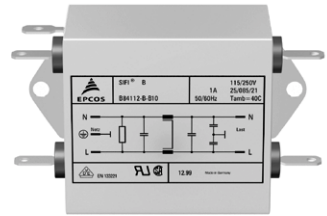


SIFI-B for enhanced insertion loss
Rated voltage 250 V~, 50/60 Hz
Rated current 1 A to 20 A

Construction

- Two-line filter
- Metal case
- Polyurethane potting (UL 94 V-0)



Features

- Compact design
- Low leakage current
- All relevant approvals
- Cost-optimized construction
- Also for assembly on top-hat rails

Applications

- Switch-mode power supplies in
 - industrial electronics
 - telecommunications
 - data systems
 - medical engineering

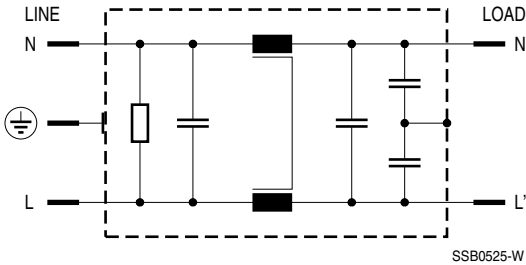
Case styles and terminal styles





- Case style A Tab connectors on face ends, lateral mounting tabs. Particularly suitable for mounting on a shielding wall.
- Case style B Tab connectors on face ends, mounting tabs on face ends.
- Case style K IEC connector as per IEC 60320 C 14 on line side, tab connectors on load side, mounting holes with metric thread.
- Case style L Litz wires on face ends
- Case style P Pins fitting PCB standard grid

Marking

Marking on component:
 Manufacturer's logo, ordering code,
 rated voltage, rated current,
 date code

Minimum marking on packaging:
 Manufacturer's logo, ordering code

Circuit diagram

Technical data

| | |
|----------------------------|---|
| Rated voltage V_R | 250 V~, 50/60 Hz |
| Rated current I_R | Referred to 40 °C ambient temperature |
| Test voltage V_P | 1414 V~, 2 s (line/line) 2700 V~, 2 s (lines/case) |
| Leakage current I_{leak} | < 0,5 mA at 230 V~, 50 Hz |
| Discharge resistors | The discharge resistors are rated such that one second after having disconnected the device from the power line, the voltage at the line connector should have dropped to 34 V. |
| Climatic category | In accordance with EN 60068-1 25/085/21 (- 25 °C/+ 85 °C/21 days damp heat test) |
| Approvals |     |

Characteristics and ordering codes

| I_R | C_R | L_R | Case style | Appr. weight g | Ordering code | Mounting plate for top-hat rail (ordering code) |
|-------|---|------------|-----------------------|---------------------------------|--|---|
| A | | | | | | |
| 1 | 2 × 0,15 µF (X2) + 2 × 4700 pF (Y2) | 2 × 10 mH | A B K L | 110 110 140 110 | B84112-B-A10 B84112-B-B10 B84112-B-K10 B84112-B-L10 | — C62122-A132-B91 — — |
| 2 | 2 × 0,15 µF (X2) + 2 × 4700 pF (Y2) | 2 × 10 mH | A B L | 110 110 110 | B84112-B-A20 B84112-B-B20 B84112-B-L20 | — C62122-A132-B91 — |
| 3 | 2 × 0,22 µF (X2) + 2 × 4700 pF (Y2) | 2 × 10 mH | A B K L P | 140 140 210 140 140 | B84112-B-A30 B84112-B-B30 B84112-B-K30 B84112-B-L30 B84112-B-P30 | — C62122-A132-B92 — — — |
| 6 | 2 × 0,33 µF (X2) + 2 × 4700 pF (Y2) | 2 × 3,3 mH | A B K L | 150 150 210 150 | B84112-B-A60 B84112-B-B60 B84112-B-K60 B84112-B-L60 | — C62122-A132-B92 — — |
| 10 | 2 × 0,47 µF (X2) + 2 × 4700 pF (Y2) | 2 × 1,8 mH | A B L | 200 200 200 | B84112-B-A110 B84112-B-B110 B84112-B-L110 | — C62122-A132-B92 — |
| 20 | 2 × 0,68 µF (X2) + 2 × 4700 pF (Y2) | 2 × 1,8 mH | A B | 700 700 | B84112-B-A120 B84112-B-B120 | — C62122-A132-B92 |

