

B Series

General Purpose RFI Power Line Filters
General Purpose for High Impedance
Loads at Low Cost



UL Recognized
CSA Certified
VDE Approved
SEV Approved*

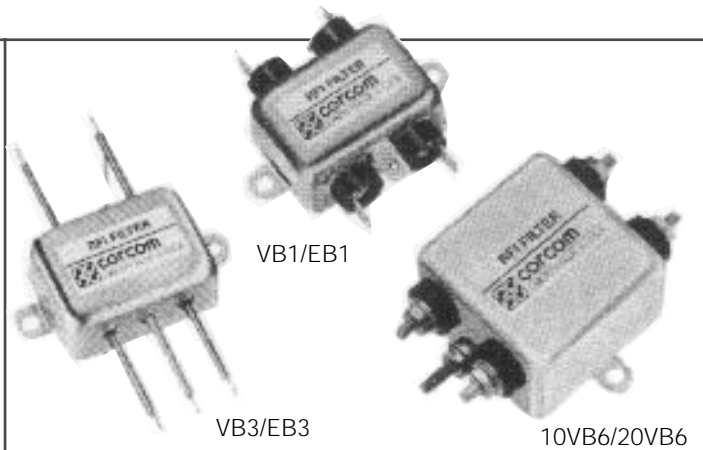
B Series

The B series RFI power line filters are general purpose common-mode filters effectively providing RFI control of line-to-ground noise in a small size at low cost. These filters are designed to meet a wide variety of electronic and electrical applications and are available in a broad selection of current ratings and termination styles. The EB models meet the very low leakage current requirements of SEV, VDE portable equipment, and (120 Volt) UL544 nonpatient medical equipment.

Electrical Schematic



Resistor location for reference only.



Specifications

| | VB Models | EB Models |
|--|------------------|------------------|
| Maximum leakage current, each line-to-ground | | |
| @ 120 VAC 60 Hz: | .4 mA | .21 mA |
| @ 250 VAC 50 Hz: | .7 mA | .36 mA |
| Hipot rating (one minute): | | |
| line-to-ground | | 2250 VDC |
| line-to-line | | 1450 VDC |
| Operating frequency: | | 50/60 Hz |
| Rated voltage: | | 120/250 VAC |
| Rated current: | @ 120 VAC | @ 250 VAC |
| 1VB/1EB | 1A | 1A |
| 2VB/2EB | 2A | 2A |
| 3VB/3EB | 3A | 3A |
| 5VB/5EB | 5A | 5A |
| 10VB/10EB | 10A | 8A |
| 10VB6 | 10A | 8A |
| 20VB/20EB | 20A | 16A |
| 30VB6 | 30A | 25A |

Minimum insertion loss in dB:
Line-to-ground in 50 ohm circuit

| Current Rating | Frequency-MHz | | | | | |
|----------------|---------------|----|---|---|----|----|
| | .15 | .5 | 1 | 5 | 10 | 30 |

VB Models

| | | | | | | |
|-----------------------|----|----|----|----|----|----|
| 1A, 3A | 15 | 30 | 38 | 50 | 50 | 50 |
| 2A, 5A, 10A, 20A, 30A | 7 | 20 | 25 | 40 | 45 | 48 |

EB Models

| | | | | | | |
|------------------|----|----|----|----|----|----|
| 1A, 3A | 15 | 29 | 35 | 45 | 45 | 48 |
| 2A, 5A, 10A, 20A | 7 | 19 | 23 | 34 | 37 | 42 |

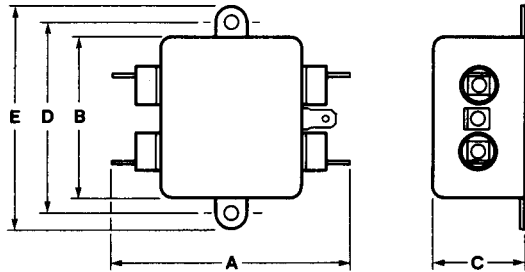
*EB models only.

Series B

Case Styles

Metric shown in italics.

B1

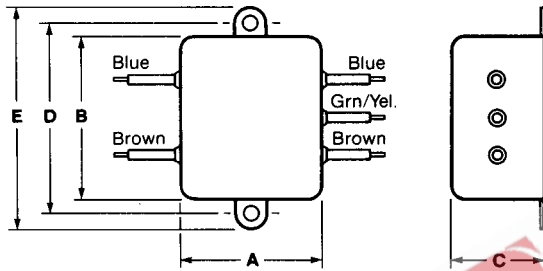


Typical dimensions

Terminals: $\frac{.250}{6.35}$ (5) Holes: $\frac{.07}{1.8}$ Dia. (4) Slot: $\frac{.07 \times .16}{1.8 \times 4.1}$

Mounting holes: $\frac{.188}{4.78}$ Dia. (2)

B3

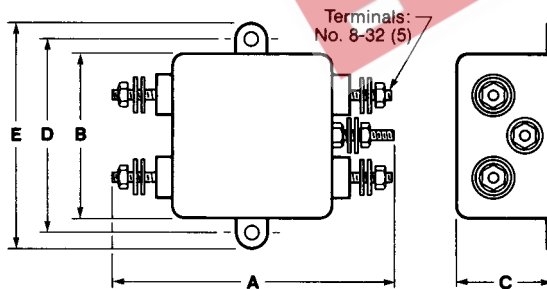


Typical dimensions

Wire leads: $\frac{4.0}{101.6}$ Min.

