



## Introducing

### Corcom SB Series High Performance B Series Power Line Filters

The Corcom SB power line filter series joins the Corcom product family of EMI/RFI filter products. The SB Series of AC/DC rated power line filters is an enhanced version of the popular Corcom B Series filter with improved common and differential mode performance. The compact height (1.53"/38.86 mm) of the SB Series makes these products optimal for space constrained applications. These filters provide significant differential mode performance ideal for industrial machinery equipment and are also suitable as a simple clean up filter within all types of electronic applications. Low leakage versions are available that meet current requirements of VDE portable equipment and UL544 non-patient medical equipment.



### STANDARDS AND SPECIFICATIONS

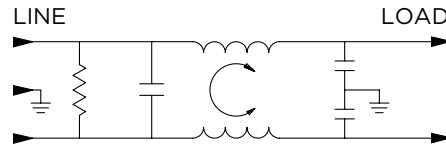


UL Recognized  
 CSA Certified  
 VDE Approved

### ELECTRICAL SPECIFICATIONS

Max. Leakage current each Line to Ground:	@ 120 VAC 60 Hz	VSB Models: .75 mA	ESB Models: .22 mA
	@ 250 VAC 50 Hz	VSB Models: 1.25 mA	ESB Models: .36 mA
Rated Currents:	6, 10, 20 & 30A		
Rated Voltage (max):	250 VAC & 250 VDC		
Operating Frequency:	50/60 Hz		

### ELECTRICAL SCHEMATIC



### KEY FEATURES

- Compact Size
- High Differential Mode Performance
- 6-30Amp
- 250 Rated Voltage VAC
- 250 Rated Voltage VDC
- UL Recognized, CSA Certified, and VDE Approved

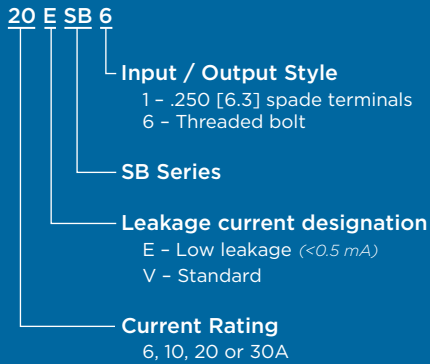
### PRODUCT OFFERING

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

### CASE DIMENSIONS

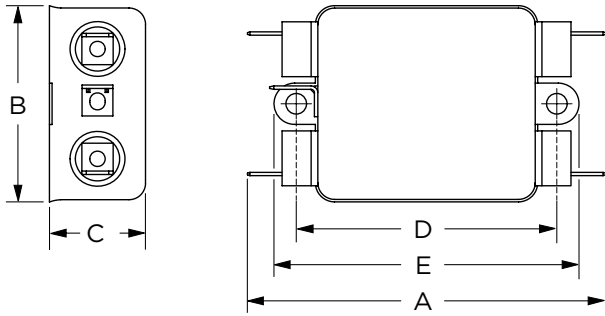
Part No.	A	B	C	D	E
	(max)	(max)	(max)	$\pm .015$ $\pm .38$	(max)
6ESB1, 6VSB1	3.36	1.82	0.91	2.375	2.78
	85.34	46.23	23.11	60.325	70.61
10ESB1, 10VSB1	3.36	1.82	1.28	2.375	2.78
	85.34	46.23	32.51	60.325	70.61
10ESB6, 10VSB6	3.47	1.82	1.53	2.375	2.78
	88.14	46.23	38.86	60.325	70.61
20ESB1, 20VSB1	3.85	2.07	1.31	2.938	3.35
	97.79	52.58	33.27	74.625	85.09
20ESB6, 20VSB6	4	2.07	1.53	2.938	3.35
	101.6	52.58	38.86	74.625	85.09
30ESB6, 30VSB6	4.92	2.07	1.53	3.947	4.33
	124.97	52.58	38.86	100.254	109.98

### ORDERING INFORMATION



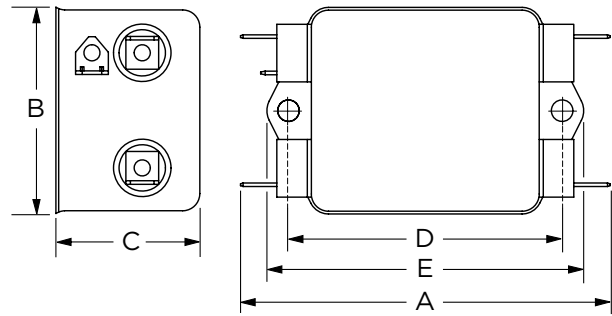
**CASE STYLES**

**6ESB1 & 6VSB1**



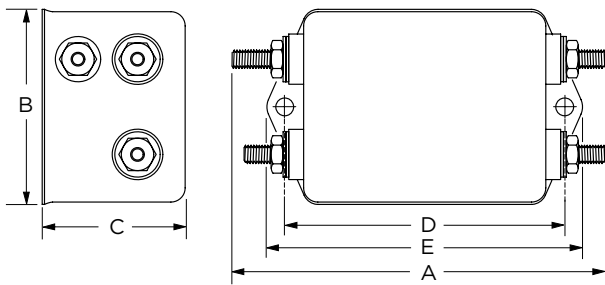
Typical Dimensions:  
 Line/Load Terminals (4): .250 [6.3] with .07 [1.8] Dia. hole  
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot  
 Mounting Holes (2): .188 [4.75] Dia.

**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.

**PERFORMANCE DATA**

**Minimum Insertion Loss**

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Part No.	Frequency – MHz										
	0.03	0.05	0.1	0.15	0.5	1	2	5	10	20	30
<b>ESB Models</b>											
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
<b>VSB Models</b>											
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 / Asymmetrical (Line to Line)

Part No.	Frequency – MHz											
	0.01	0.03	0.05	0.1	0.15	0.5	1	2	5	10	20	30
<b>ESB Models</b>												
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
<b>VSB Models</b>												
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

## FOR MORE INFORMATION

[www.corcom.com](http://www.corcom.com)

### Technical Support

Internet:	<a href="http://www.tycoelectronics.com/help">www.tycoelectronics.com/help</a>
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Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined [www.tycoelectronics.com/leadfree](http://www.tycoelectronics.com/leadfree)

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Harrisburg, PA

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