

PRODUCT SELECTION GUIDE

Filter With Solder Cup Contacts

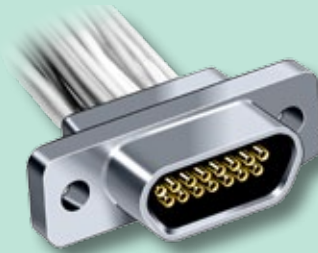
Available in 9, 15, 21, 25, 31, and 37 contacts, these aluminum shell filtered Micro-D connectors are backfilled with thermally conductive epoxy to allow soldering without heat damage to sensitive filter elements.



*Solder Cup Filter
Page G-5*

Pre-Wired Pigtail Filter Connector

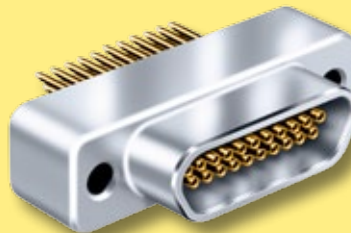
These pre-wired connectors save labor and provide added reliability. Choose from 9 to 37 contacts. Mates to standard M83513 type Micro-D connectors.



*Pre-Wired Filter
Page G-7*

Vertical Printed Circuit Board Micro-D Filter

Featuring a one piece aluminum shell, these thru-hole board mount connectors can be ordered with jackposts or with jackscrews for flex-to-board applications. PC terminals are .018" (0.46 mm.) diameter and are spaced .050" (1.27 mm.) apart.



*Vertical PCB Filter
Page G-11*

90° Printed Circuit Board Micro-D Filter

These right angle thru-hole headers replicate the popular "CBR" .100" by .100" terminal spacing. Filter elements are housed in a wider shell. A molded rear tray withstands soldering heat and is impervious to chemicals. Terminals are encapsulated in epoxy.



*Right Angle
PCB Filter
Page G-15*

In-Line Filter Adapter

Avoid costly redesign with pin/socket feed-thru adapters. These adapters plug into any standard M83513 connector. Simply unplug your existing cable, install the filter adapter and reconnect the cable.



*Feed-Thru Adapter
Page G-9*

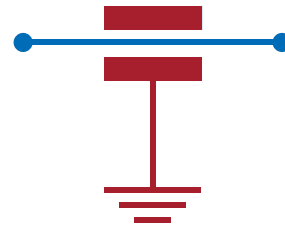
ABOUT MICRO-D FILTER CONNECTORS

Glennair Filter Micro-D connectors are low-pass filters, transmitting DC and low frequency signals while attenuating unwanted high frequency noise. These connectors are available with **C** filter elements or **Pi** filters. The filter substrates are constructed with a ceramic planar capacitor array.

Glennair Filter Micro-D's meet the demanding performance requirements of MIL-DTL-83513, except for a reduction in the dielectric withstanding voltage rating to 200 volts DC (higher voltages available on request). The TwistPin contact system assures superior performance in the most demanding applications.

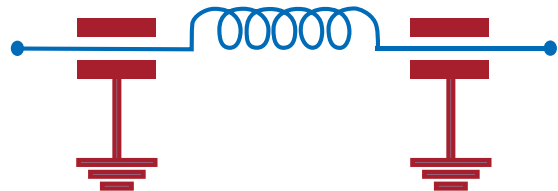
C Filter

Single capacitor with low self inductance. This configuration is generally used to attenuate high frequency signals. The simple design allows high-frequency EMI to discharge to ground via the surrounding electromagnetic field. C filters occupy the least amount of space and offer lower cost compared to other filter types.

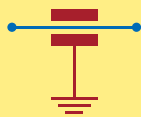


Pi Filter

Dual capacitors with a ferrite inductor positioned between them. The Pi filter provides excellent high-frequency performance due to its sharper rolloff.



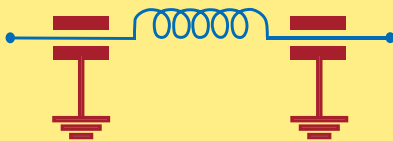
MICRO-D C FILTER ATTENUATION AND CAPACITANCE VALUES



C Filter

Filter Class	Capacitance pF	No Load Insertion Loss (dB Minimum)			
		1 MHz	10 MHz	100 MHz	500–1000 MHz
A	19,000 — 28,000	6	24	41	50
B	16,000 — 22,500	5	23	39	49
C	9,000 — 16,500	3	16	35	46
D	4,000 — 6,000	—	8	28	41
E	1,650 — 2500	—	4	21	34
F	400 — 650	—	—	10	23
G	200 — 300	—	—	5	17

MICRO-D PI FILTER ATTENUATION AND CAPACITANCE VALUES



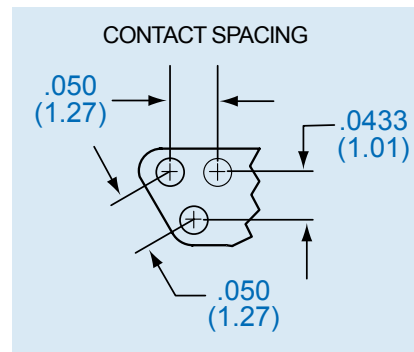
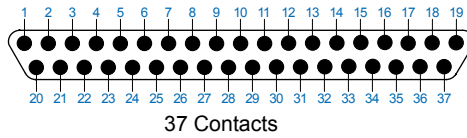
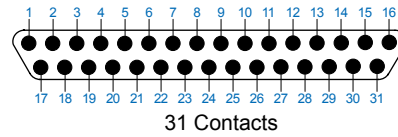
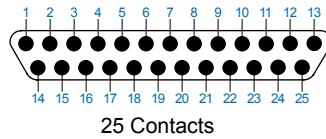
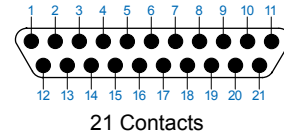
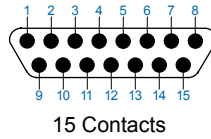
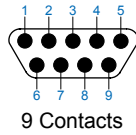
Pi Filter

Filter Class	Capacitance pF	No Load Insertion Loss (dB Minimum)			
		1 MHz	10 MHz	100 MHz	500–1000 MHz
A	38,000 — 56,000	10	40	62	66
B	32,000 — 45,000	8	35	60	62
C	18,000 — 33,000	5	25	57	60
D	8,000 — 12,000	1	14	50	58
E	3300 — 5000	—	8	40	52
F	800 — 1300	—	2	15	32
G	400 — 600	—	0.8	13	22

Micro-D Filter Connectors General Information



MICRO-D FILTER CONNECTOR CONTACT ARRANGEMENTS (FACE VIEW PIN CONNECTOR)



PERFORMANCE SPECIFICATIONS

Current Rating	3 AMP
Dielectric Withstanding Voltage	250 VDC
Working Voltage	100 VDC
Insulation Resistance	5000 Megohms Minimum
Contact Resistance	8 Milliohms Maximum
Low Level Contact Resistance	32 Milliohms Maximum
Magnetic Permeability	2 μ Maximum
Operating Temperature	-55° C. to +125° C.
Shock	50 g.
Vibration	20 g.
Mating Force	(10 Ounces) X (# of Contacts)
Capacitance and Attenuation	(See Table on Preceding Page)

