

## Minimum Depth, Cost-effective Shielded Power Inlet Filter

# SRB Series



UL Recognized  
CSA Certified  
VDE Approved\*



## SRB Series

- Smallest depth Corcom RFI filter available
- Complete shield
- Wide range of capacitor values
- Attenuates coupled EMI up to 300MHz
- Minimal to low leakage current versions are suitable for patient and non-patient contact medical equipment.
- Full range of mounting and termination options including unique vertical and horizontal orientation slide in mounts eliminate the need for mounting hardware

## Ordering Information

15 SRB S 1 - Q

Capacitor ID  
See Chart  
Omit if none

### Output Styles

- 1 - Spade terminals (*back*)
- 2 - Spade terminals (*bottom*)
- 8 - Wire leads
- P - PC board pins

### Mounting Style

- S - Snap-in
- X - Slide-in (*short edge / horizontal*)
- Y - Slide-in (*long edge / vertical*)
- Omit for flange mount

### SRB Series

Current Rating  
15A

\*15A versions are tested by Underwriters Laboratories to US and Canadian requirements and are VDE approved at 10A, 250VAC

## Specifications

### Maximum leakage current each Line to Ground:

| Capacitor ID / Value | @120 VAC     | @250 VAC     |
|----------------------|--------------|--------------|
| Blank / None         | 2 $\mu$ A    | 5 $\mu$ A    |
| Q / 33 pF            | 2.1 $\mu$ A  | 3.65 $\mu$ A |
| R / 100 pF           | 9.6 $\mu$ A  | 16.6 $\mu$ A |
| S / 220 pF           | 19.2 $\mu$ A | 33.2 $\mu$ A |
| T / 330 pF           | 24.0 $\mu$ A | 41.5 $\mu$ A |
| W / 470 pF           | 0.04 mA      | 0.07 mA      |
| X / 1000 pF          | 0.07 mA      | 0.13 mA      |
| Y / 2200 pF          | 0.16 mA      | 0.28 mA      |
| Z / 3300 pF          | 0.24 mA      | 0.42 mA      |

### Hipot rating (one minute):

|                 |          |
|-----------------|----------|
| Line to Ground: | 2250 VDC |
| Line to Line:   | 1450 VDC |

### Rated Voltage (max.):

250 VAC

### Operating Frequency:

50/60 Hz

### Rated Current:

15A\*

### 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:  $I_o = I_r \sqrt{(85 - T_a)/45}$

## Capacitor Options

| Capacitor ID | Capacitor Value |
|--------------|-----------------|
| Q            | 33 pF           |
| R            | 100 pF          |
| S            | 220 pF          |
| T            | 330 pF          |
| W            | 470 pF          |
| X            | 1000 pF         |
| Y*           | 2200 pF         |
| Z*           | 3300 pF         |

\*Not available in SRB8, SRBX or SRBY styles

3

Power Inlet Filters & Power Entry Modules

## Minimum Depth, Cost-effective Shielded Power Inlet Filter *(continued)*

# SRB Series

## Available Part Numbers

### Flange Mount

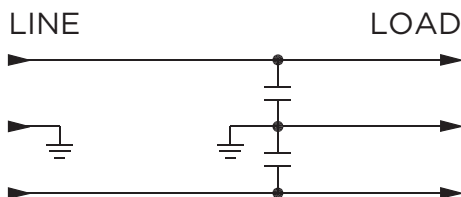
|          |          |          |          |
|----------|----------|----------|----------|
| 15SRB1   | 15SRB2   | 15SRBP   | 15SRB8   |
| 15SRB1-Q | 15SRB2-Q | 15SRBP-Q | 15SRB8-Q |
| 15SRB1-R | 15SRB2-R | 15SRBP-R | 15SRB8-R |
| 15SRB1-S | 15SRB2-S | 15SRBP-S | 15SRB8-S |
| 15SRB1-T | 15SRB2-T | 15SRBP-T | 15SRB8-T |
| 15SRB1-W | 15SRB2-W | 15SRBP-W | 15SRB8-W |
| 15SRB1-X | 15SRB2-X | 15SRBP-X | 15SRB8-X |
| 15SRB1-Y | 15SRB2-Y | 15SRBP-Y |          |
| 15SRB1-Z | 15SRB2-Z | 15SRBP-Z |          |

