DISCRETE FEED-THRU FILTERS

FX SERIES

DESCRIPTION

Amphenol's FX series of Discrete Feed-thru Filters offer excellent, low cost filter solutions for telecom, industrial, military and aerospace electronics applications, especially where small size and high performance are important.

Manufactured to meet the requirements of Mil-F-15733, the FX filters are available in threaded bushing and solder-mount styles with capacitance ranges from 10pF to 600nF.

Due to Amphenol's unique manufacturing process, higher capacitance values and greater voltage withstand capabilities are achieved with the same industry standard package sizes.

Consult factory for custom filter and/or filter plate requirements.

MATERIALS

Terminals: Copper Alloy, silver plated (filter pins shown are gold plated)
Eyelets/Bushings: Brass, silver plated

Amphenol®

ORDERING INFORMATION

FX B - 1 P 152 1 - 100

FX — **Discrete Filter Series**

B — **B** - Threaded Bushing
E - Solder-in Eyelet
F - Filter Pin
P - Filter Plate (Consult Factory)

1 — **Mtg Style**
1 - .110 Mtg Hole Dia.
2 - .138 Mtg Hole Dia.
3 - .145 Mtg Hole Dia.
4 - .210 Mtg Hole Dia.
0 - Special Size

Bushing Only
5 - 6-32 Thread
6 - 8-32 Thread
7 - 12-32 Thread
8 - 5/16-32 Thread

P — **Circuit Type**
P - Pi
C - Capacitive
L - L

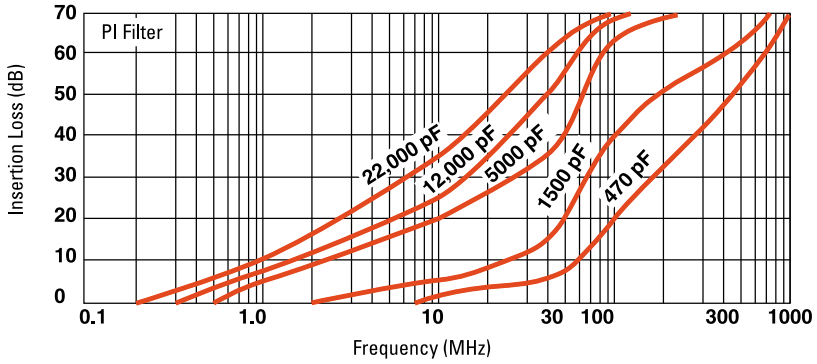
Deviation code — **100** - Standard Cataloge Package Sizes (see page 4) — **100**

Termination — **1** - Straight Lead, **2** - Nail Head (Turret), **3** - Solder Cup, **4** - P.C. Tail, **5** - Flattened & Pierced, **6** - Hooked Term — **1**

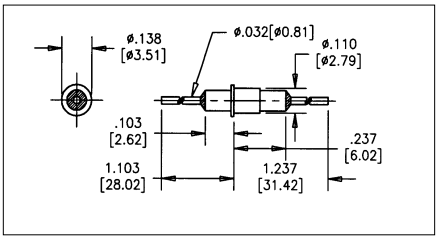
Capacitance Code (PF) — **101** - 100pF, **202** - 2000pF, **203** - 20,000pF (Last digit of 3 number code is the number of zeros after first 2 digits) — **152**

TYPICAL INSERTION LOSS

Insertion Loss characteristics shown are typical for the given minimum capacitance values of PI filter configurations when tested per MIL-STD-220 at no load.

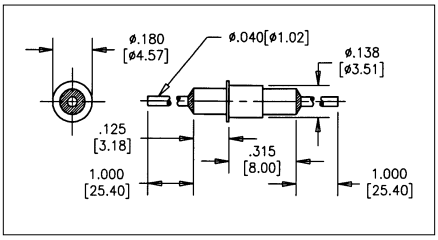


Telephone: (416) 754-5656 Facsimile: (416) 754-8668 Email: sales@amphenolcanada.com



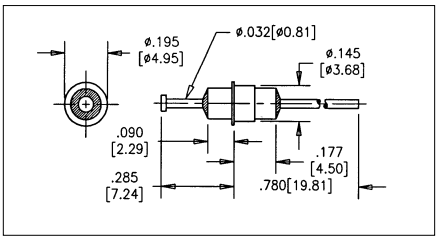
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXE-1P1521-000	1,500	350	700	10	5	15	40	70	70



ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXE-2P3021-000	3,000	350	700	10	10	35	55	70	70
FXE-2P8021-000	8,000	250	500	10	18	35	68	70	70



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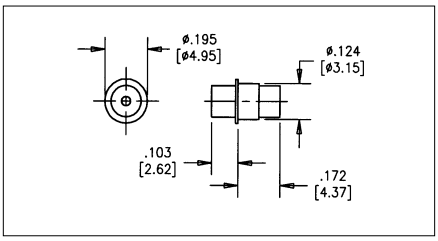
Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXE-3P1822-000	1,800	250	500	10	5	15	50	70	70