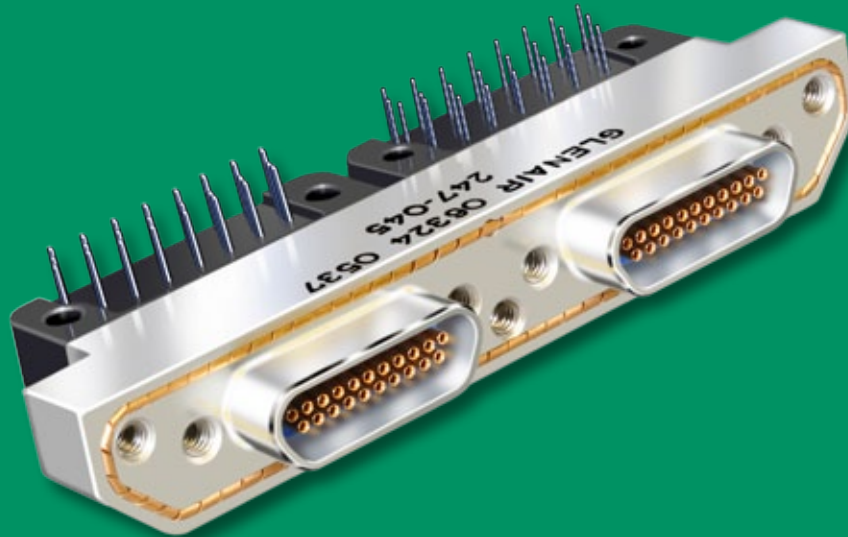
MATERIALS AND FINISHES

Connector Shell	Aluminum Alloy 6061 or Stainless Steel, 300 Series, Passivated See Ordering Info for Aluminum Plating Options.
Insulator	Liquid Crystal Polymer (LCP)
Seals	Fluorosilicone Rubber, Blue
Pin Contact	Beryllium Copper With 50 Microinches Gold over Nickel Plating
Socket Contact	Copper Alloy With 50 Microinches Gold Over Nickel Plating
Hardware	300 Series Stainless Steel
PCB Terminals	Gold-Plated Copper Alloy, Solder Dipped
Capacitors	Planar Ceramic Array
Inductors	Ferrite
EMI Ground Spring	Beryllium Copper, Gold Plated
Encapsulant	Thermally Conductive Epoxy

SPECIAL PRODUCT INFORMATION

Innovative Designs to Meet Every Need

Sometimes a standard part just won't do. For these situations Glenair welcomes your custom requirements. Whatever the need, we can propose a solution and back it up with rapid design and prototyping.



Micro-D Filter Connectors Solder Cup



Glenair's Filtered Solder Cup Micro-D's provide EMI solutions in a miniaturized M83513 type connector. These connectors feature ceramic capacitor planar arrays and ferrite inductors. Solder cups accept #26 thru #30 AWG wire, or specify oversize contacts for #24 gage wire.

Choose Pi or C Filter Arrays in seven filter classes and six layouts. Glenair filtered Micro-D connectors comply with applicable MIL-DTL-83513 requirements and are 100% interchangeable with standard connectors.

Choose 9 to 37 Contacts, with standard cadmium or nickel plating on the connector housing or choose optional finishes such as gold or chem film.

HOW TO ORDER FILTER MICRO-D CONNECTORS WITH SOLDER CUPS

Series	Shell Finish	Number of Contacts	Contact Type	Filter Type	Filter Class	Hardware
240-030	Aluminum Shell	9	Solder Cup Contacts for #24 AWG or Smaller Wire P – Pin S – Socket	C – C Filter P – Pi Filter	A	B
	1 – Cadmium	15			B	P
	2 – Nickel	21			C	M
	4 – Black Anodize	25			D	M1
	5 – Gold	31			E	S
	6 – Chem Film	37			F	S1
					G	L
Stainless Steel Shell						K
	3 – Passivated				See "Filter Classes" on Following Page	F
						R
Sample Part Number						
240-030	- 2	- 25	P	P	B	B

MICRO-D MOUNTING HARDWARE

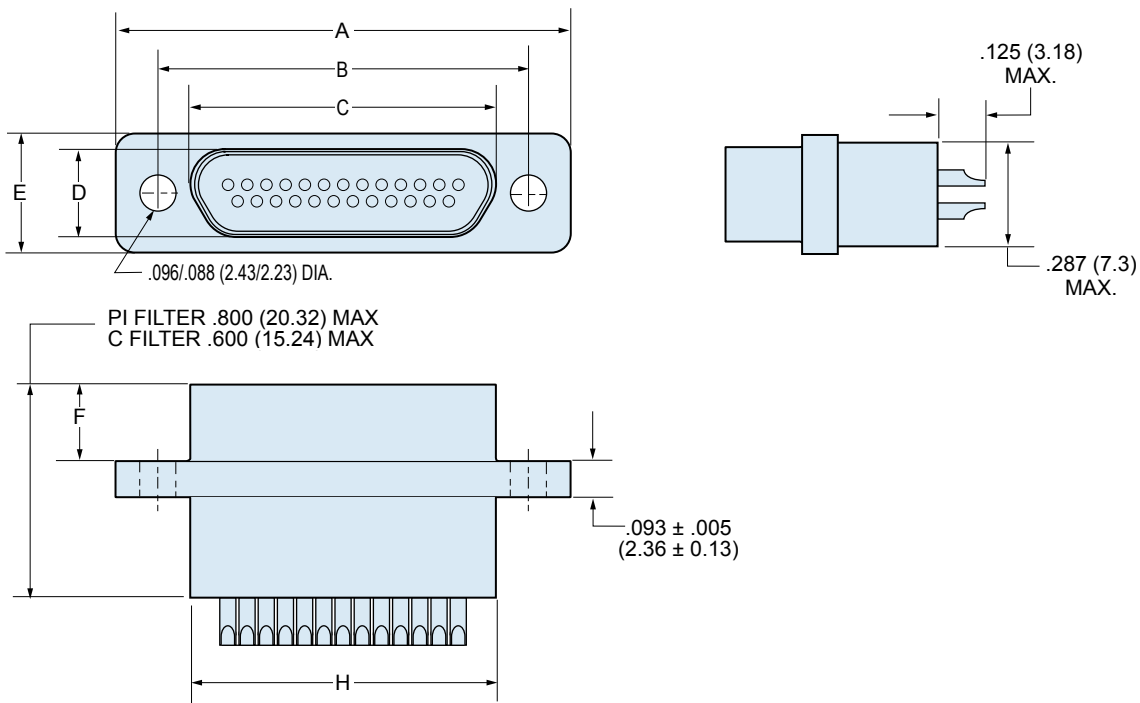
B	P	M	M1	S	S1	L	K	F	R
Thru-Hole Order Hardware Separately	Jackpost Removable Includes Nut and Washer	Jackscrew Hex Head Removable E-ring	Jackscrew Hex Head Removable E-ring Extended	Jackscrew Slot Head Removable E-ring	Jackscrew Slot Head Removable E-ring Extended	Jackscrew Hex Head Non-Removable	Jackscrew Slot Head Non-Removable Extended	Float Mount For Front Panel Mounting	Float Mount For Rear Panel Mounting