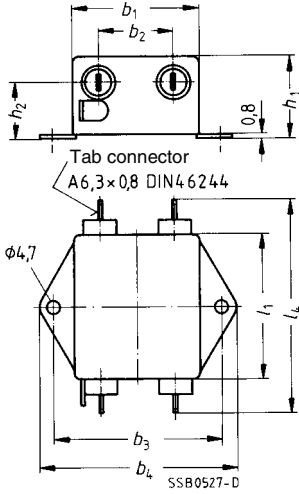
Case styles and dimensions

| Case style | Ordering code B84112- | Dimensions in mm | | | | | | | | | | | | Litz mm ² | Style 1015 |
|------------|--------------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------------------------|---------------|
| | | b_1 | b_2 | b_3 | b_4 | l_1 | l_2 | l_3 | l_4 | h_1 | h_2 | | | | |
| A | -B-A10 | 45 | 26,5 | 60,4 | 70 | 50 | — | — | 76,5 | 28,6 | 20 | — | — | | |
| B | -B-B10 | 45 | 26,5 | — | — | 50 | 60,4 | 70 | 76,5 | 28,6 | 20 | — | — | | |
| K | -B-K10 | 51 | — | — | — | 63,5 | — | — | — | 32 | — | — | — | | |
| L | -B-L10 | 45 | — | — | — | 50 | 60,4 | 70 | — | 28,6 | — | 0,82 | AWG18 | | |
| A | -B-A20 | 45 | 26,5 | 60,4 | 70 | 50 | — | — | 76,5 | 28,6 | 20 | — | — | | |
| B | -B-B20 | 45 | 26,5 | — | — | 50 | 60,4 | 70 | 76,5 | 28,6 | 20 | — | — | | |
| L | -B-L20 | 45 | — | — | — | 50 | 60,4 | 70 | — | 28,6 | — | 0,82 | AWG18 | | |
| A | -B-A30 | 50,8 | 31,5 | 60,4 | 70 | 63,5 | — | — | 89,5 | 28,6 | 20 | — | — | | |
| B | -B-B30 | 50,8 | 31,5 | — | — | 63,5 | 74,7 | 84,5 | 89,5 | 28,6 | 20 | — | — | | |
| K | -B-K30 | 50,8 | — | — | — | 79,5 | — | — | — | 32 | — | — | — | | |
| L | -B-L30 | 50,8 | — | — | — | 63,5 | 74,7 | 84,5 | — | 28,6 | — | 0,82 | AWG18 | | |
| P | -B-P30 | see dimensional drawing | | | | | | | | | | | | | |
| A | -B-A60 | 50,8 | 31,5 | 60,4 | 70 | 63,5 | — | — | 89,5 | 28,6 | 20 | — | — | | |
| B | -B-B60 | 50,8 | 31,5 | — | — | 63,5 | 74,7 | 84,5 | 89,5 | 28,6 | 20 | — | — | | |
| K | -B-K60 | 50,8 | — | — | — | 79,5 | — | — | — | 32 | — | — | — | | |
| L | -B-L60 | 50,8 | — | — | — | 63,5 | 74,7 | 84,5 | — | 28,6 | — | 0,82 | AWG18 | | |
| A | -B-A110 | 50,8 | 31,5 | 60,4 | 70 | 63,5 | — | — | 89,5 | 38,1 | 28 | — | — | | |
| B | -B-B110 | 50,8 | 31,5 | — | — | 63,5 | 74,7 | 84,5 | 89,5 | 38,1 | 28 | — | — | | |
| L | -B-L110 | 50,8 | — | — | — | 63,5 | 74,7 | 84,5 | — | 38,1 | — | 1,35 | AWG16 | | |
| A | -B-A120 | see dimensional drawing | | | | | | | | | | | | | |
| B | -B-B120 | see dimensional drawing | | | | | | | | | | | | | |

