SB Series

UL Recognized
CSA Certified
VDE Approved

SB Series

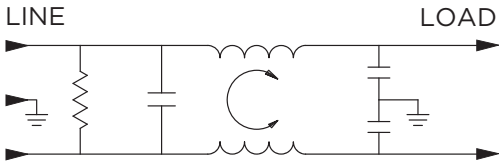
- Enhanced performance version of our popular B Series of RFI line filters
- Small size with enhanced performance
- 30A version half the size of other 30A filters
- Low leakage version available that meets current requirements of VDE portable equipment and non-patient care medical equipment

Ordering Information

20 E SB 6

- 6 – Input / Output Style
  - 1 – .250 [6.3] spade terminals
  - 6 – Threaded bolt
- SB – SB Series
- E – Leakage current designation
  - E – Low leakage *(<0.5 mA)*
  - V – Standard
- 20 – Current Rating
  - 6, 10, 20 or 30A

Electrical Schematic



Specifications

Maximum leakage current each Line to Ground:

	VSB Models	ESB Models
@ 120 VAC 60 Hz:	.75 mA	.22 mA
@250 VAC 50 Hz:	1.25 mA	.36 mA

Hipot rating (one minute):

Line to Ground:	2250 VDC
Line to Line:	1450 VDC

Rated Voltage (max): 250 VAC, 250 VDC

Operating Frequency: 50/60 Hz

Rated Current: 6 to 30A

Operating Ambient Temperature Range (at rated current I_r): -10°C to +40°C

In an ambient temperature (T_a) higher than +40°C the maximum operating current (I_O) is calculated as follows: $I_O = I_r \sqrt{(85-Ta)/45}$

Available Part Numbers

6ESB1	6VSB1
10ESB1	10VSB1
10ESB6	10VSB6
20ESB1	20VSB1
20ESB6	20VSB6
30ESB6	30VSB6

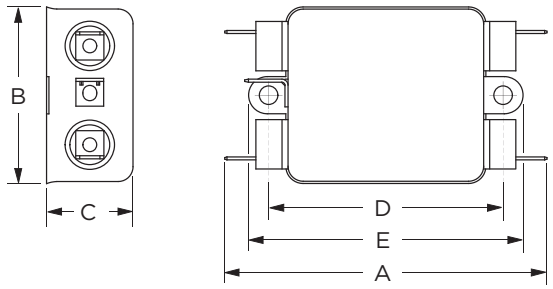
Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

For email, phone or live chat, please go to **te.com/help**
corcom.com

SB Series

Case Styles

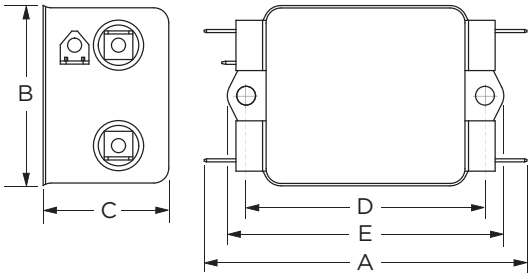
6ESB1 & 6VSB1



Typical Dimensions:

Line/Load Terminals (4):	.250 [*6.3*] with .07 [*1.8*] Dia. hole
Ground Terminal (1):	.250 [*6.3*] with .07 x .16 [*1.8 x 3.8*] slot
Mounting Holes (2):	.188 [*4.75*] Dia.

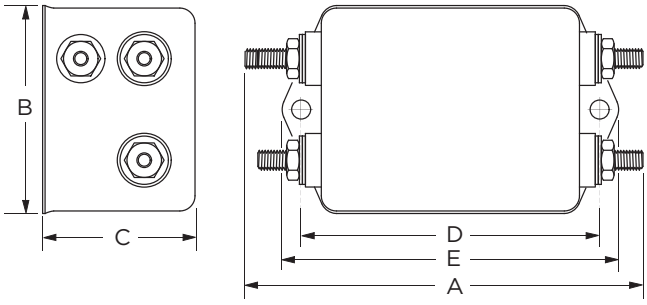
10ESB1, 10VSB1, 20ESB1 & 20VSB1



Typical Dimensions:

Line/Load Terminals (4):	.250 [*6.3*] with .07 [*1.8*] Dia. hole
Ground Terminal (1):	.250 [*6.3*] with .07 x .16 [*1.8 x 3.8*] slot
Mounting Holes (2):	.188 [*4.75*] Dia.