### Snap-In

### Slide-In

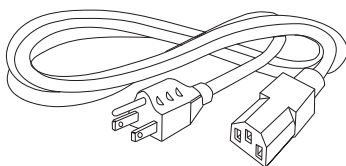
|           |           |           |           |
|-----------|-----------|-----------|-----------|
| 15SRBS1   | 15SRBS8   | 15SRBX8   | 15SRBY8   |
| 15SRBS1-Q | 15SRBS8-Q | 15SRBX8-Q | 15SRBY8-Q |
| 15SRBS1-R | 15SRBS8-R | 15SRBX8-R | 15SRBY8-R |
| 15SRBS1-S | 15SRBS8-S | 15SRBX8-S | 15SRBY8-S |
| 15SRBS1-T | 15SRBS8-T | 15SRBX8-T | 15SRBY8-T |
| 15SRBS1-W | 15SRBS8-W | 15SRBX8-W | 15SRBY8-W |
| 15SRBS1-X | 15SRBS8-X | 15SRBX8-X | 15SRBY8-X |
| 15SRBS1-Y |           |           |           |
| 15SRBS1-Z |           |           |           |

## Electrical Schematic



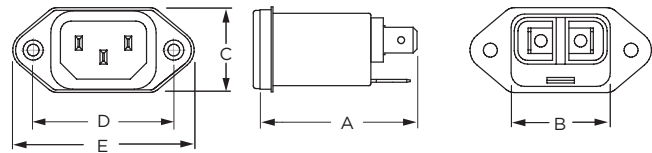
## Accessories

GA400: NEMA 5-15P to IEC 60320-1 C-13 line cord



## Case Styles

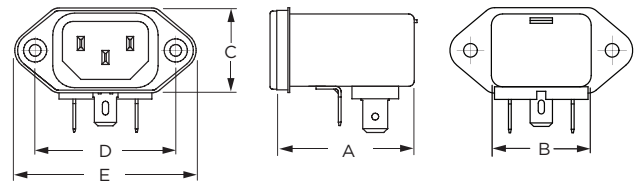
### SRB1



Typical Dimensions:

Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw  
Line Inlet (1): IEC 60320-1 C14  
Load Terminals (2): .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

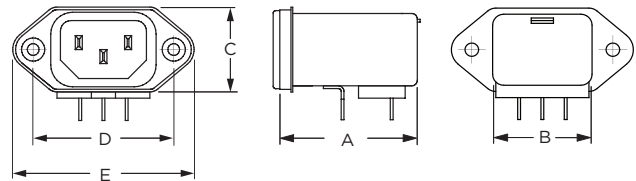
### SRB2



Typical Dimensions:

Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw  
Line Inlet (1): IEC 60320-1 C14  
Load Terminals (2): .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

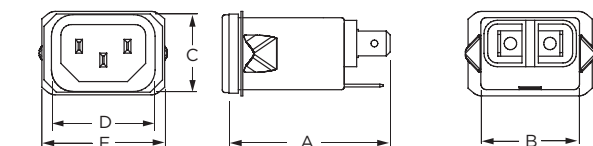
### SRBP



Typical Dimensions:

Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw  
Line Inlet (1): IEC 60320-1 C14  
PC board pins (3): .031 [0.7] square, ± .003 [.07]

### SRBS1



Typical Dimensions:

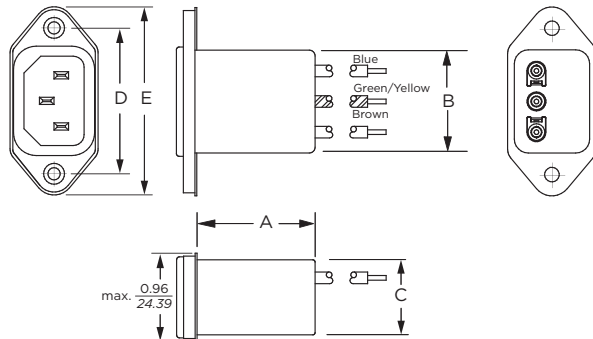
Line Inlet (1): IEC 60320-1 C14  
Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole  
Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

