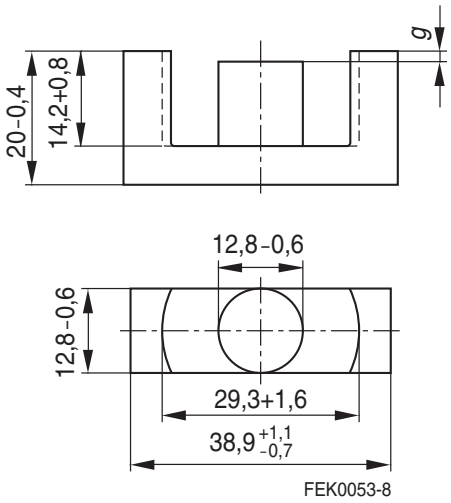
EPCOS

ETD 39/20/13

Core B66363

- 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)

$\Sigma l/A$ = 0,74 mm^{-1}
l_e = 92,2 mm
A_e = 125 mm^2
A_{min} = 123 mm^2
V_e = 11 500 mm^3

Approx. weight 60 g/set

Ungapped

Material	A_L value nH	μ_e	A_{L1min} 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[1)]	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	μ_e	Ordering code ** = 27 (N27) = 87 (N87)
N27, N87	0,10 ± 0,02	1062	622	B66363-G100-X1**
	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

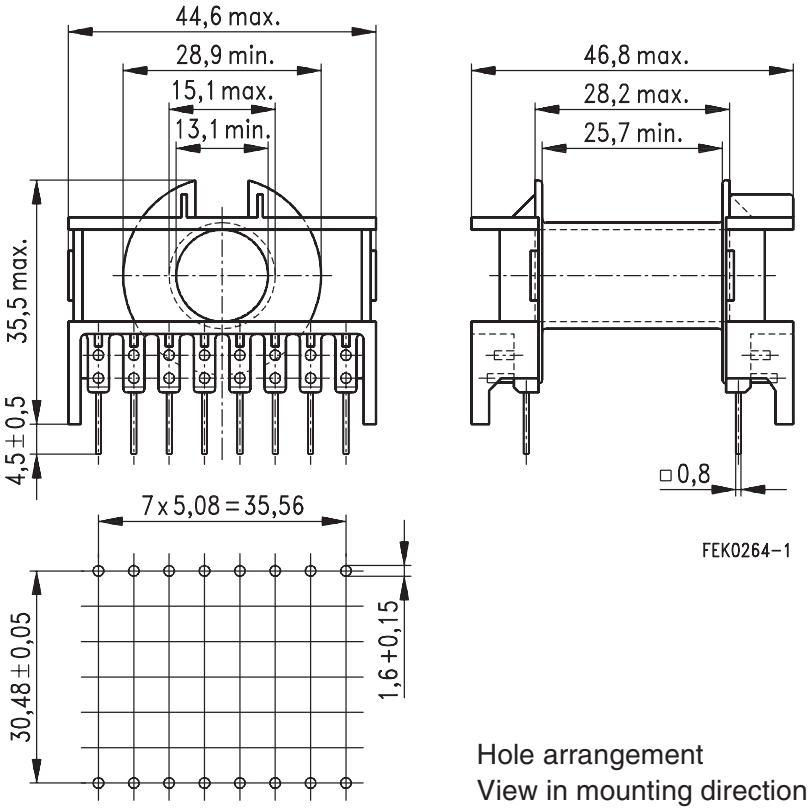
Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085: F ≙ max. operating temperature 155 °C), color code black
Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s
Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s
Winding: see *"Processing Notes"*, page 158

Yoke

Material: Stainless spring steel (0,4 mm)

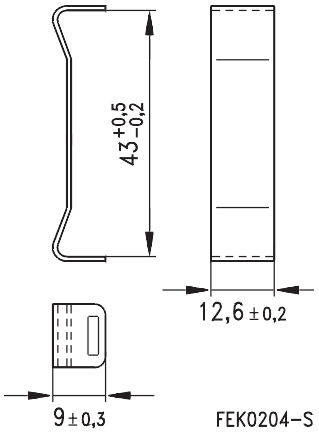
Coil former					Ordering code
Sections	A_N mm²	l_N mm	A_R value μΩ	Pins	
1	178	69	13,3	16	B66364-B1016-T1
Yoke (ordering code per piece, 2 are required)					B66364-A2000

Coil former



Hole arrangement
View in mounting direction

Yoke



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This brochure replaces the previous edition.

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