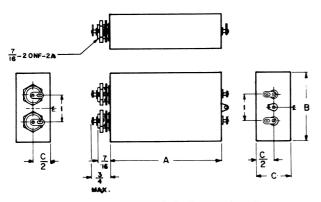




RF Signal Line Filters for Secure Communications over Telephone and Signal Lines

BULKHEAD STYLE: CABINET MOUNTING PENETRATION STYLE: INDEPENDANT MOUNTING



(DIMENSIONS IN INCHES)

Part No	Current (AMP)	Voltage	Freq (Hz)	A	В	C
FC-209	2×0.16	600 VDC	0-60	4.75	2.50	1.25
FC-663	2×0.15	$\begin{array}{c} 250 \mathrm{VAC} \\ 600 \mathrm{VDC} \end{array}$	0-60	4.00	2.50	1.25
FC-1270	2×1.0	$120\mathrm{VAC}$	0-60	7.25	3.50	1.50
FC-1273	2×0.5	$120 \mathrm{VAC}$	0-60	7.25	3.50	1.50
FC-1273	4×0.5	$120 \mathrm{VAC}$	0-60	7.25	7.00	1.50
FC-1273	8 x 0.5	120VAC	0-60	7.25	14.00	1.50

Telephone Filters FC-209, -1280:

- Attenuation: 60dB at 14kHz, 100dB from 25kHz to 10GHz
- Impedance: 300Ω L/G, 600Ω L/L balanced

High Current Telephone Filters FC-1273, -200A:

- Attenuation: 100dB min from 25kHz to 10GHz
- Impedance: 300Ω L/G, 600Ω L/L balanced
- Pass Band: 0-3kHz

High Data Rate Filters FC-663, -1193:

- Attenuation: 100dB min from 100kHz to 10GHz
- Impedance: 300Ω L/G, 600Ω L/L balanced

REMOVABLE COVER A I B A 13 KNOCKOUT S PLACES WIRE LEADS 18" LONG MIN.

Part No	Current (AMP)	Voltage	Freq (Hz)	A	В	C
FC-1280	$2 \ge 0.16$	600 VDC	0-60	6.81	3.50	2.50
FC-1193	2×0.15	$\begin{array}{c} 250 \mathrm{VAC} \\ 600 \mathrm{VDC} \end{array}$	0-60	6.81	3.50	2.50
FC-754A	2×1.0	$120 \mathrm{VAC}$	0-60	9.00	3.50	2.50
FC-754A	2×1.0	220 VAC	0-60	9.00	3.50	2.50
FC-754A	4×1.0	120VAC	0-60	9.00	7.00	2.50
FC-754A	4×1.0	220VAC	0-60	9.00	7.00	2.50
FC-754A	8 x 1.0	$120 \mathrm{VAC}$	0-60	9.00	14.00	2.50
FC-754A	8×1.0	220VAC	0-60	9.00	14.00	2.50
FC-200A	2×0.5	$120 \mathrm{VAC}$	0-60	6.81	3.50	2.50
FC-2930P	2×0.15	500VDC	0-60	4.00	2.50	1.25

Fire Alarm Filters FC-1270, -754A:

- Attenuation: 100dB min from 14kHz to 10GHz
- Inductive input and output

Fire Alarm Filters FC-2930P

- Attenuation: 0—500kHz—0.3dB max
- Attenuation: 2.5MHz—1GHz—100dB min

Performance

Filters meet or exceed the following criteria: MIL-F-15733, MIL-STD-220C, UL1283

Digital Line Filters

Part No	Curren t (AMP)	Insertio n Loss (dB)	Pass Band (kHz)	Stop Band (MHz)	Voltage	A	В	C
FC-3099B-9.6kB/s	2 x 0.15	80	0 - 100	0.4 - 10000	240VAC	4.75	2.50	1.25
FC-3099B-19.2kB/s	2×0.15	80	0 - 200	0.8 - 10000	$240 \mathrm{VAC}$	4.00	2.50	1.25
FC-3099B-64kB/s	2×0.15	80	0 - 640	2.5 - 10000	$240 \mathrm{VAC}$	7.25	3.50	1.50
FC-3099B-200kB/s	$2 \ge 0.15$	80	0 - 2000	8.0 - 10000	$240 \mathrm{VAC}$	7.25	3.50	1.50
FC-3099B-10MB/s	2×0.15	80	0 - 10000	40 - 10000	$240 \mathrm{VAC}$	7.25	3.50	1.50

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Part No



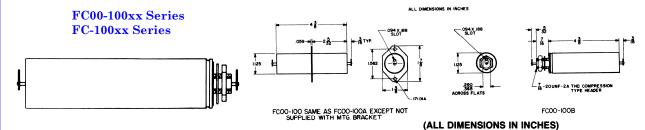
RF Signal Line Filters for Secure Communications over Telephone and Signal Lines

These filters are designed for 600 ohm signal and telephone circuit applications and cover broad frequency spectrum for advanced communication systems.

