

General-Purpose Filters SIFI-B Series

B84112

SIFI-B for enhanced attenuation
Rated voltage 250 Vac, 50/60 Hz
Rated current 1 A to 20 A

Construction

- Two-line filter
- Aluminum case

Features

- Compact design
- Low leakage current
- All relevant marks of conformity
- Cost-optimized construction

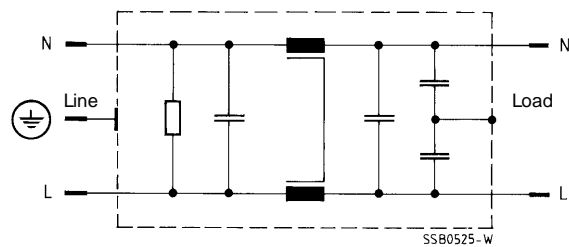
Applications

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

Terminals

Various terminal styles
depending on case styles A, B, K, L, P

Circuit diagram









General-Purpose Filters
SIFI-B Series

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Technical data

Rated voltage V_R	250 Vac, 50/60 Hz
Rated current I_R	Referred to 40 °C ambient temperature
Test voltage V_P	1414 Vdc, 2 s (line/line) 2700 Vdc, 2 s (lines/case)
Leakage current I_{leak}	< 0,5 mA at 250 Vac, 50 Hz
Climatic category	In accordance with IEC 68-1 25/085/21 (– 25 °C/+ 85 °C/21 days damp heat test)

Characteristics and ordering codes

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

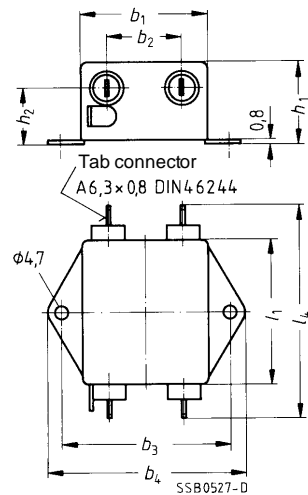
× = mark of conformity granted

Case styles and dimensions

Case style	Ordering code B84112-	Dimensions in mm											Litz mm ²	Style 1015
		<i>b</i> ₁	<i>b</i> ₂	<i>b</i> ₃	<i>b</i> ₄	<i>l</i> ₁	<i>l</i> ₂	<i>l</i> ₃	<i>l</i> ₄	<i>h</i> ₁	<i>h</i> 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 outline 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 outline drawing											—	—
B	-B-B120	See outline drawing											—	—

