



## **Inductors**

DC/DC converters

**Series/Type: B78304B\* A003**

**Date: November 2005**

**Construction**

- E 6.3 ferrite core
- With cover cap
- 6 gullwing terminals

**Features**

- Very small size
- Low stray inductance, low winding capacitance, low DC resistance

**Applications**

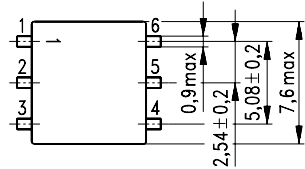
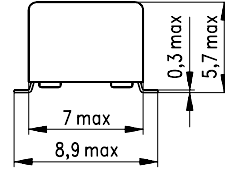
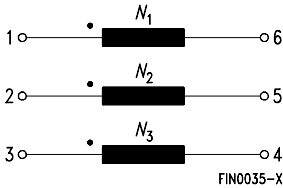
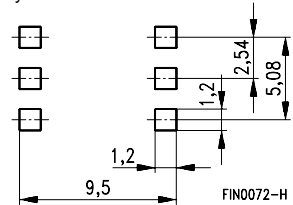
- Pulse transformers
- Broadband transformers
- Drive transformers for power semiconductors
- Low-power DC/DC converters (B78304B1016A003)

**Packing**

- 16-mm blister tape
- Packing unit: 900 pcs.

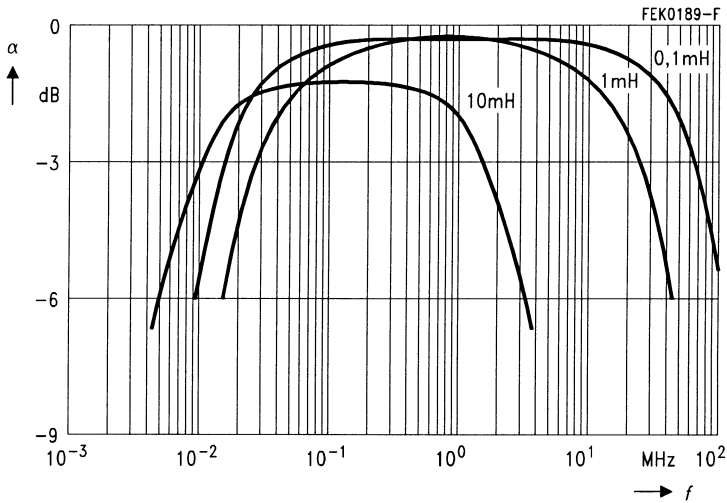
**Transformation ratio**

See table on next page


**Layout recommendation**


**Technical data**

| $L_1$<br>mH     | $N_1 : N_2 : N_3$ | $L_S$ <sup>1)</sup><br>$\mu\text{H}$ | $R_{DC}$ <sup>2)</sup><br>$\Omega$ | $C_K$ <sup>3)</sup><br>pF | $B_{3dB}$<br>MHz | $f_r$ <sup>4)</sup><br>MHz | $V_P$ <sup>5)</sup><br>VAC | Ordering code   |
|-----------------|-------------------|--------------------------------------|------------------------------------|---------------------------|------------------|----------------------------|----------------------------|-----------------|
| $0.1 \pm 55\%$  | 1:1:1             | 0.3                                  | $< 0.2$                            | 15                        | 0.05 ... 60      | $\approx 9.0$              | 500                        | B78304B1030A003 |
| $1.0 \pm 55\%$  | 1:1:1             | 1.0                                  | $< 0.9$                            | 30                        | 0.03 ... 23      | $\approx 4.0$              | 500                        | B78304B1031A003 |
| $10.0 \pm 55\%$ | 1:1:1             | 4.0                                  | $< 6.0$                            | 80                        | 0.01 ... 1.6     | $\approx 0.2$              | 500                        | B78304B1032A003 |
| $4.3 \pm 55\%$  | 1: 0.21:0.21      | 20.0                                 | $< 6.0$                            | —                         | —                | $> 0.6$                    | 500                        | B78304B1016A003 |

**Attenuation versus frequency**


- 1) Measured on 1–6, all other windings short-circuited
- 2) Measured on 1–6
- 3) Capacitance winding : winding, measured 1–2
- 4) Resonance frequency of primary winding (1–6)
- 5) Voltage strength winding : winding (50 Hz, 1 s)

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