

Minimum Depth, Cost-effective Shielded Power Inlet Filter

SRB Series



UL Recognized
CSA Certified
VDE Approved*

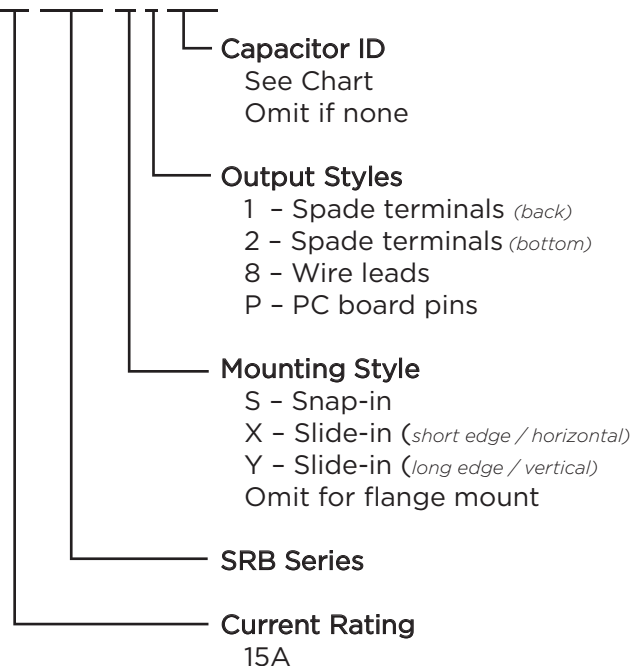


SRB Series

- 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



*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 µA	5 µA
Q / 33 pF	2.1 µA	3.65 µA
R / 100 pF	9.6 µA	16.6 µA
S / 220 pF	19.2 µA	33.2 µA
T / 330 pF	24.0 µA	41.5 µA
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

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 (max.)	B (max.)	C (max.)	D $\pm .015$ $\pm .38$	E (max.)
15SRB1	1.75	1.13	0.96	1.58	2.04
15SRB2	1.54	1.13	0.96	1.58	2.04
15SRBP	1.54	1.13	0.96	1.58	2.04
15SRBS1	1.75	1.13	0.96	1.19	1.41
15SRB8	0.95	1.13	0.96	1.58	2.04
15SRBS8	.95	1.13	0.96	1.19	1.41
15SRBX8	0.95	1.11	0.89	1.35*	1.41
15SRBY8	0.95	1.11	0.89	1.30*	1.36

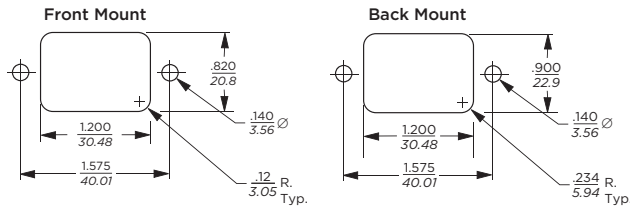
*max.

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

SRB Series

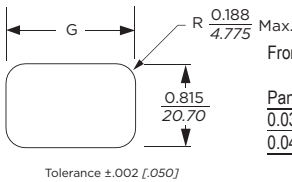
Recommended Panel Cutouts

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



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]

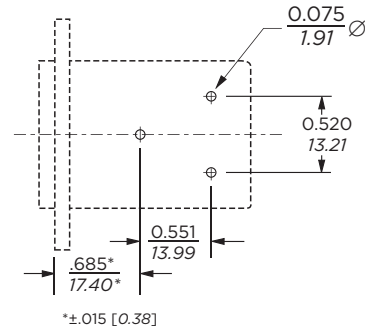
SRBX



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