ESB6 & VSB6



Typical Dimensions:

Terminals (5):	8-32, Torque 18 lbf-in. [*2.03* N-m] max. ± 2 [*.22*]
Mounting Holes (2):	.188 [*4.75*] Dia.

Case Dimensions

Part No.	A (max)	B (max)	C (max)	D ± .015 / ± .38	E (max)
6ESB1, 6VSB1	**3.36** *85.34*	**1.82** *46.23*	**0.91** *23.11*	**2.375** *60.325*	**2.78** *70.61*
10ESB1, 10VSB1	**3.36** *85.34*	**1.82** *46.23*	**1.28** *32.51*	**2.375** *60.325*	**2.78** *70.61*
10ESB6, 10VSB6	**3.47** *88.14*	**1.82** *46.23*	**1.53** *38.86*	**2.375** *60.325*	**2.78** *70.61*
20ESB1, 20VSB1	**3.85** *97.79*	**2.07** *52.58*	**1.31** *33.27*	**2.938** *74.625*	**3.35** *85.09*
20ESB6, 20VSB6	**4.00** *101.60*	**2.07** *52.58*	**1.53** *38.86*	**2.938** *74.625*	**3.35** *85.09*
30ESB6, 30VSB6	**4.92** *124.97*	**2.07** *52.58*	**1.53** *38.86*	**3.947** *100.254*	**4.33** *109.98*