Micro-D Filter Connectors Solder Cup

MICRO-D FILTER CLASSES AND PERFORMANCE

Filter Class →	A		B		C		D		E		F		G	
Capacitance, Picofarads (pF)														
C Filter	19000-28000		16000-22500		9000-16500		4000-6000		1650-2500		400-650		200-300	
Pi Filter	38000-56000		32000-45000		18000-33000		8000-12000		3300-5000		800-1300		400-600	
Insertion Loss, dB Minimum, 25° C.														
Filter Type →	C		Pi		C		Pi		C		Pi		C	
1 MHz	6	10	5	8	3	5	—	1	—	—	—	—	—	—
10 MHz	24	40	23	35	16	25	8	14	4	8	—	2	—	0.8
100 MHz	41	62	39	60	35	57	28	50	21	40	10	15	5	13
500-1000 MHz	50	66	49	62	46	60	41	58	34	52	23	32	17	22



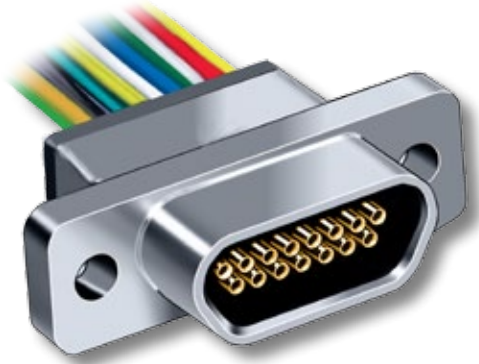
DIMENSIONS

Layout	A Max.		B		C Max.		D Max.		E Max.		F		H Max.	
	In.	mm.	In. $\pm .003$	mm. ± 0.08	In.	mm.	In.	mm.	In.	mm.	In. $\pm .004$	mm. ± 0.10	In.	mm.
9P	.785	19.94	.565	14.35	.333	8.46	.184	4.67	.322	8.18	.183	4.65	.400	10.16
9S	.785	19.94	.565	14.35	.400	10.16	.250	6.35	.322	8.18	.195	4.95	.400	10.16
15P	.935	23.75	.715	18.16	.483	12.27	.184	4.67	.322	8.18	.183	4.65	.550	13.97
15S	.935	23.75	.715	18.16	.551	14.00	.250	6.35	.322	8.18	.195	4.95	.550	13.97
21P	1.085	27.56	.865	21.97	.633	16.08	.184	4.67	.322	8.18	.183	4.65	.700	17.78
21S	1.085	27.56	.865	21.97	.701	17.81	.250	6.35	.322	8.18	.195	4.95	.700	17.78
25P	1.185	30.01	.965	24.51	.733	18.62	.184	4.67	.322	8.18	.183	4.65	.800	20.32
25S	1.185	30.01	.965	24.51	.801	20.35	.250	6.35	.322	8.18	.195	4.95	.800	20.32
31P	1.335	33.91	1.115	28.32	.883	22.43	.184	4.67	.322	8.18	.183	4.65	.950	24.13
31S	1.335	33.91	1.115	28.32	.951	24.16	.250	6.35	.322	8.18	.195	4.95	.950	24.13
37P	1.485	37.72	1.265	32.13	1.033	26.24	.184	4.67	.322	8.18	.183	4.65	1.100	27.94
37S	1.485	37.72	1.265	32.13	1.101	27.96	.250	6.35	.322	8.18	.195	4.95	1.100	27.94

Micro-D Filter Connectors Pre-Wired Pigtails with Insulated Wire



Micro-D
Filter



Glenair's Filtered Pigtail Micro-D's provide EMI solutions in a miniaturized M83513 Micro-D connector. These connectors feature ceramic capacitor planar arrays and ferrite inductors. Insulated wire is factory precision-crimped to TwistPin contacts for superior reliability in the most demanding environments.

Choose Pi or C Filter Arrays in seven filter classes and six layouts. Glenair filtered Micro-D connectors comply with applicable MIL-DTL-83513 requirements and are 100% intermateable with standard connectors.

Choose 9 to 37 Contacts, with standard cadmium or nickel plating on the connector housing or choose optional finishes such as gold or chem film.

HOW TO ORDER FILTER MICRO-D CONNECTORS WITH INSULATED WIRE PIGTAILS

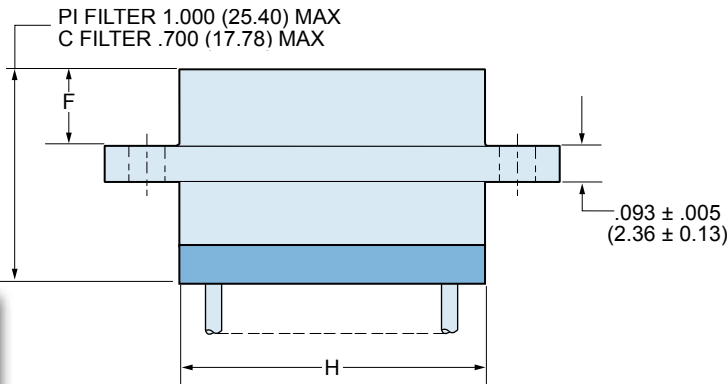
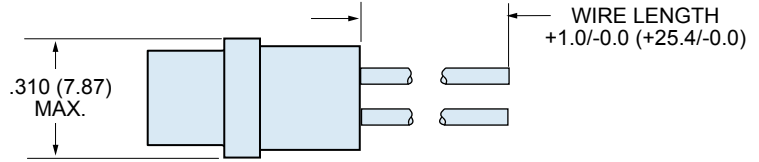
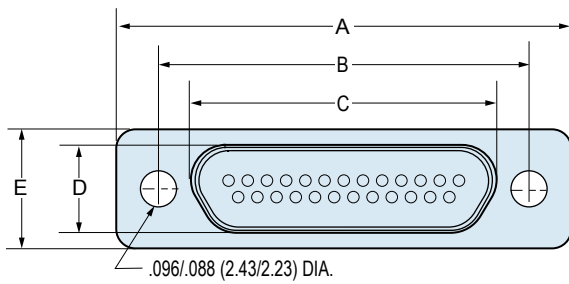
Series	Shell Finish	Number of Contacts	Contact Type	Filter Type	Filter Class	Wire Gage (AWG)	Wire Type	Wire Color	Wire Length Inches	Hardware	
240-032	Aluminum Shell	9	P Pin	C – C Filter	A	4 – #24	K – M22759/11 600 Vrms Teflon® (TFE)	1 – White	18 Wire Length In Inches. "18" Specifies 18 Inches.	B P M M1 S S1 L K F R	
		15		P – Pi Filter		6 – #26		2 – Yellow			
		21	S Socket		B C D E F G	8 – #28	J – M22759/33 600 Vrms Modified Cross-Linked Tefzel® (ETFE)	5 – Color-Coded Stripes Per MIL-STD-681 (#24 and #26 gage only)			
		25						7 – Ten Color Repeat			
		31									
		37									
	Stainless Steel Shell										
	3 – Passivated										
	Sample Part Number										
	240-032	2	– 25	P	P	B	6	K	1	– 18	B

