

# 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 Corcom 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 Corcom 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 many types of electronic applications. Low leakage versions are available that meet current requirements of VDE portable equipment and UL544 non-patient medical equipment.



# **KEY FEATURES**

- Compact size
- High differential mode performance
- Current range from 6 to 30A
- Rated for both AC and DC operation @ 250VAC/VDC
- UL Recognized, CSA Certified, and VDE Approved

# **ORDERING INFORMATION**



# **STANDARDS AND SPECIFICATIONS**







- UL Recognized
- CSA Certified
- VDE Approved

#### **ELECTRICAL SPECIFICATIONS**

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

#### **ELECTRICAL SCHEMATIC**



# **PRODUCT OFFERING**

1-1609034-1:	6ESB1	1-1609034-2:	6VSB1
1-1609034-3:	10ESB1	1-1609034-5:	10VSB1
1-1609034-4:	10ESB6	1-1609034-6:	10VSB6
1-1609034-7:	20ESB1	1-1609034-9:	20VSB1
1-1609034-8:	20ESB6	2-1609034-0:	20VSB6
2-1609034-1:	30ESB6	2-1609034-2:	30VSB6

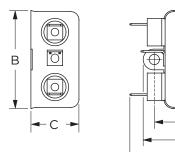
#### **CASE DIMENSIONS**

	A B		С	D	E	
Part No.	(max)	(max)	(max)	± .015 ± .38	(max)	
CECD1 CVCD1	3.36	1.82	0.91	2.375	2.78	
6ESB1, 6VSB1	85.34	46.23	23.11	60.325	70.61	
105001 107001	3.36	1.82	1.28	2.375	2.78	
10ESB1, 10VSB1	85.34	46.23	32.51	60.325	70.61	
105000 107000	3.47	1.82	1.53	2.375	2.78	
10ESB6, 10VSB6	88.14	46.23	38.86	60.325	70.61	
205001 207001	3.85	2.07	1.31	2.938	3.35	
20ESB1, 20VSB1	97.79	52.58	33.27	74.625	85.09	
205506 207506	4	2.07	1.53	2.938	3.35	
20ESB6, 20VSB6	101.6	52.58	38.86	74.625	85.09	
705000 701/000	4.92	2.07	1.53	3.947	4.33	
30ESB6, 30VSB6	124.97	52.58	38.86	100.254	109.98	



# **CASE STYLES**

#### **6ESB1 & 6VSB1**



Typical Dimensions: Line/Load Terminals (4):

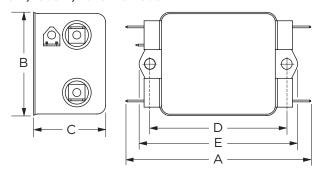
Line/Load Terminals (4): Ground Terminal (1): Mounting Holes (2):

.250 [6.3] with .07 [1.8] Dia. hole .250 [6.3] with .07 x .16 [1.8 x 3.8] slot .188 [4.75] Dia.

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# 10ESB1, 10VSB1, 20ESB1 & 20VSB1

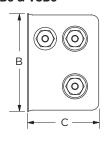


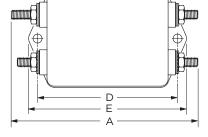
Typical Dimensions:
Line/Load Terminals (4):
Ground Terminal (1):

Mounting Holes (2):

.250 [6.3] with .07 [1.8] Dia. hole .250 [6.3] with .07 x .16 [1.8 x 3.8] slot .188 [4.75] Dia.

# ESB6 & VSB6





Typical Dimensions:

Terminals (5):

Mounting Holes (2):

8-32, Torque 18 lbf-in. [2.03 N-m] max. ± 2 [.22] .188 [4.75] Dia.

# **PERFORMANCE DATA**

# **Minimum Insertion Loss**

Measured in closed 50 Ohm system

# Common Mode / Asymmetrical (Line to Ground)

	Frequency — MHz										
Part No.	0.03	0.05	0.1	0.15	0.5	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 / Asymmetrical (Line to Line)

		, <b>,</b>			·							
	Frequency — MHz											
Part No.	0.01	0.03	0.05	0.1	0.15	0.5	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



# FOR MORE INFORMATION

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