Case style A

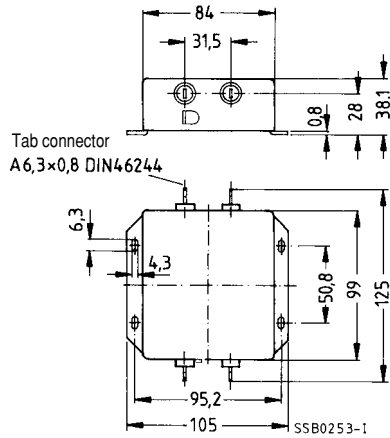
B84112-B-A10 ...

B84112-B-A110



Case style A

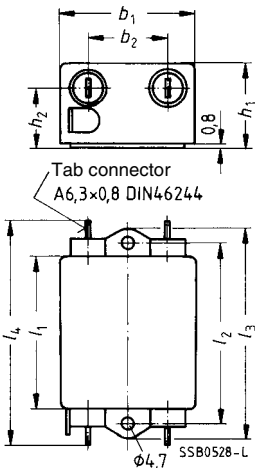
B84112-B-A120



Case style B

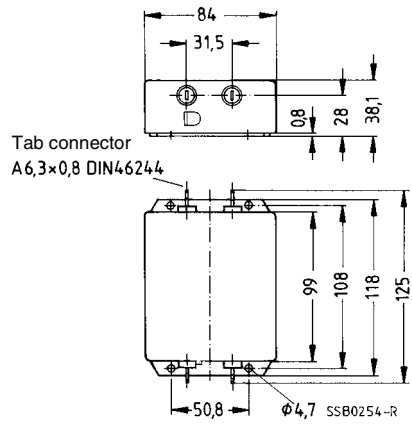
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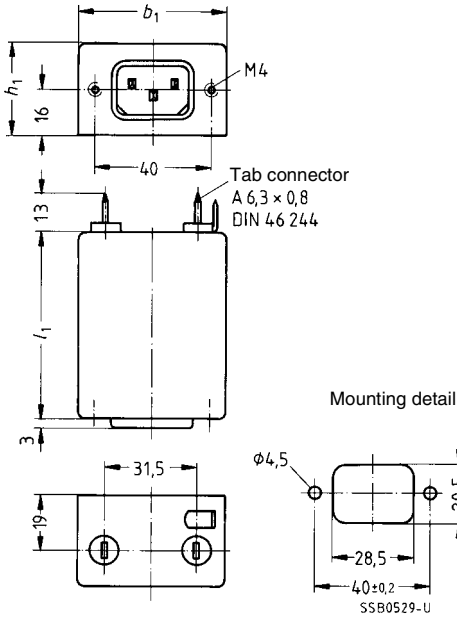


Case style B

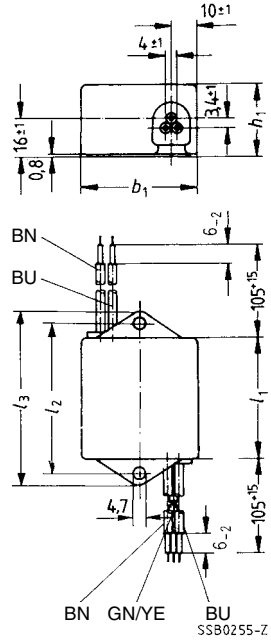
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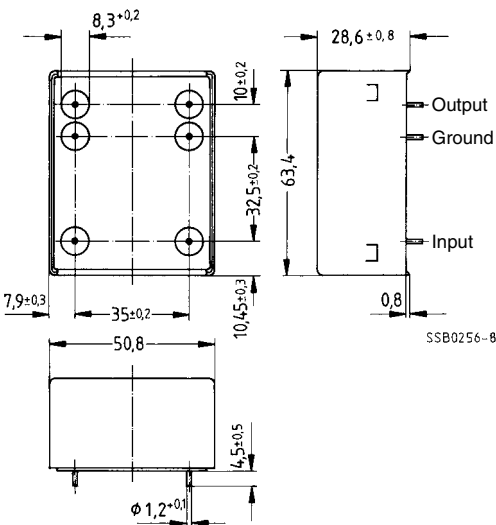
Case style K