Mounting holes: $\frac{.188}{4.78}$ Dia. (2)

10VB6 & 20VB6

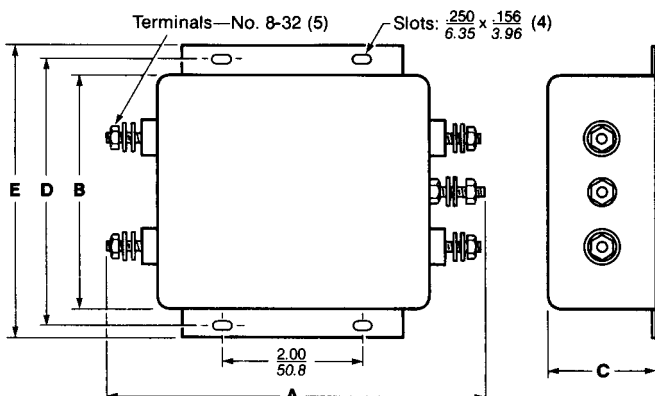


Typical dimensions

Mounting holes: $\frac{.188}{4.78}$ Dia. (2)

Torque 18 ± 2 in.lb.

30VB6



Libertyville, IL (847) 680-7400

Case Dimensions

Metric shown in italics.

| Part No. | A (max) | B (max) | C (max) | D $\pm .015$ $\pm .38$ | E (max) |
|--------------|------------|------------|------------|------------------------------|------------|
| 1VB1, 1EB1 | 2.25 | 1.82 | 0.66 | 2.125 | 2.53 |
| 2VB1, 2EB1 | 57.2 | 46.2 | 16.8 | 53.98 | 64.3 |
| 1VB3, 1EB3 | 0.96 | 1.82 | 0.66 | 2.125 | 2.53 |
| 2VB3, 2EB3 | 24.4 | 46.2 | 16.8 | 53.98 | 64.3 |
| 3VB1, 3EB1 | 2.61 | 1.82 | 0.78 | 2.125 | 2.53 |
| 5VB1, 5EB1 | 66.3 | 46.2 | 19.8 | 53.98 | 64.3 |
| 3VB3, 3EB3 | 1.32 | 1.82 | 0.78 | 2.125 | 2.53 |
| 5VB3, 5EB3 | 33.5 | 46.2 | 19.8 | 53.98 | 64.3 |
| 10VB1, 10EB1 | 2.61 | 1.82 | 1.16 | 2.125 | 2.53 |
| | 66.3 | 46.2 | 29.5 | 53.98 | 64.3 |
| 10VB3, 10EB3 | 1.32 | 1.82 | 1.16 | 2.125 | 2.53 |
| | 33.5 | 46.2 | 29.5 | 53.98 | 64.3 |
| 10VB6 | 2.72 | 1.82 | 1.16 | 2.125 | 2.53 |
| | 69.7 | 46.2 | 29.5 | 53.98 | 64.3 |
| 20VB1, 20EB1 | 3.36 | 2.07 | 1.16 | 2.375 | 2.81 |
| | 85.3 | 52.6 | 29.5 | 60.33 | 71.4 |
| 20VB6 | 3.46 | 2.07 | 1.16 | 2.375 | 2.81 |
| | 87.9 | 52.6 | 29.5 | 60.33 | 71.4 |
| 30VB6 | 5.34 | 3.38 | 1.53 | 3.750 | 4.2 |
| | 135.6 | 85.9 | 38.9 | 95.3 | 106.7 |

Pricing

Consult your local Corcom sales representative for pricing.

| Part No. | Part No. |
|----------|----------|
| 1VB1 | 1EB1 |
| 1VB3 | 1EB3 |
| 2VB1 | 2EB1 |
| 2VB3 | 2EB3 |
| 3VB1 | 3EB1 |
| 3VB3 | 3EB3 |
| 5VB1 | 5EB1 |
| 5VB3 | 5EB3 |
| 10VB1 | 10EB1 |
| 10VB3 | 10EB3 |
| 10VB6 | 20EB1 |
| 20VB1 | |
| 20VB6 | |
| 30VB6 | |