Three groups of filters are available:

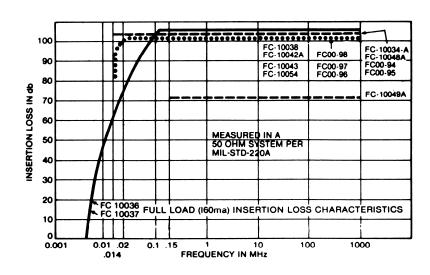
- Individual cylindrical type for "bulkhead mounting"
- Dual filters for chassis mounting or for shielded rooms b.
- Prewired multi-circuit box assemblies, up to 600 filters wired to terminal boards

Individual Circuit Tubular Filters



T_	Type Impedance Circuit		pedance Circuit Insertion Loss (dB)		Max Curre	Rated Voltage	Max Voltage		Case	Dimensio	ons (inch	es)		
NO .	Type	Ω	Circuit	Pass-Band		14kHz	nt	(VDC)	Drop	Tubu	ılar		Rectan	gular
				1 ass=Dailu		14K11Z	(AMP	(VDC)	At rated	Length	Dia	Length	Width	Thickness
43	voice	300	single	<1 dB to	5kHz	80	0.5	300	6	5750	087	-	-	-
4A	voice	300	single	<i db="" td="" to<=""><td>5khz</td><td>>100</td><td>0.1</td><td>100</td><td>2</td><td>-</td><td>-</td><td>8.250</td><td>2.25</td><td>2.375</td></i>	5khz	>100	0.1	100	2	-	-	8.250	2.25	2.375
S	voice	300/600	dual	<i db="" td="" to<=""><td>5kHz</td><td>80</td><td>0.5</td><td>300</td><td>6</td><td>-</td><td>-</td><td>10.0</td><td>2.0</td><td>2.0</td></i>	5kHz	80	0.5	300	6	-	-	10.0	2.0	2.0
4*	voice	300/600	dual	1.5 dB t	o 5kHz	100	0.5	300	8	-	-	10.0	2.0	2.0

		52		Pass-Band	14kHz	nt	(VDC)	Drop	Tubu	uar		Rectan	guiar
				1 ass-Dand	TTKITZ	(AMP	(VDC)	At rated	Length	Dia	Length	Width	Thickness
FC·I0043	voice	300	single	<1 dB to 5k	Hz 80	0.5	300	6	5750	087	-	1	-
FC·10034A	voice	300	single	<i 5k<="" db="" td="" to=""><td>nz >100</td><td>0.1</td><td>100</td><td>2</td><td>-</td><td>-</td><td>8.250</td><td>2.25</td><td>2.375</td></i>	nz >100	0.1	100	2	-	-	8.250	2.25	2.375
FC·1003S	voice	300/600	dual	<i 5kl<="" db="" td="" to=""><td>1z 80</td><td>0.5</td><td>300</td><td>6</td><td>-</td><td>-</td><td>10.0</td><td>2.0</td><td>2.0</td></i>	1z 80	0.5	300	6	-	-	10.0	2.0	2.0
FC 00 94*	voice	300/600	dual	1.5 dB to 5k	Hz 100	0.5	300	8	-	-	10.0	2.0	2.0
FC 00 95**	voice	300/600	dual	1.5 dB to 5k	Hz 100	0.5	300	8	-	-	10.0	2.0	2.0
FC 00 96**	voice	300/600	dual	I.5 dB to 5k	Hz 80	0.5	300	6	-	-	10.00	2.0	2.0
FC 00 97**	voice	300/600	dual	1.5 dB to 5 k	:Hz 80	0.5	300	6	-	-	10.0	2.0	2.0
FC 00 99	voice	300/600	dual	<0.5 dB	80@100kH	0.15	250	.5	-	-	6.0	5.0	1.5
FC 00 100	voice	300/600	single	<0.5 dB	80@100kH	0.15	250	.5	4.375	1.1	-	-	-

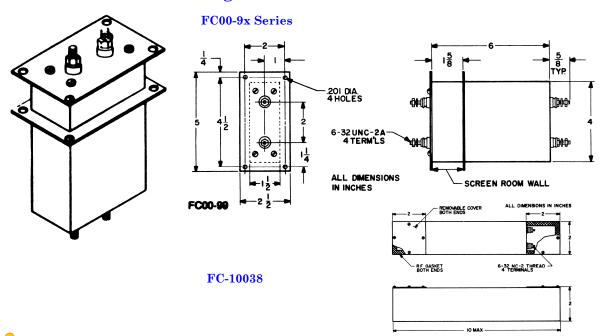




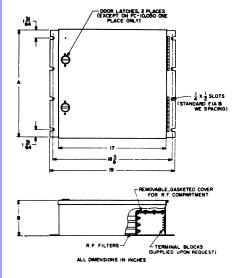


RF Signal Line Filters for Secure Communications over Telephone and Signal Lines

Individual Circuit Rectangular Filters



Multi-Circuit Filters



Filter Module Cases

These cases will accommodate any of the following tubular filter types in any desired combination: FC·10054, FC-10048A, FC·10049A, FC-10037, FC·10042A.