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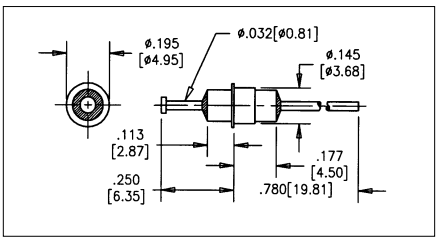
Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXE-3P1820-000	1,800	250	500	10	5	15	45	60	60



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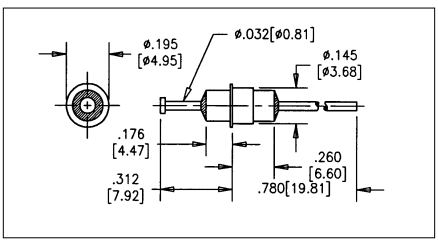
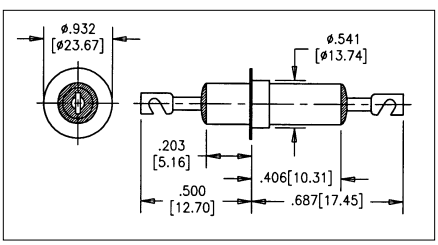
Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXE-3P1232-000	12,000	100	200	10	25	50	70	70	70



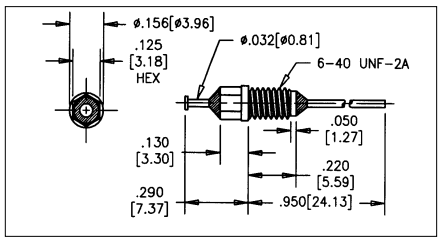
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXE-3P2232-000	22,000	100	200	10	35	60	70	70	70



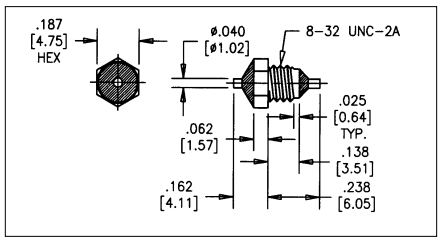
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXE-4P3025-000	3,000	500	700	25	8	25	50	70	70



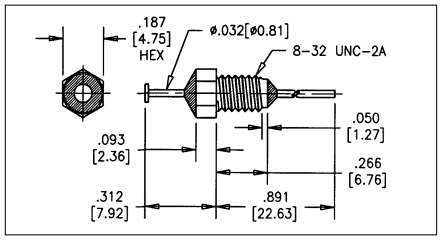
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXB-5P1522-000	1,500	200	500	10	5	15	40	60	60
FXB-5P3022-000	3,000	200	500	10	8	15	50	70	70



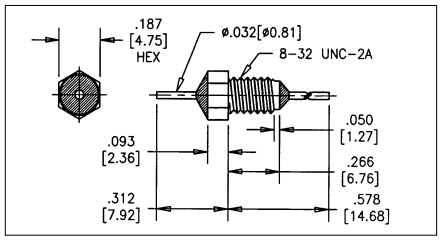
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXB-6P1521-001	1,500	200	500	15	5	10	35	60	60



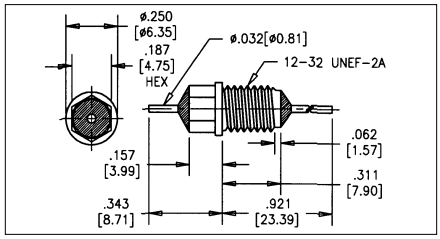
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXB-6P1522-000	1,500	350	700	15	5	15	45	70	70



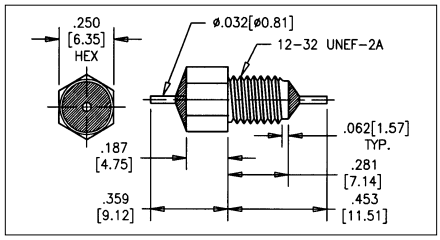
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXB-6P5021-000	5,000	100	2000	10	20	30	65	70	70



ELECTRICAL CHARACTERISTICS

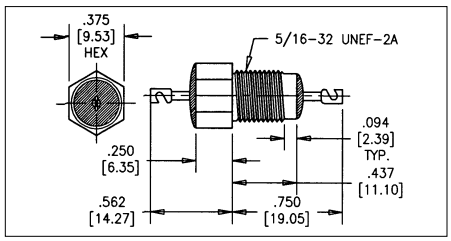
Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXB-7P1521-003	1,500	350	700	10	5	15	45	70	70
FXB-7P5021-000	5,000	100	200	10	20	35	65	70	70



ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXB-0P1521-007	1,500	350	700	10	5	15	45	70	70
FXB-0P5521-005	5,500	200	500	10	20	35	65	70	70
FXB-0P1521-004*	1,500	350	700	10	5	15	45	70	70

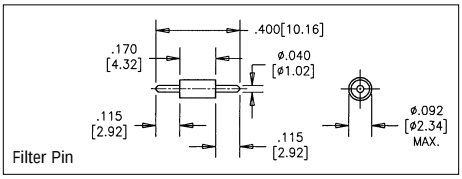
*Thread is 12-28



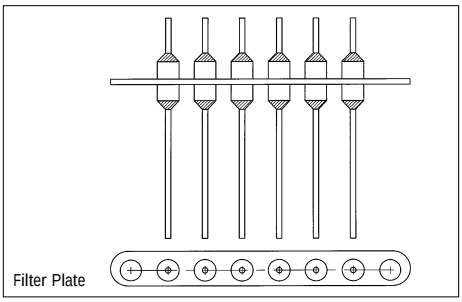
ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXB-8P2025-000	2,000	700	1400	25	5	20	50	70	70
FXB-8P3025-000	3,000	500	1000	25	10	35	55	70	
FXB-0P3025-006*	3,000	500	1000	25	10	35	55	70	70

*Thread is 5/16-24 Thread



Filter Pin


Filter Plate

ELECTRICAL CHARACTERISTICS

Part Number	Cap Min (pF)	Working Voltage	DWV (VDC)	Current (Amp)	Insertion Loss (dB) @ 25 Deg.C, per Mil-std-220				
					10 MHz	30 MHz	100 MHz	1 GHz	10 GHz
FXF-0P1524-000	1,500	200	500	5	5	10	25	60	60
FXF-0P4714-000	470	200	500	5	2	5	20	60	60

Filter Pins and Filter Plates can be manufactured in many shapes, sizes and capacitance values. Filter Plates allow easy mating to headers, sockets and pc boards while eliminating EMI between electronic system modules.

Filter Plates, with custom sizes and arrangements offer lower installed cost, improved EMI performance and design flexibility. Consult Amphenol for your customized filter solutions.

STANDARD PACKAGE SIZE- 100 DEVIATION

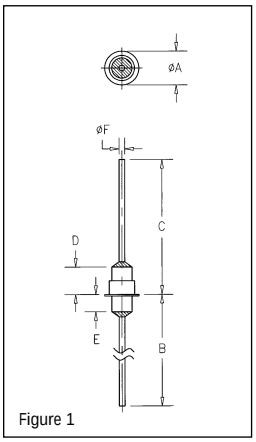


Figure 1

SOLDER-IN EYELET, PI FILTER

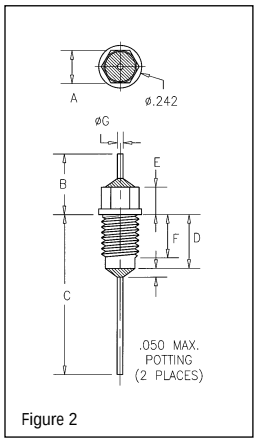


Figure 2

THREADED BUSHING STYLE FOR 12-32 THREAD SIZE, PI FILTER

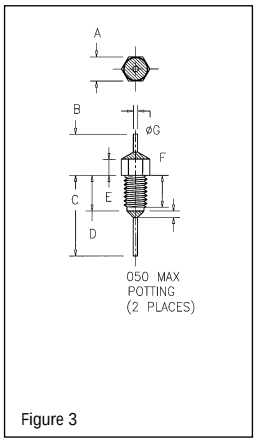


Figure 3

THREADED BUSHING STYLE FOR 6-32, 8-32, AND 5/16-32 THREAD SIZE, PI FILTER

SOLDER-IN EYELET, PI FILTER CHARACTERISTICS

Mounting Hole Diameter	Fig.	A	B	C	D	E	F	Max Cap
.110	1	.138	1.116	1.224	.224	.116	.032	15,000 pF
.138	1	.180	1.125	1.315	315	.125	.032	30,000 pF
.145	1	.190	.312	.780	.337	.156	.032	30,000 pF
.210	1	.312	.500	.687	.406	.203	.057	69,000 pF

Dimensions shown in inches

FXE-xPxxx1-100

Cap Code XXX

Mtg style X

THREADED BUSHING, PI FILTER CHARACTERISTICS

Thread	Fig.	A	B	C	D	E	F	G	Max Cap
6 - 32	3	.156	.290	.950	.266	.130	.170	.020	30,000 pF
8 - 32	3	.187	.312	.891	.266	.093	.216	.032	30,000 pF
12 - 32	2	.187	.343	.921	.311	.157	.261	.040	30,000 pF
5/16 - 32	3	.375	.562	.750	.437	.250	.337	.057	69,000 pF

Dimensions shown in inches

FXB-xPxxx-100

Cap Code XXX

Mtg style X

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