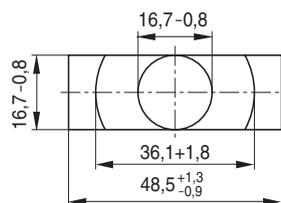
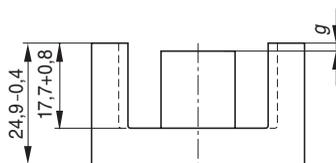


ETD 49/25/16

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



FEK0061-Y

Magnetic characteristics (per set)

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

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

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

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

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

Approx. weight 124 g/set

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 (magnetic axis horizontal)

Material: GFR polyterephthalate, UL 94 V-0, insulation class to IEC 60085:
 B66368B: F = max. operating temperature 155 °C, color code black (Valox 420SE0; [E 45329 (M)]; General Electric Plastics)
 B66368W: H = max. operating temperature 180 °C, color code black (Rynite FR530; [E 69578 (M)]; E I DUPONT DE NEMOURS & CO INC)

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

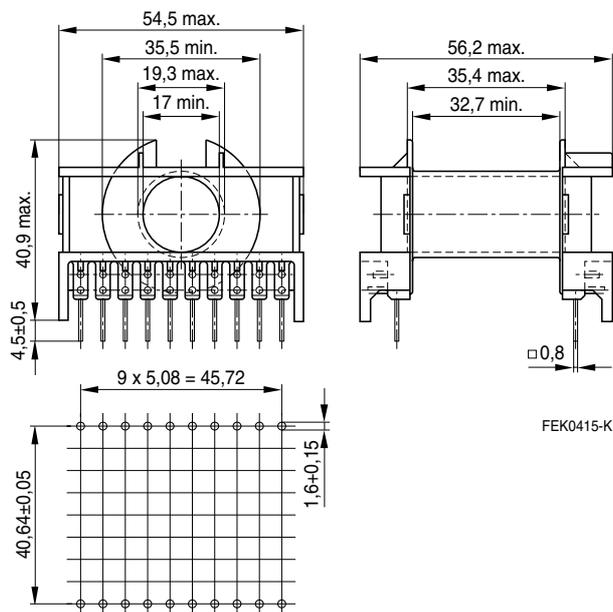
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3.5 s

Winding: see databook 2001, chapter *Processing Notes*, page 158

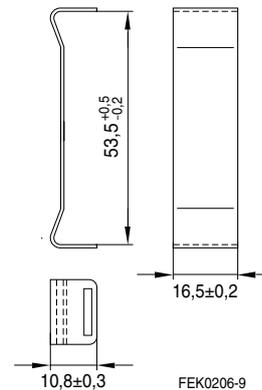
Yoke Material: Stainless spring steel (0.4 mm)

| Sections | A _N (mm ²) | l _N (mm) | A _R value (μΩ) | Pins | Ordering code |
|--|-----------------------------------|---------------------|---------------------------|------|------------------------------------|
| 1 | 269.4 | 86 | 11 | 20 | B66368B1020T001 B66368W1020T001 |
| Yoke (ordering code per piece, 2 are required) | | | | | B66368A2000 |

Coil former



Yoke



Hole arrangement
View in mounting direction

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Published by EPCOS AG

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