SB Series

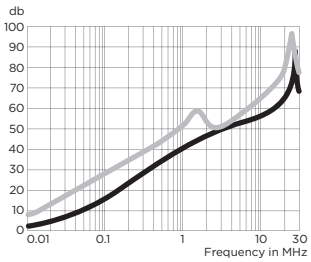
Performance Data

Typical Insertion Loss

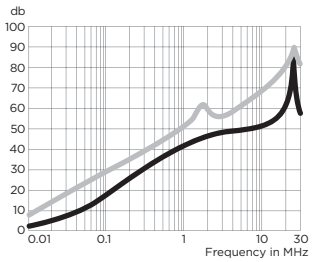
Measured in closed 50 Ohm system

ESB Models

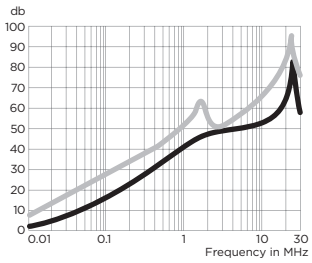
6ESB1



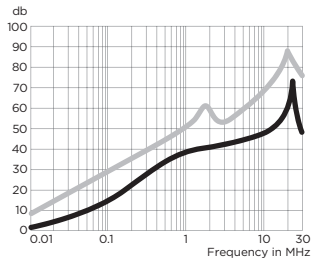
10ESB1



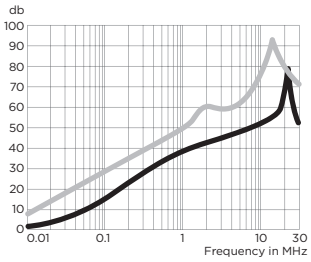
10ESB6



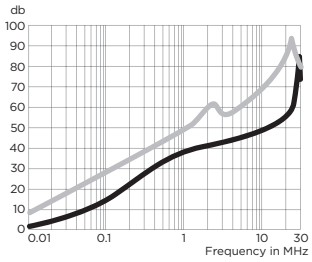
20ESB1



20ESB6

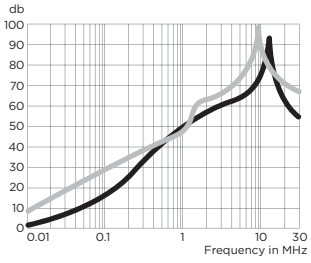


30ESB6

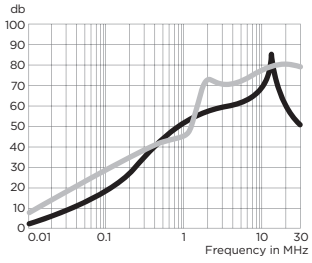


VSB Models

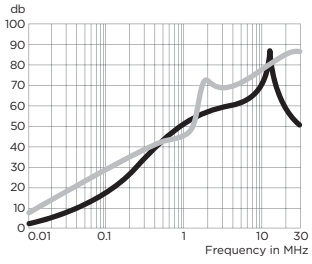
6VSB1



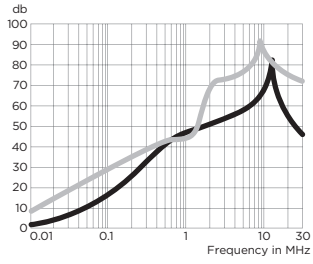
10VSB1



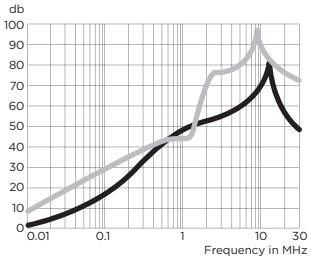
10VSB6



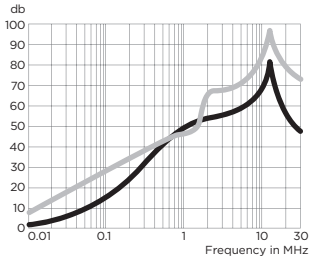
20VSB1



20VSB6



30VSB6



Common Mode / Asymmetrical (L-G)
Differential Mode / Symmetrical (L-L)

SB Series

Performance Data *(continued)*

Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

	Frequency – MHz										
Part No.	**.03**	**.05**	**.1**	**.15**	**.5**	**1**	**2**	**5**	**10**	**20**	**30**
ESB Models											
6ESB1	3	8	13	17	31	37	40	47	50	58	62
10ESB1	3	9	15	19	31	39	41	44	47	54	51
10ESB6	3	9	14	18	31	39	41	44	47	54	54
20ESB1	3	7	13	15	30	35	37	39	40	46	40
20ESB6	3	7	13	16	30	35	39	40	44	58	46
30ESB6	3	7	13	17	30	34	37	40	42	49	58
VSB Models											
6VSB1	3	8	14	19	37	47	51	58	66	59	49
10VSB1	3	9	15	21	41	49	50	56	64	54	46
10VSB6	4	9	15	21	39	49	50	56	64	54	44
20VSB1	3	7	14	19	37	45	47	50	60	48	40
20VSB6	3	7	14	19	37	44	49	52	62	48	41
30VSB6	3	6	13	18	37	45	49	51	60	50	42

Differential Mode / Symmetrical (Line to Line)

	Frequency – MHz											
Part No.	**.01**	**.03**	**.05**	**.1**	**.15**	**.5**	**1**	**2**	**5**	**10**	**20**	**30**
ESB Models												
6ESB1	5	14	20	25	29	41	49	47	50	60	74	72
10ESB1	5	15	20	26	29	41	47	50	54	64	74	74
10ESB6	5	14	20	25	29	41	47	48	50	60	62	64
20ESB1	5	15	21	26	29	41	45	48	54	63	70	66
20ESB6	5	15	21	26	29	41	44	48	54	63	70	66
30ESB6	5	14	20	25	29	40	46	50	50	58	70	70
VSB Models												
6VSB1	5	14	20	25	29	40	41	57	66	78	56	62
10VSB1	5	15	21	26	29	39	40	60	64	67	67	64
10VSB6	5	14	20	25	29	39	40	60	64	68	70	64
20VSB1	5	15	20	26	29	40	42	60	68	70	70	67
20VSB6	5	15	21	26	29	39	38	58	68	70	70	66
30VSB6	5	15	20	25	29	39	39	56	62	70	70	66