MICRO-D MOUNTING HARDWARE

B	P	M	M1	S	S1	L	K	F	R
Thru-Hole Order Hardware Separately	Jackpost Removable Includes Nut and Washer	Jackscrew Hex Head Removable E-ring	Jackscrew Hex Head Removable E-ring Extended	Jackscrew Slot Head Removable E-ring	Jackscrew Slot Head Removable E-ring Extended	Jackscrew Hex Head Non-Removable	Jackscrew Slot Head Non-Removable Extended	Float Mount For Front Panel Mounting	Float Mount For Rear Panel Mounting



Micro-D Filter Connectors Pre-Wired Pigtails with Insulated Wire



G

DIMENSIONS

Layout	A Max.		B		C Max.		D Max.		E Max.		F		H Max.	
	In.	mm.	In. ± .003	mm. ± 0.08	In.	mm.	In.	mm.	In.	mm.	In. ± .004	mm. ± 0.10	In.	mm.
9P	.785	19.94	.565	14.35	.333	8.46	.184	4.67	.322	8.18	.183	4.65	.400	10.16
9S	.785	19.94	.565	14.35	.400	10.16	.250	6.35	.322	8.18	.195	4.95	.400	10.16
15P	.935	23.75	.715	18.16	.483	12.27	.184	4.67	.322	8.18	.183	4.65	.550	13.97
15S	.935	23.75	.715	18.16	.551	14.00	.250	6.35	.322	8.18	.195	4.95	.550	13.97
21P	1.085	27.56	.865	21.97	.633	16.08	.184	4.67	.322	8.18	.183	4.65	.700	17.78
21S	1.085	27.56	.865	21.97	.701	17.81	.250	6.35	.322	8.18	.195	4.95	.700	17.78
25P	1.185	30.01	.965	24.51	.733	18.62	.184	4.67	.322	8.18	.183	4.65	.800	20.32
25S	1.185	30.01	.965	24.51	.801	20.35	.250	6.35	.322	8.18	.195	4.95	.800	20.32
31P	1.335	33.91	1.115	28.32	.883	22.43	.184	4.67	.322	8.18	.183	4.65	.950	24.13
31S	1.335	33.91	1.115	28.32	.951	24.16	.250	6.35	.322	8.18	.195	4.95	.950	24.13
37P	1.485	37.72	1.265	32.13	1.033	26.24	.184	4.67	.322	8.18	.183	4.65	1.100	27.94
37S	1.485	37.72	1.265	32.13	1.101	27.96	.250	6.35	.322	8.18	.195	4.95	1.100	27.94

Micro-D Filter Connectors Pin-Socket In-Line Filter Adapters



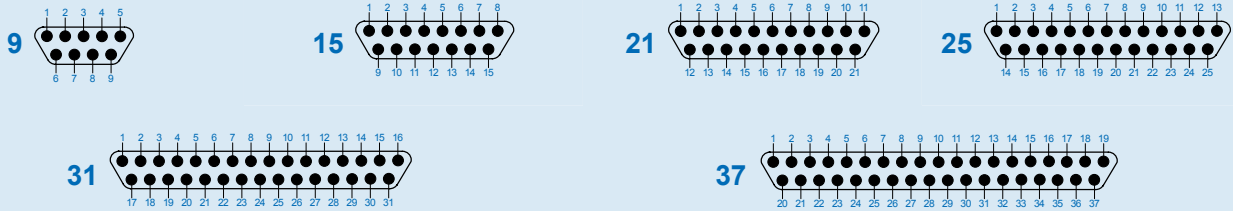
Avoid Costly Redesign with Micro-D Filter Adapters. Upgrade your existing cables and boxes to meet EMI requirements. These pin-socket adapters can be plugged into any standard M83513 connectors. Simply unplug your existing cable, install the filter adapter, and plug the cable into the adapter.

In-Line Filter Adapters feature gold plated TwistPin contacts, machined aluminum shells, and either Pi or C filter elements. These environmentally sealed adapters are designed to meet the requirements of MIL-DTL-83513.

HOW TO ORDER MICRO-D IN-LINE FILTER ADAPTERS

Series	Shell Finish	Number of Contacts	Contact Type	Filter Type	Filter Class	Hardware
240-033	1 – Cadmium	9	PS Pin/Socket	C – C Filter	A	N – No Hardware
	2 – Nickel	15		P – Pi Filter	B	P – Combination Jackscrew and Jackpost (See photograph on this page).
	4 – Black Anodize	21		C		
	5 – Gold	25		D		
	6 – Chem Film	31		E		
	Stainless Steel Shell	37		F		
	3 – Passivated			G		
<i>Sample Part Number</i>						
240-033	2	– 25	PS	C	D	P

MICRO-D IN-LINE FILTER ADAPTER CONTACT ARRANGEMENTS



Mating Face View of Pin Connector. Socket connectors have reversed cavity numbers.

MICRO-D FILTER CLASSES AND PERFORMANCE

Filter Class →	A		B		C		D		E		F		G	
Capacitance, Picofarads (pF)														
C Filter	19000-28000		16000-22500		9000-16500		4000-6000		1650-2500		400-650		200-300	
Pi Filter	38000-56000		32000-45000		18000-33000		8000-12000		3300-5000		800-1300		400-600	
Insertion Loss, dB Minimum, 25° C.														
Filter Type →	C	Pi	C	Pi	C	Pi	C	Pi	C	Pi	C	Pi	C	Pi
1 MHz	6	10	5	8	3	5	—	1	—	—	—	—	—	—
10 MHz	24	40	23	35	16	25	8	14	4	8	—	2	—	0.8
100 MHz	41	62	39	60	35	57	28	50	21	40	10	15	5	13
500-1000 MHz	50	66	49	62	46	60	41	58	34	52	23	32	17	22



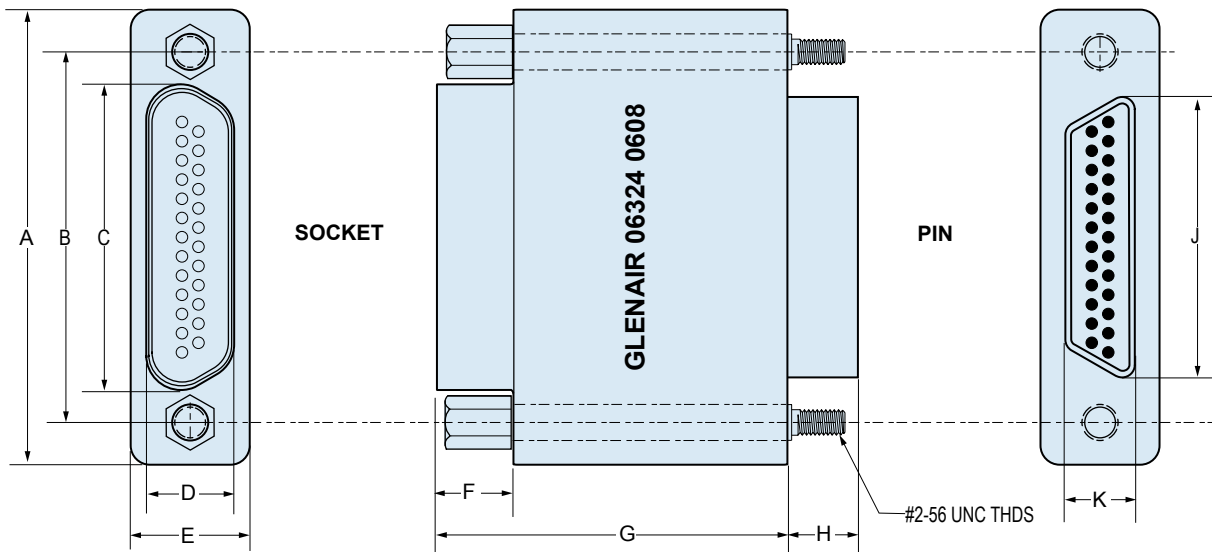
Micro-D Filter Connectors Pin-Socket In-Line Filter Adapters