Case style L



Case style P

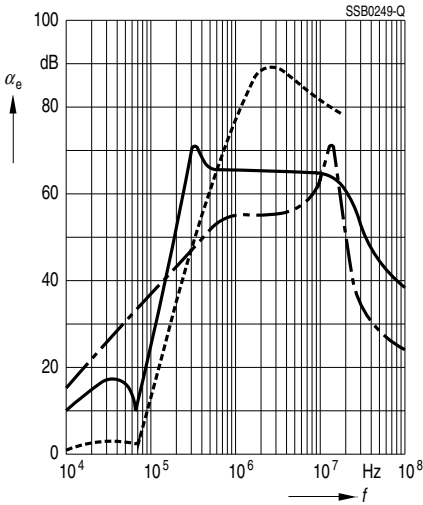


Insertion loss (typical values at $Z = 50 \Omega$)

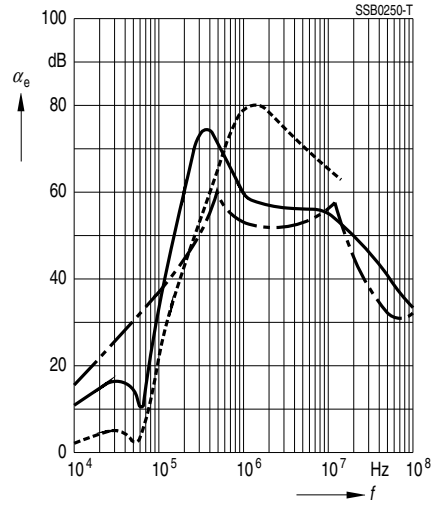
- unsymmetrical, adjacent branches terminated
- - - - - common mode, all branches in parallel (asymmetrical)
- - - - - differential mode (symmetrical)

B84112-B-*10

B84112-B-*20

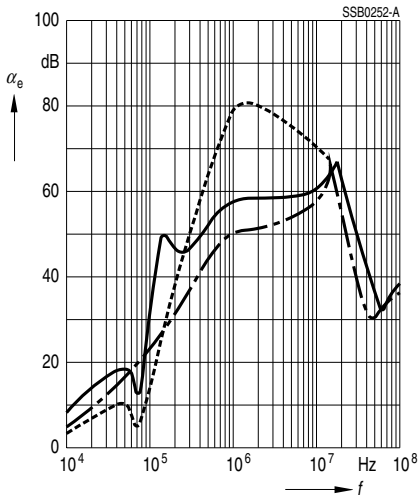


B84112-B-*30

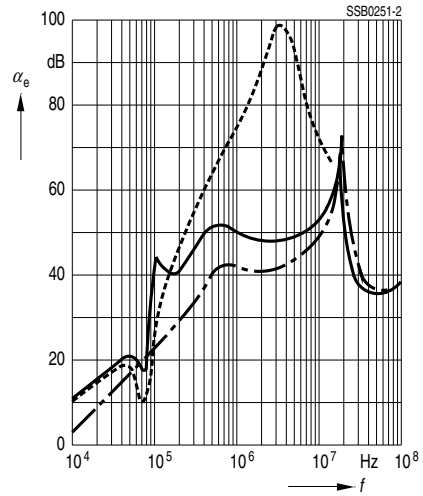


B84112-B-*60

B84112-B-*110



B84112-B-*120



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