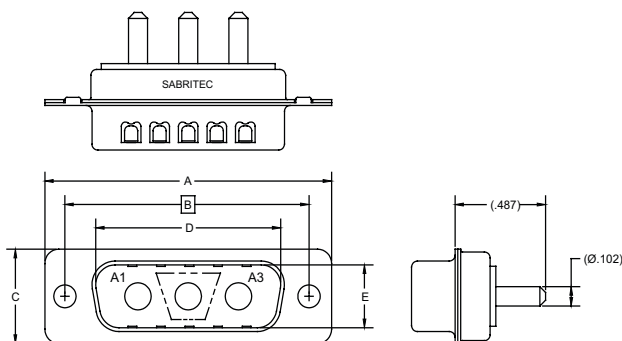


# Filter Combo D-Subminiature

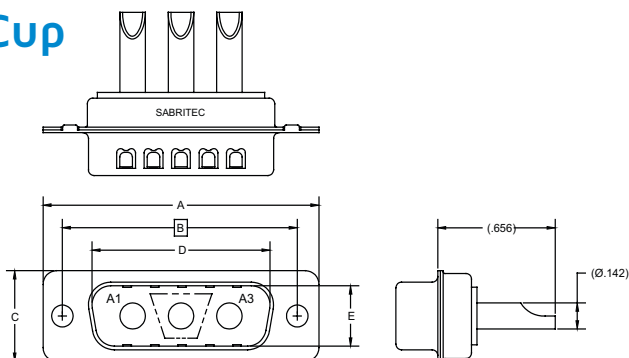


Combo D-Sub 3W3/3WK3 Filtered Power Connectors

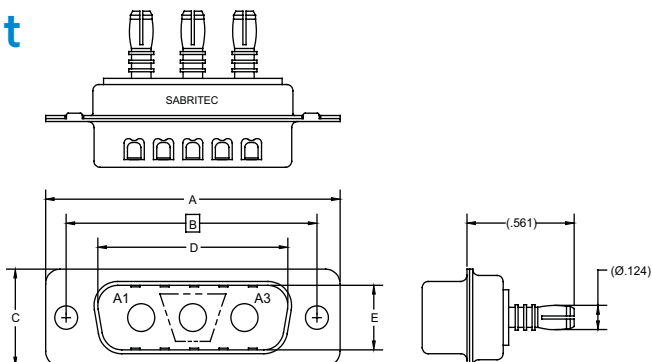
## PC Tail



## Solder Cup



## Press-Fit



Smiths Interconnect offers a complete line of high powered EMI filtered D-Sub connectors including the single row size #8 power contacts (3W3, 3WK3, etc.). Our ceramic planar capacitors can easily achieve up to 47 nF per line on this series. The planar capacitor provides excellent attenuation as well as meeting the Bellcore requirements for 1000 VDC Dielectric Withstanding Voltage. The materials used in the construction meet the UL flammability requirements of 94V-0. Smiths Interconnect filtered D-Sub connectors are intermateable with standard non-filter D-Sub connectors.

This series is available in PC tail, solder cup and solderless press-fit terminations into standard plated-thru holes. Smiths Interconnect also offers combo D-Sub arrangements for power coaxial and signal contacts mixed arrangements including layouts 5W5, 8W8, 17W2, 9W1 and 24W7.

## D-Sub High Power Plugs

Part Number	EMI Filter		Voltage Rating
	Cap Value	Layout	
310031-1000	1 nF	3W3	400 VDC
310032-1001	1 nF	3WK3	400 VDC
310031-1002	5 nF	3W3	400 VDC
310032-1003	5 nF	3WK3	400 VDC
310031-1004	47 nF	3W3	400 VDC
310032-1005	47 nF	3WK3	400 VDC

Part Number	EMI Filter		Voltage Rating
	Cap Value	Layout	
310031-2000	1 nF	3W3	400 VDC
310032-2001	1 nF	3WK3	400 VDC
310031-2002	5 nF	3W3	400 VDC
310032-2003	5 nF	3WK3	400 VDC
310031-2004	47 nF	3W3	400 VDC
310032-2005	47 nF	3WK3	400 VDC