PERFORMANCE SPECIFICATIONS

Current Rating	3 AMP
Dielectric Withstanding Voltage	250 VDC
Working Voltage	100 VDC
Insulation Resistance	5000 Megohms Minimum
Contact Resistance	8 Milliohms Maximum
Low Level Contact Resistance	32 Milliohms Maximum
Magnetic Permeability	2 μ Maximum
Operating Temperature	-55° C. to +125° C.
Shock	50 g.
Vibration	20 g.
Mating Force	(10 Ounces) X (# of Contacts)
Capacitance and Attenuation	(See Table on Preceding Page)

MATERIALS AND FINISHES

Connector Shell	Aluminum Alloy 6061 or Stainless Steel, 300 Series, Passivated See Ordering Info for Aluminum Plating Options.
Insulator	Liquid Crystal Polymer (LCP)
Seals	Fluorosilicone Rubber, Blue
Pin Contact	Beryllium Copper With 50 Microinches Gold over Nickel Plating
Socket Contact	Copper Alloy With 50 Microinches Gold Over Nickel Plating
Hardware	300 Series Stainless Steel
PCB Terminals	Gold-Plated Copper Alloy, Solder Dipped
Capacitors	Planar Ceramic Array
Inductors	Ferrite
EMI Ground Spring	Beryllium Copper, Gold Plated
Encapsulant	Thermally Conductive Epoxy



DIMENSIONS

Layout	A Max.		B		C Max.		D Max.		E Max.		F		G Max.		H		J Max.		K Max.	
	In.	mm.	In. $\pm .003$	mm. ± 0.08	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In. $\pm .004$	mm. ± 0.10	In.	mm.	In.	mm.
9PS	.785	19.94	.565	14.35	.333	8.46	.250	6.35	.322	8.18	.195	4.95	1.400	35.56	.183	4.65	.333	8.46	.184	4.67
15PS	.935	23.75	.715	18.16	.483	12.27	.250	6.35	.322	8.18	.195	4.95	1.400	35.56	.183	4.65	.483	12.27	.184	4.67
21PS	1.085	27.56	.865	21.97	.633	16.08	.250	6.35	.322	8.18	.195	4.95	1.400	35.56	.183	4.65	.633	16.08	.184	4.67
25PS	1.185	30.01	.965	24.51	.733	18.62	.250	6.35	.322	8.18	.195	4.95	1.400	35.56	.183	4.65	.733	18.62	.184	4.67
31PS	1.335	33.91	1.115	28.32	.883	22.43	.250	6.35	.322	8.18	.195	4.95	1.400	35.56	.183	4.65	.883	22.43	.184	4.67
37PS	1.485	37.72	1.265	32.13	1.033	26.24	.250	6.35	.322	8.18	.195	4.95	1.400	35.56	.183	4.65	1.033	26.24	.184	4.67

Micro-D Filter Connectors Vertical Printed Circuit Board



Micro-D
Filter



Printed Circuit Board Micro-D Filter Connectors. These vertical mount PCB connectors are ideal for flexible circuit or motherboard applications.

Key Features include gold plated TwistPin contacts, machined aluminum shells, and either Pi or C filter elements. These environmentally sealed connectors are designed to meet the requirements of MIL-DTL-83513.

Integral Board Standoffs and Pre-Tinned Tails—These connectors are solder dipped (63/37 SnPb) and feature a full complement of mounting hardware options.

