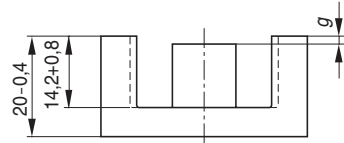


- In accordance with IEC 61185
- Quality assurance per UTE 83313-002/CECC 25 301-002 (material N27)
- For SMPS transformers with optimum weight/performance ratio at small volume
- ETD cores are supplied as single units


**Magnetic characteristics** (per set)

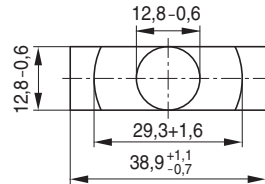
$$\Sigma/A = 0,74 \text{ mm}^{-1}$$

$$l_e = 92,2 \text{ mm}$$

$$A_e = 125 \text{ mm}^2$$

$$A_{\min} = 123 \text{ mm}^2$$

$$V_e = 11\,500 \text{ mm}^3$$



FEK0053-8

**Approx. weight** 60 g/set

**Ungapped**

Material	$A_L$ value nH	$\mu_e$	$A_{L1\min}$ nH	$P_V$ W/set	Ordering code
N27	2550 + 30/- 20 %	1500	2140	< 2,22 (200 mT, 25 kHz, 100 °C)	B66363-G-X127
N87	2700 + 30/- 20 %	1600	2140	< 6,00 (200 mT, 100 kHz, 100 °C)	B66363-G-X187
N97 <sup>1)</sup>	2800 + 30/- 20 %	1650	2140	< 5,10 (200 mT, 100 kHz, 100 °C)	B66363-G-X197

**Gapped**

Material	$g$ mm	$A_L$ value approx. nH	$\mu_e$	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,10 ± 0,02	1062	622	B66363-G100-X1**
N87	0,20 ± 0,02	639	374	B66363-G200-X1**
	0,50 ± 0,05	326	191	B66363-G500-X1**
	1,00 ± 0,05	196	115	B66363-G1000-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	196	– 0,734	308	– 0,847	287	– 0,865
N87	196	– 0,734	300	– 0,796	280	– 0,873

Validity range:  $K1, K2$ : 0,10 mm <  $s$  < 3,00 mm  
 $K3, K4$ : 90 nH <  $A_L$  < 850 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

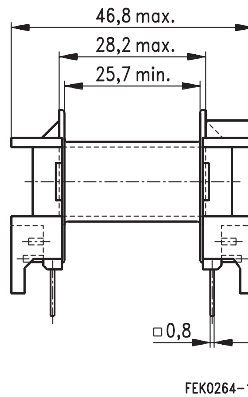
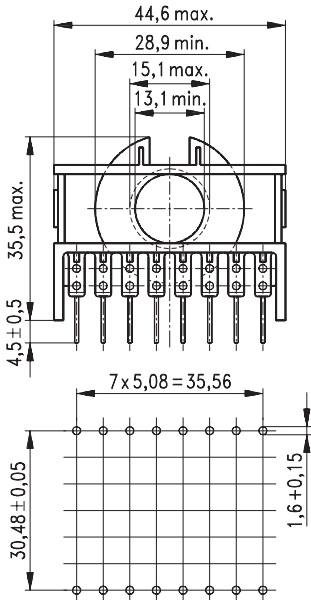
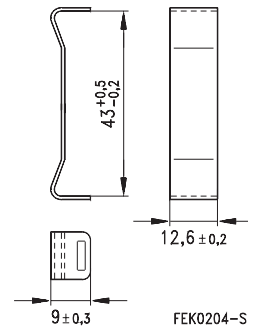
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

Winding: see "Processing Notes", page 158

**Yoke**

Material: Stainless spring steel (0,4 mm)

Coil former					Ordering code
Sections	$A_N$ mm <sup>2</sup>	$l_N$ mm	$A_R$ value $\mu\Omega$	Pins	
1	178	69	13,3	16	B66364-B1016-T1
Yoke (ordering code per piece, 2 are required)					B66364-A2000

**Coil former**

**Yoke**


Hole arrangement  
View in mounting direction

**Herausgegeben von EPCOS AG**

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