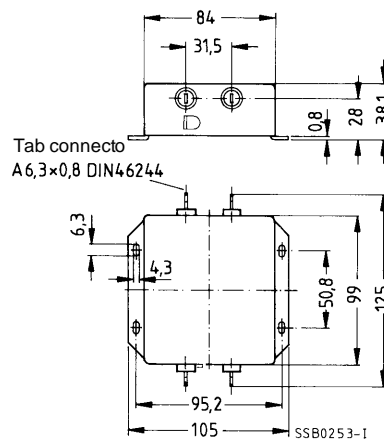
Case style A

B84112-B-A10 ...
 B84112-B-A110



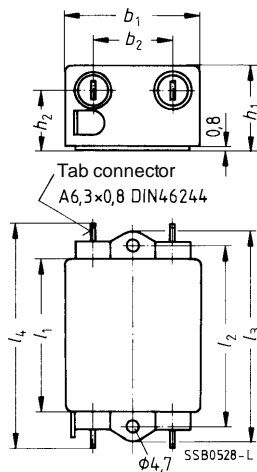
Case style A

B84112-B-A120



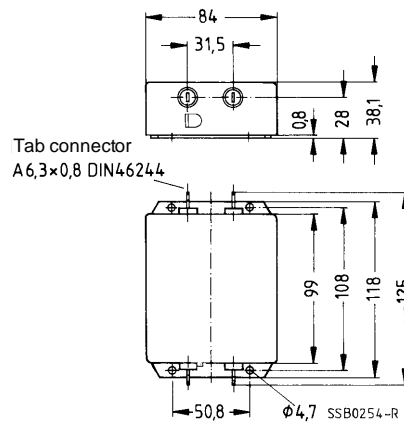
Case style B

B84112-B-B10 ...
 B84112-B-B110

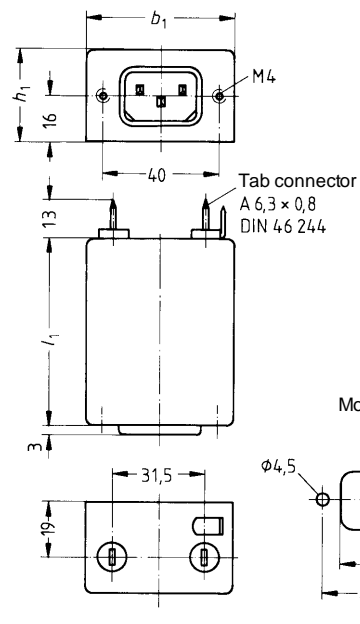


Case style B

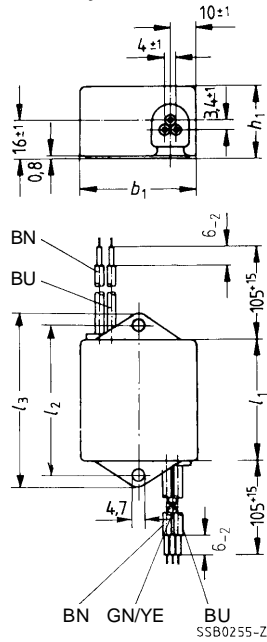
B84112-B-B120



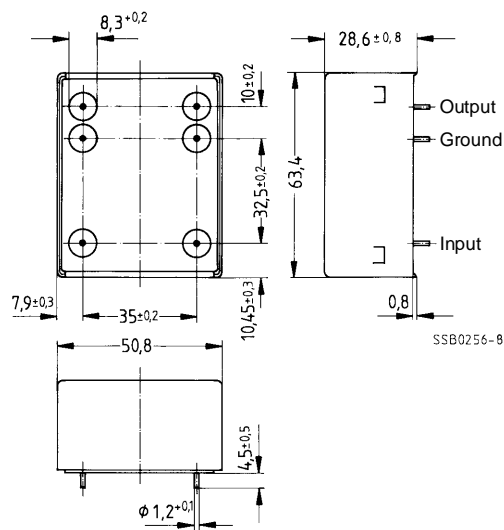
Case style K



Case style L



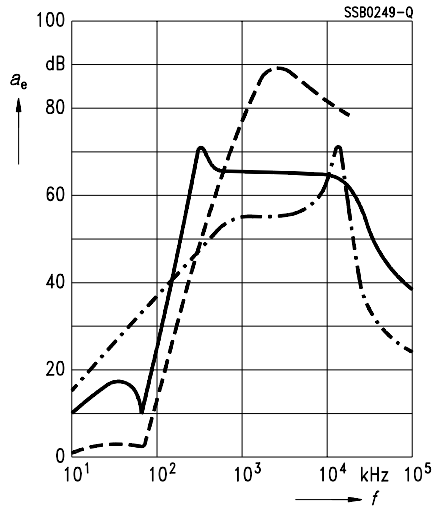
Case style P



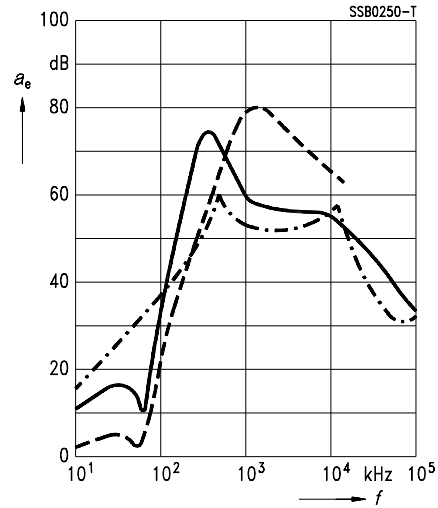
Insertion loss (typical values at $Z = 50 \Omega$)

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

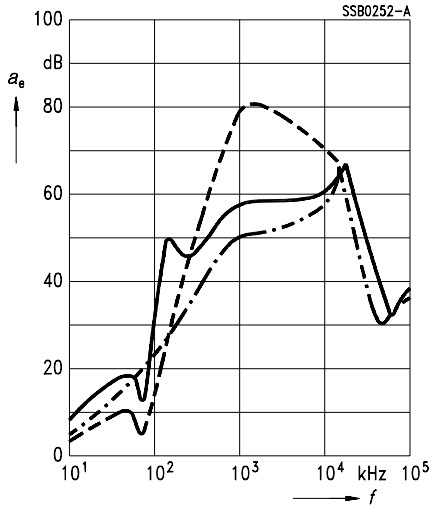
B84112-B-*10
 B84112-B-*20



B84112-B-*30



B84112-B-*60
 B84112-B-*110



B84112-B-*120