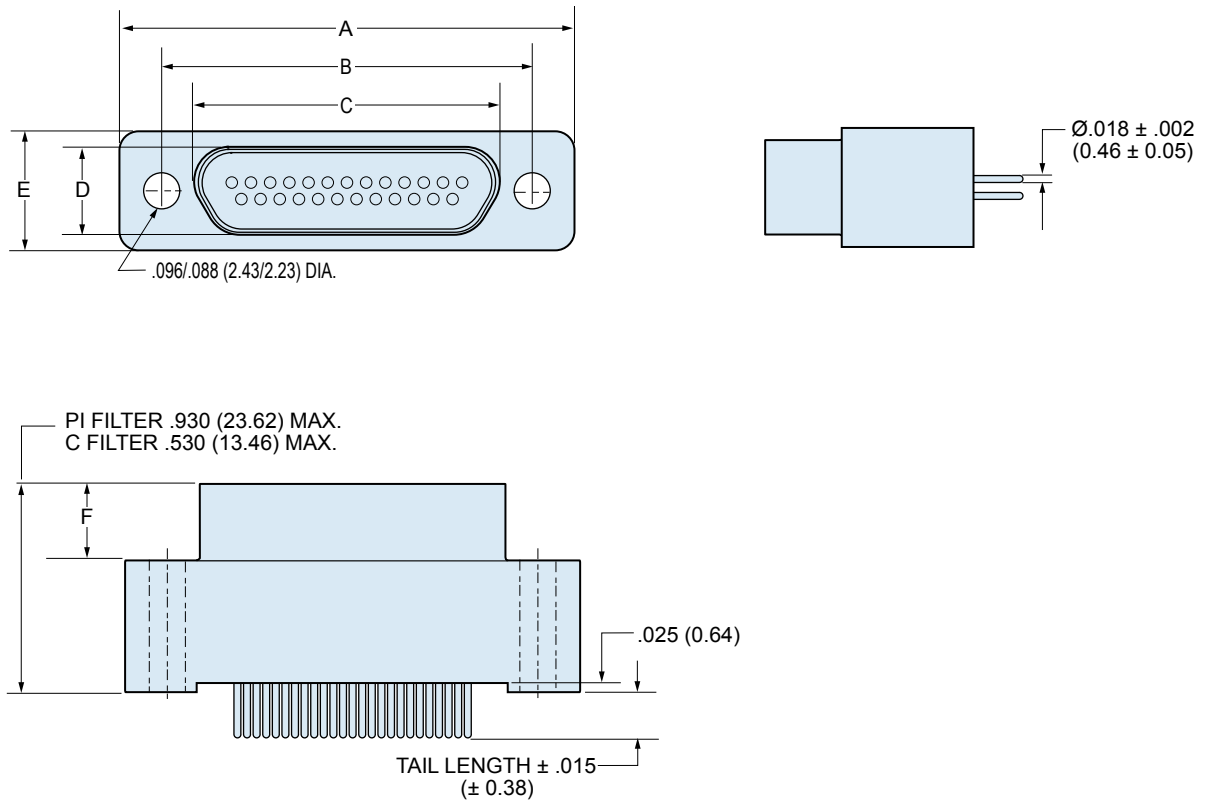
HOW TO ORDER MICRO-D FILTER VERTICAL MOUNT PCB CONNECTORS

Series	Shell Finish	Number of Contacts	Contact Type	Filter Type	Filter Class	PC Tail Length	Hardware Option
240-031	1 – Cadmium	9	P Pin	C C Filter	A	1 – .110 Inches (2.79)	NN – No Jackpost, No Threaded Insert PN – Extended Jackpost for .062" (1.6) PCB, No Threaded Insert RN – Extended Jackpost for .196" (5.0) PCB, No Threaded Insert NU – Threaded Insert Only, No Jackposts PU – Short Jackpost and Threaded Insert Rear Panel Jackposts With Threaded Inserts R6U – 0.125" (3.2) Panel R5U – 0.094" (2.4) Panel R4U – 0.062" (1.6) Panel R3U – 0.047" (1.2) Panel R2U – 0.031" (0.8) Panel JackscREW Options M – Hex Head Jackscrews S – Slot Head Jackscrews
	2 – Nickel	15					
	4 – Black Anodize	21					
	5 – Gold	25					
	6 – Chem Film	31					
		37					
			S Socket	P Pi Filter	C	2 – .250 Inches (6.35)	
					D	Length in Inches ± .015 (0.38)	
					E		
				F			
				G			
	Stainless Steel Shell						
	3 – Passivated						
Sample Part Number							
240-031	2	– 25	P	C	D	1	PN





Micro-D Filter Connectors Vertical Printed Circuit Board

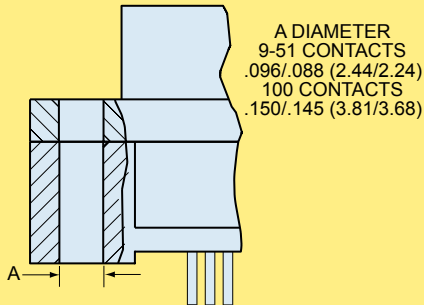


G

MICRO-D FILTER VERTICAL PCB DIMENSIONS

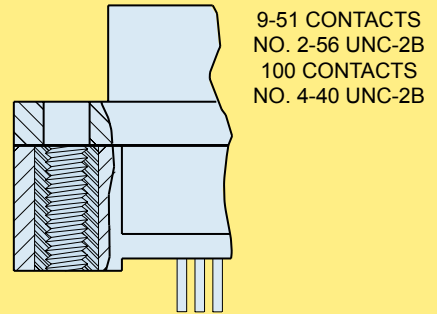
Layout	A Max.		B		C Max.		D Max.		E Max.		F	
	In.	mm.	In. ± .003	mm. ± 0.08	In.	mm.	In.	mm.	In.	mm.	In. ± .004	mm. ± 0.10
9P	.785	19.94	.565	14.35	.333	8.46	.184	4.67	.322	8.18	.183	4.65
9S	.785	19.94	.565	14.35	.400	10.16	.250	6.35	.322	8.18	.195	4.95
15P	.935	23.75	.715	18.16	.483	12.27	.184	4.67	.322	8.18	.183	4.65
15S	.935	23.75	.715	18.16	.551	14.00	.250	6.35	.322	8.18	.195	4.95
21P	1.085	27.56	.865	21.97	.633	16.08	.184	4.67	.322	8.18	.183	4.65
21S	1.085	27.56	.865	21.97	.701	17.81	.250	6.35	.322	8.18	.195	4.95
25P	1.185	30.01	.965	24.51	.733	18.62	.184	4.67	.322	8.18	.183	4.65
25S	1.185	30.01	.965	24.51	.801	20.35	.250	6.35	.322	8.18	.195	4.95
31P	1.335	33.91	1.115	28.32	.883	22.43	.184	4.67	.322	8.18	.183	4.65
31S	1.335	33.91	1.115	28.32	.951	24.16	.250	6.35	.322	8.18	.195	4.95
37P	1.485	37.72	1.265	32.13	1.033	26.24	.184	4.67	.322	8.18	.183	4.65
37S	1.485	37.72	1.265	32.13	1.101	27.96	.250	6.35	.322	8.18	.195	4.95

MICRO-D FILTER VERTICAL PCB HARDWARE OPTIONS



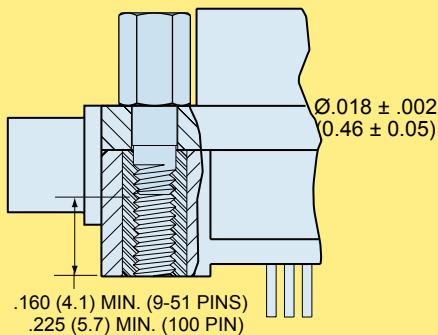
NN Style

Connector Supplied Without Hardware
Thru-Hole, No Hardware



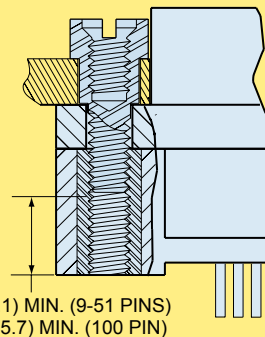
NU Style

Connector Supplied With Threaded Inserts



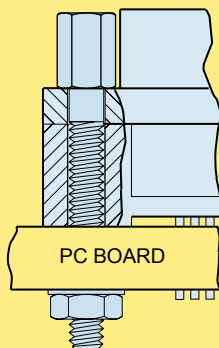
PU Style

Jackpost with Threaded Insert

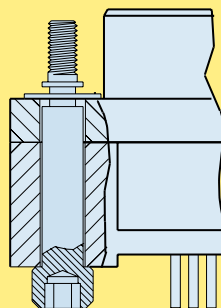


RU Style

Rear Panel Jackpost with Threaded Insert

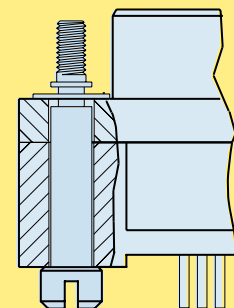


Extended Jackpost
PN Style for .062" PCB
RN Style for .196" PCB



M Style

Hex Head Jackscrew with E-Ring



S Style

Slot Head Jackscrew with E-Ring



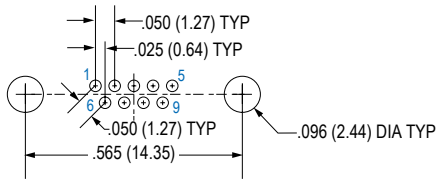
Micro-D Filter Connectors Vertical Printed Circuit Board

MICRO-D FILTER VERTICAL PCB LAYOUTS— PIN CONNECTOR SHOWN

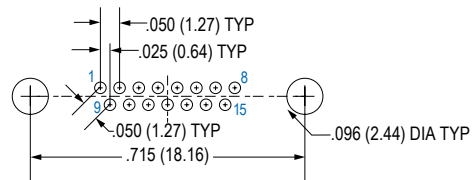
PC Tail Diameter $.018 \pm .002$ (0.46 \pm 0.05)

Contact numbers shown are for pin connectors. Reverse for socket.

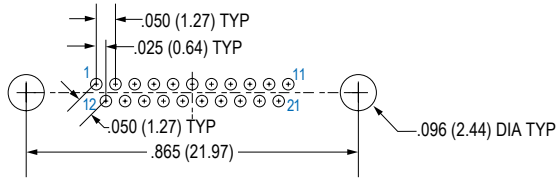
Patterns shown are for connector mounting side of PC board.



