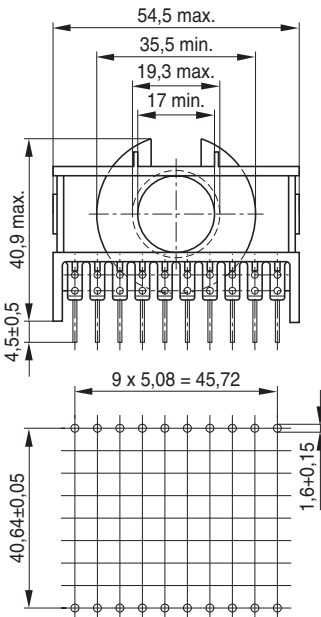
Winding: see "Processing Notes", page 158

Yoke

Material: Stainless spring steel (0,4 mm)

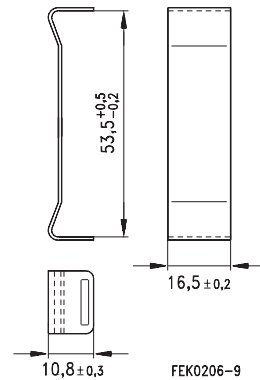
Coil former					Ordering code
Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	
1	269,4	86	11	20	B66368-B1020-T1
Yoke (ordering code per piece, 2 are required)					B66368-A2000

Coil former



FEK0415-K

Yoke



FEK0206-9

Hole arrangement
View in mounting direction

Herausgegeben von EPCOS AG

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Published by EPCOS AG

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