Minimum Depth, Cost-effective Shielded Power Inlet Filter *(continued)*

# SRB Series

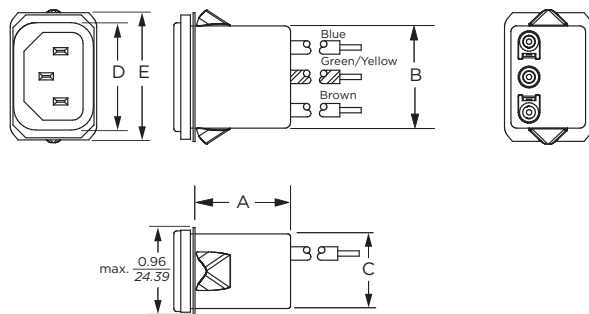
## Case Styles *(continued)*

### SRB8



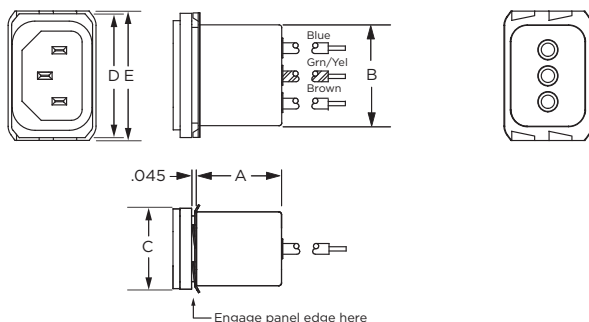
Typical Dimensions:  
Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw  
Line Inlet (1): IEC 60320-1 C14  
Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

### SRBS8



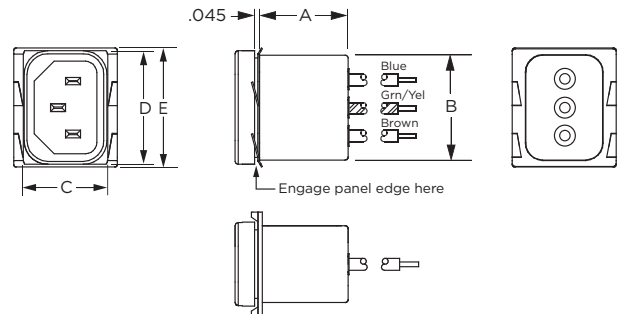
Typical Dimensions:  
Line Inlet (1): IEC 60320-1 C14  
Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

### SRBX8



Typical Dimensions:  
Line Inlet (1): IEC 60320-1 C14  
Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

### SRBY8



Typical Dimensions:  
Line Inlet (1): IEC 60320-1 C14  
Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

## Case Dimensions

| Part No. | A<br>(max.)   | B<br>(max.)   | C<br>(max.)   | D<br>$\pm .015$<br>$\pm .38$ | E<br>(max.)   |
|----------|---------------|---------------|---------------|------------------------------|---------------|
| 15SRB1   | 1.75<br>44.45 | 1.13<br>28.70 | 0.96<br>24.38 | 1.58<br>40.00                | 2.04<br>51.76 |
| 15SRB2   | 1.54<br>39.12 | 1.13<br>28.70 | 0.96<br>24.38 | 1.58<br>40.00                | 2.04<br>51.76 |
| 15SRBP   | 1.54<br>39.12 | 1.13<br>28.70 | 0.96<br>24.38 | 1.58<br>40.00                | 2.04<br>21.76 |
| 15SRBS1  | 1.75<br>44.45 | 1.13<br>28.70 | 0.96<br>24.38 | 1.19<br>30.10                | 1.41<br>35.81 |
| 15SRB8   | 0.95<br>24.13 | 1.13<br>28.70 | 0.96<br>24.38 | 1.58<br>40.00                | 2.04<br>51.76 |
| 15SRBS8  | .95<br>24.13  | 1.13<br>28.70 | 0.96<br>24.38 | 1.19<br>30.10                | 1.41<br>35.81 |
| 15SRBX8  | 0.95<br>24.1  | 1.11<br>28.2  | 0.89<br>22.61 | 1.35*<br>34.29*              | 1.41<br>35.81 |
| 15SRBY8  | 0.95<br>24.1  | 1.11<br>28.2  | 0.89<br>22.61 | 1.30*<br>33.02*              | 1.36<br>34.54 |

\*max.