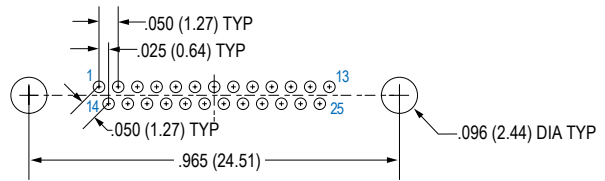
9 Contacts



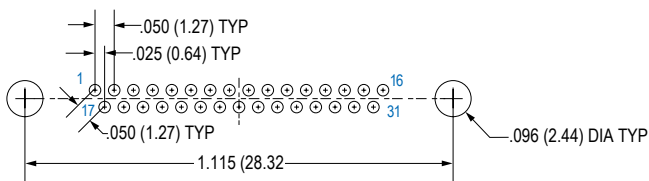
15 Contacts



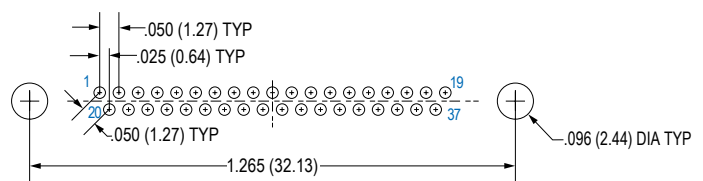
21 Contacts



25 Contacts



31 Contacts



37 Contacts

Micro-D Filter Connectors Right Angle Printed Circuit Board



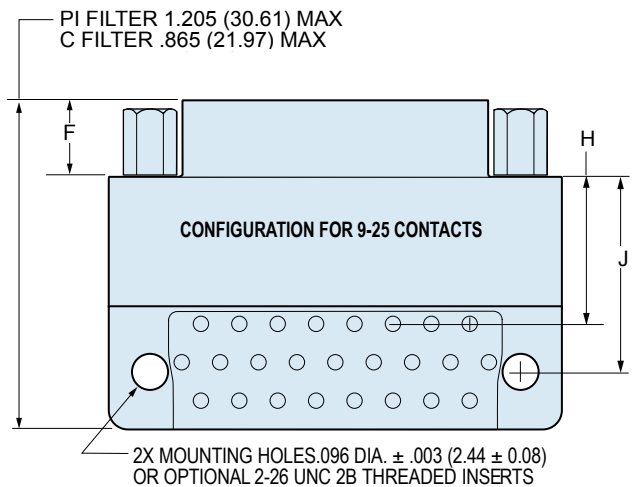
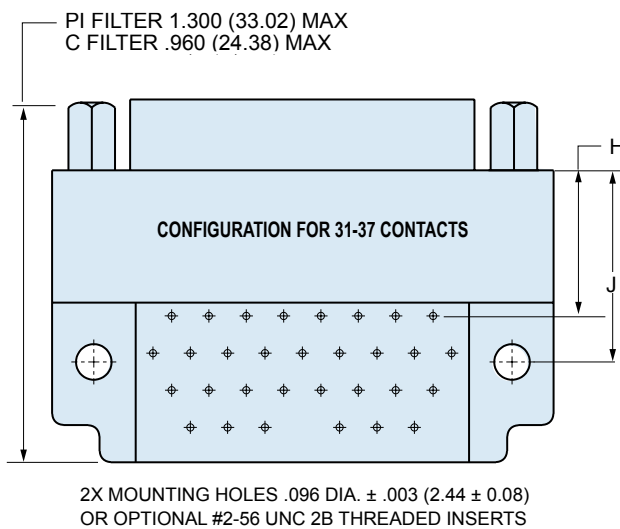
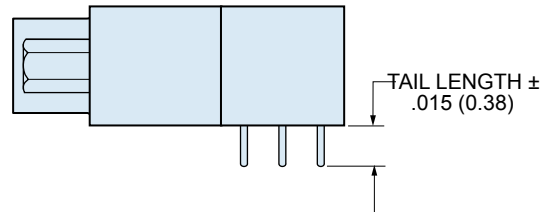
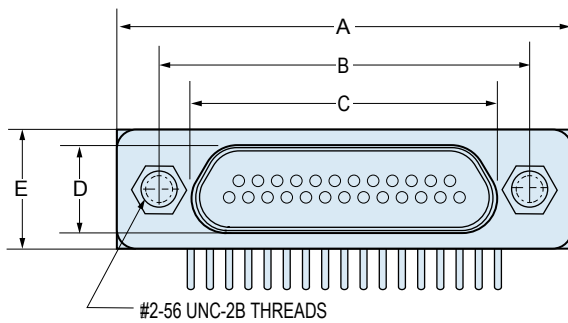
Right Angle Board Mount Filtered Micro-D's. These connectors feature low-pass EMI filtering in a right angle header for PCB termination.

Key Features include gold plated TwistPin contacts, machined aluminum shells, and either Pi or C filter elements. These environmentally sealed connectors are designed to meet the requirements of MIL-DTL-83513.

.100" x .100" Board Spacing – These connectors are similar to “CBR” style Micro-D's and share the same board footprint, allowing retrofit to existing boards.

HOW TO ORDER MICRO-D FILTERED RIGHT ANGLE PCB

Series	Shell Finish	Number of Contacts	Contact Type	Filter Type	Filter Class	Hardware Option	Tail Length		
240-034	1 – Cadmium	9	P Pin	C C Filter	A	NN – No Jackpost, No Threaded Insert	Length in Inches ± .015 (0.38)		
	2 – Nickel	15			B	PN – Jackpost, No Threaded Insert			
	4 – Black Anodize	21			C	NU – Threaded Insert Only, No Jackposts			
	5 – Gold	25	S Socket	P Pi Filter	D	PU – Jackpost and Threaded Insert			
	6 – Chem Film	31			E				
		37			F				
					G				
	Stainless Steel Shell							Rear Panel Jackposts With Threaded Inserts	
	3 – Passivated	R6U – 0.125" (3.2) Panel R5U – 0.094" (2.4) Panel R4U – 0.062" (1.6) Panel R3U – 0.047" (1.2) Panel R2U – 0.031" (0.8) Panel							
	Sample Part Number								
240-034	- 2	- 37	S	P	E	PU	- .080		