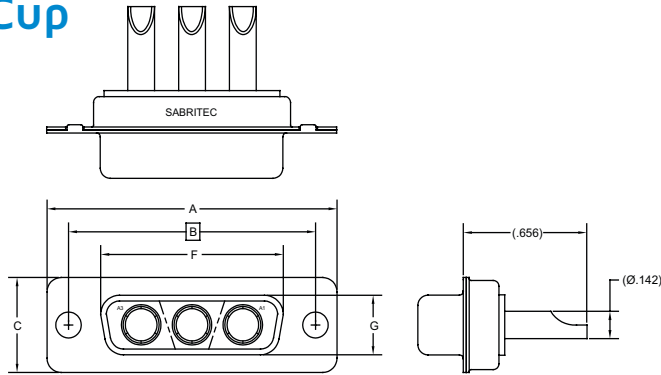
Part Number	EMI Filter		Voltage Rating
	Cap Value	Layout	
310031-4000	1 nF	3W3	400 VDC
310032-4001	1 nF	3WK3	400 VDC
310031-4002	5 nF	3W3	400 VDC
310032-4003	5 nF	3WK3	400 VDC
310031-4004	47 nF	3W3	400 VDC
310032-4005	47 nF	3WK3	400 VDC

Dimensions						
A	B	C	D	E	F	G
+.010	Basic	+.010	+.004	+.004	+.004	+.004
1.541	1.312	0.494	0.995	0.329	0.970	0.310

# Filter D-Sub Connectors

## D-Sub High Power Receptacles

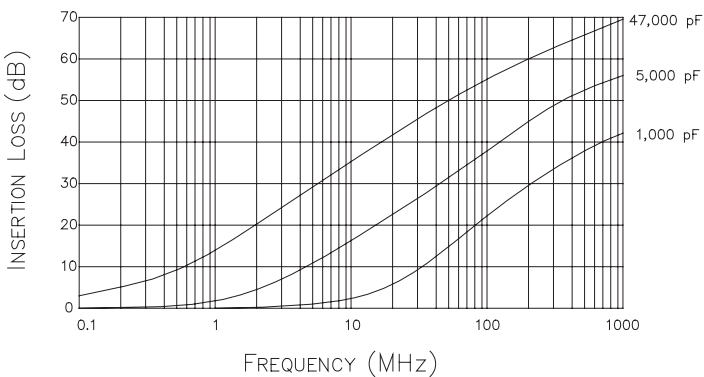
### Solder Cup



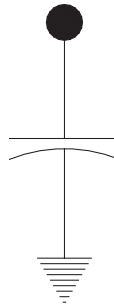
Part Number	EMI Filter		Voltage Rating
	Cap Value	Layout	
310031-3000	1 nF	3W3	400 VDC
310032-3001	1 nF	3WK3	400 VDC
310031-3002	5 nF	3W3	400 VDC
310032-3003	5 nF	3WK3	400 VDC
310031-3004	47 nF	3W3	400 VDC
310032-3005	47 nF	3WK3	400 VDC

Dimensions						
A	B	C	D	E	F	G
+ .010	Basic	+ .010	+ .004	+ .004	+ .004	+ .004
1.541	1.312	0.494	0.995	0.329	0.970	0.310

### Insertion Loss Curves



"C" Filter Schematic



### Insertion Loss Table

Frequency (MHz)	C1 (1 nF)	C5 (5 nF)	C47 (47 nF)
1	0.1	1.4	15
10	4	16	34
100	22	36	52
1000	42	56	68

### Material and Finishes

Shell	Tin plated steel
Insulator	Thermoplastic (UL 94V-Ø rated)
Contacts	Copper Alloy, gold plate per ASTM-B488 over nickel plate per QQ-N-290
Filter Array	Monolithic capacitor, X7R material

### Electrical Characteristics

Operating Temperature	-55°C to + 125°C
Voltage	1,000 VDC DWV 400 VDC Working
DC Current Rating	30 Amps max per contact
Surge Voltage	1,000 Volts, 1.2 x 50µs Waveform (12 ohms) 1,000 Volts, 8 x 20µs Waveform (2 ohms)
Insulation Resistance	5,000 megaohms @ 400 VDC
Capacitance	1 nF, 5 nF, 47 nF, (± 20%)
International Standard for EMC	Meets or exceeds EN 61000-4-5 IEC 1000-4-5

### Terminations

PC Tail  
Solder Cup  
Press Fit