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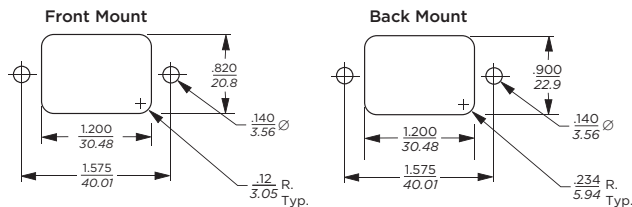
Power Inlet Filters & Power Entry Modules

**Minimum Depth, Cost-effective Shielded Power Inlet Filter** *(continued)*

# SRB Series

## Recommended Panel Cutouts

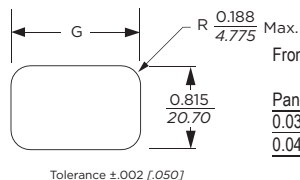
### SRB1, SRB2, SRBP & SRB8



Tolerances  $\pm .005$  [0.13] unless otherwise noted

- Note 1: SRB1 and SRB8 can be front or back mounted  
Note 2: SRB2 and SRBP can be back mounted only

### SRBS

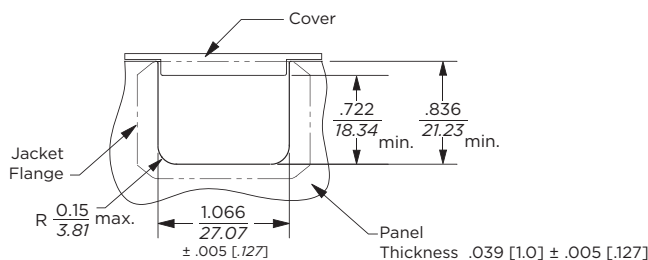


Front Mount only

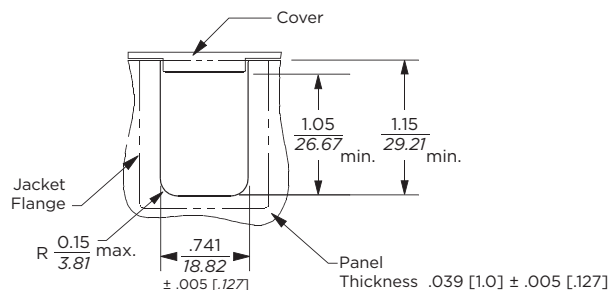
| Panel Thickness             | G Dim. $\pm .002$ [0.05] |
|-----------------------------|--------------------------|
| 0.031 - 0.052 [0.79 - 1.32] | 1.260 [32.00]            |
| 0.046 - 0.068 [1.17 - 1.73] | 1.350 [34.29]            |

Tolerance  $\pm .002$  [0.050]