No of Filters	A	В	Case Model		
20	8 3/4	10 1/4	FC-10050		
50	19 1/4	10 1/4	FC-10051		
100	19 1/4	19 1/8	FC-10052		
200	36 3/4	19 1/8	FC-10053		

All units are hermetically sealed and housed in plated metal cases provided with mounting flanges and/or threaded necks for convenient mounting. Terminals are compression-type glass, solder sealed. Duty cycle is continuous for all units. When installed on a shield-room wall, the filters remove spurious high-frequency energy, while providing a continuous RF-tight shield for the filtered signal. Fil-Coil also supplies assemblies of any combination of filters, completely pre-wired to terminal strips and enclosed in RF-tight cabinet. All filters fabricated, tested and installed in accordance with military specification MIL-F-15733 and in accordance with the following detail requirements

Telephone type filters are installed and wired in a metallic shielded enclosure. The enclosures used to house the individual filters are constructed so that the input and output circuits of the filter are shielded from each other to provide the required attenuation. The shielded compartment of the filter enclosure incorporates a removable cover to provide easy access for installation. This shielded compartment has a RF gasket between the cover and the cover mounting surface to maintain the RF integrity of the filter. All filter enclosures are fabricated from sheet steel, no less than .075 inches thick (14 gauge), suitably primed and painted. Each filter enclosure is provided with mounting brackets whose surfaces shall be clean, free of paint, and plated in order to provide a low-impedance ground. The surfaces to which these filters mount will be clean, unpainted, suitably plated surfaces.

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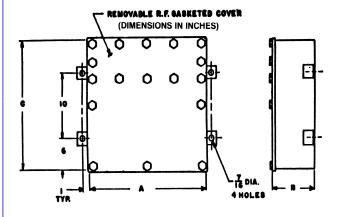




RF Signal Line Filters for Secure Communications over Telephone and Signal Lines

FC-1274 SERIES

Cabinets designed to accommodate FC-1270 or FC-1273 filters. Cabinets may be ordered without filters or with up to a maximum amount of filters indicated in the table. When less than maximum number of filters are ordered, the empty spaces will be R.F. plugged.

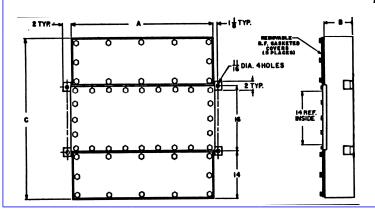


				MAX. NO.	WEIGHT W/
PART NO.	Α	В	\mathbf{C}	OF	FILTERS
				FILTERS	(lbs.)
FC-1274C	18	6	22	6	50
FC-1274CL	20	6	22	7	55
FC-1274D	20	8	22	12	65
FC-1274M	24	11	22	20	80
FC-1274N	24	14	22	25	130
FC-1274B	26'	14	22	30	145
FC-1274P	30	14	22	35	165
FC-1274Q	35	14	22	40	185
FC-1274R	32	18	22	45	200

PART NO.	Α	В	С	MAX. NO. OF	WEIGHT WI
TAILT NO.		Ь	C	FILTERS	(lbs.)
	-				` '
FC-1274E	24	14	44	50	240
FC-1274K	26	16	44	66	255
FC-1274L	30	16	44	78	325
FC-1274F	26	.18	44	88	340
FC-1274G	44	14	44	100	415
FC-1274H	44	18	44	152	52"
FC-1274A	45	18	44	176	510
FC-1274J	44	24	44	200	650

FC-560 SERIES

Cabinets designed to accommodate FC-209 or FC-663 filters. (See page 23 for description of filters.)
Cabinets may be ordered without filters or with up to the max. number of filters indicated in the table. When less than the maximum number of filters are ordered, the empty spaces will be R.F. plugged.



				MAX. NO.	WEIGHT WI
PART NO.	Α	В	С	OF	FILTERS
				FILTERS	(lbs.)
FC-560N	8	4.38	20	4	30
FC-560K	16.75	4.38	20	10	50
FC-560J	20	4.38	20	12	60
FC-560Q	13.75	8.75	20	16	70
FC-560R	16.75	8.75	20	20	80

PART NO_	А	В	С	MAX. NO_ OF FILTERS	WEIGHT WI FILTERS (lbs.)
FC-560F	18.50	5	40	26	120
FC-560G	18.50	8	40	50	170
FC-560H	36	6.50	40	76	260
FC-560D	36	8	40	100	320
FC-560B	54	8	40	150	450
FC-560E	28.44	17.61	40	200	500
FC-560M	39.50	16	40	252	620
FC-560P	54	18	40	300	785
FC-560A	36	20	40	338	850
FC-560L	72	16	40	400	1000

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