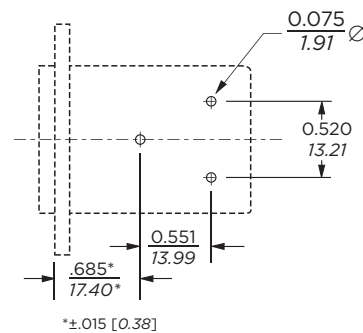
### SRBX



### SRBY



## PC Board Layout



SRBX8

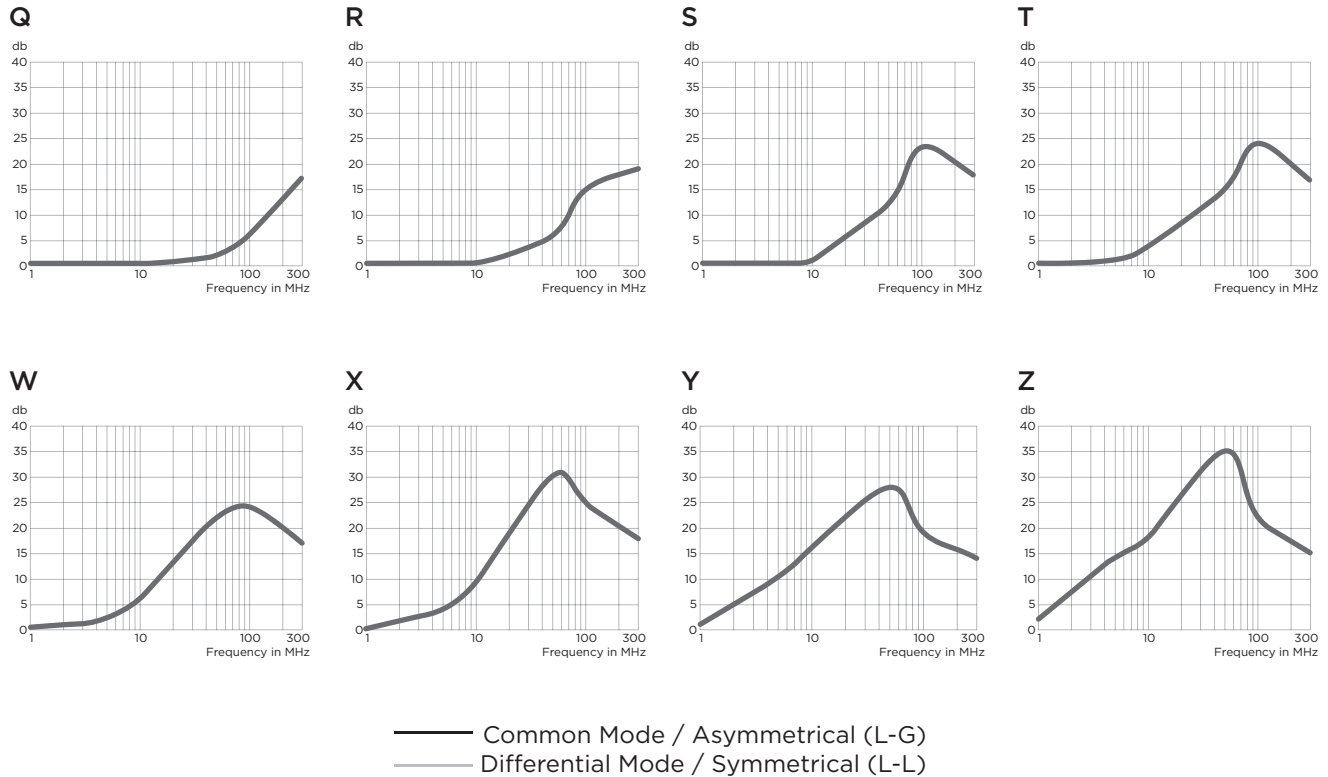
## Minimum Depth, Cost-effective Shielded Power Inlet Filter *(continued)*

# SRB Series

## Performance Data

### Typical Insertion Loss

Measured in closed 50 Ohm system



## Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency – MHz |    |    |    |     |     |
|----------------|-----------------|----|----|----|-----|-----|
|                | 1               | 5  | 10 | 50 | 100 | 300 |
| Q              | -               | -  | -  | -  | -   | 20  |
| R              | -               | -  | -  | 3  | 6   | 22  |
| S              | -               | -  | 1  | 6  | 17  | 19  |
| T              | -               | -  | 2  | 13 | 13  | 19  |
| W              | -               | 2  | 4  | 18 | 13  | 20  |
| X              | -               | 5  | 9  | 25 | 10  | 17  |
| Y              | 1               | 10 | 15 | 20 | 8   | 22  |
| Z              | 2               | 14 | 18 | 17 | 7   | 15  |

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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