G

DIMENSIONS

Layout	A Max.		B		C Max.		D Max.		E Max.		F		G Max.		C Filter H		C Filter J		Pi Filter H		Pi Filter J	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
			±.003	±0.08							±.004	±0.10			±.010	±0.25	±.010	±0.25	±.010	±0.25	±.010	±0.25
9P	.785	19.94	.565	14.35	.333	8.46	.184	4.67	.322	8.18	.183	4.65	.420	10.67	.440	11.18	.460	11.68	.740	18.80	.760	19.30
9S	.785	19.94	.565	14.35	.400	10.16	.250	6.35	.322	8.18	.195	4.95	.420	10.67	.440	11.18	.460	11.68	.740	18.80	.760	19.30
15P	.935	23.75	.715	18.16	.483	12.27	.184	4.67	.322	8.18	.183	4.65	.420	10.67	.340	8.64	.460	11.68	.640	16.26	.760	19.30
15S	.935	23.75	.715	18.16	.551	14.00	.250	6.35	.322	8.18	.195	4.95	.420	10.67	.340	8.64	.460	11.68	.640	16.26	.760	19.30
21P	1.085	27.56	.865	21.97	.633	16.08	.184	4.67	.322	8.18	.183	4.65	.420	10.67	.340	8.64	.460	11.68	.640	16.26	.760	19.30
21S	1.085	27.56	.865	21.97	.701	17.81	.250	6.35	.322	8.18	.195	4.95	.420	10.67	.340	8.64	.460	11.68	.640	16.26	.760	19.30
25P	1.185	30.01	.965	24.51	.733	18.62	.184	4.67	.322	8.18	.183	4.65	.420	10.67	.340	8.64	.460	11.68	.640	16.26	.760	19.30
25S	1.185	30.01	.965	24.51	.801	20.35	.250	6.35	.322	8.18	.195	4.95	.420	10.67	.340	8.64	.460	11.68	.640	16.26	.760	19.30
31P	1.335	33.91	1.115	28.32	.883	22.43	.184	4.67	.322	8.18	.183	4.65	.520	13.21	.340	8.64	.460	11.68	.640	16.26	.760	19.30
31S	1.335	33.91	1.115	28.32	.951	24.16	.250	6.35	.322	8.18	.195	4.95	.520	13.21	.340	8.64	.460	11.68	.640	16.26	.760	19.30
37P	1.485	37.72	1.265	32.13	1.033	26.24	.184	4.67	.322	8.18	.183	4.65	.520	13.21	.340	8.64	.460	11.68	.640	16.26	.760	19.30
37S	1.485	37.72	1.265	32.13	1.101	27.96	.250	6.35	.322	8.18	.195	4.95	.520	13.21	.340	8.64	.460	11.68	.640	16.26	.760	19.30

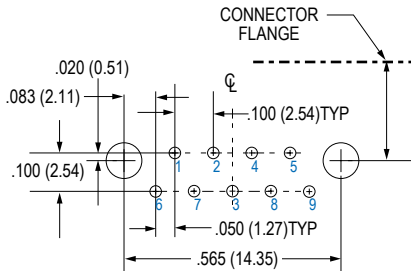
Micro-D Filter Connectors Right Angle Printed Circuit Board



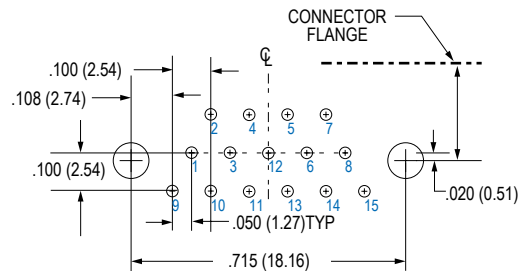
Micro-D
Filter

MICRO-D FILTER RIGHT ANGLE PCB LAYOUTS— PIN CONNECTOR

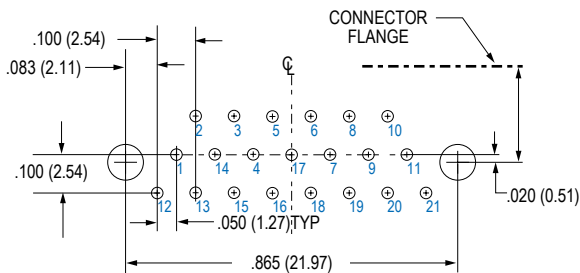
PC Tail Diameter $.018 \pm .002$ (0.46 \pm 0.05)
Contact numbers shown are for pin connectors.
Patterns shown are for connector mounting side of PC board.



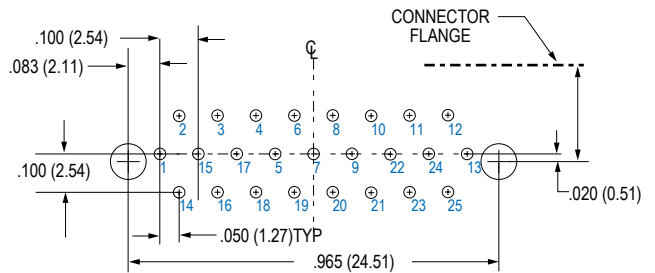
9 Contacts



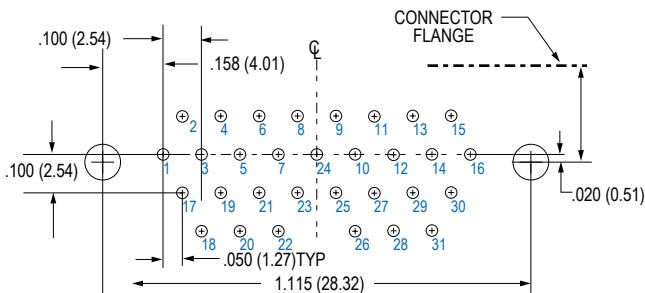
15 Contacts



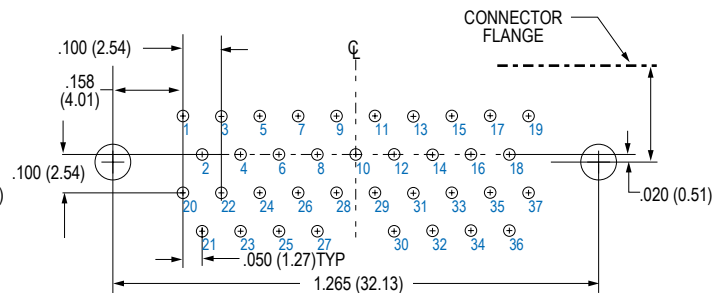
21 Contacts



25 Contacts



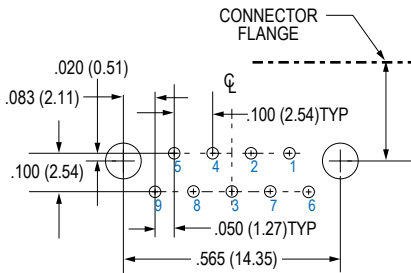
31 Contacts



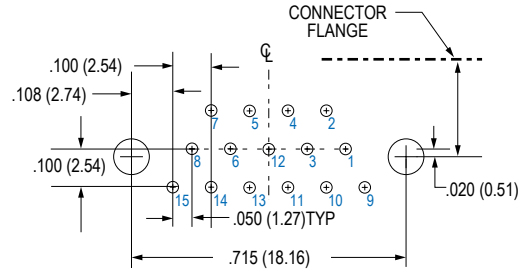
37 Contacts

MICRO-D FILTER RIGHT ANGLE PCB LAYOUTS— SOCKET CONNECTOR

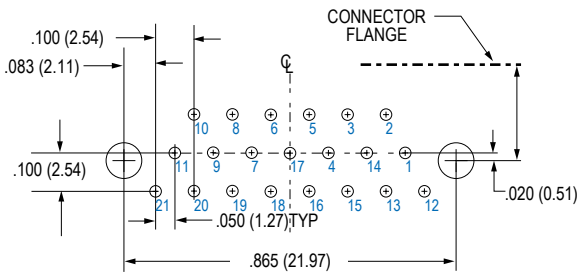
PC Tail Diameter $.018 \pm .002$ (0.46 ± 0.05)
 Contact numbers shown are for socket connectors.
 Patterns shown are for connector mounting side of PC board.



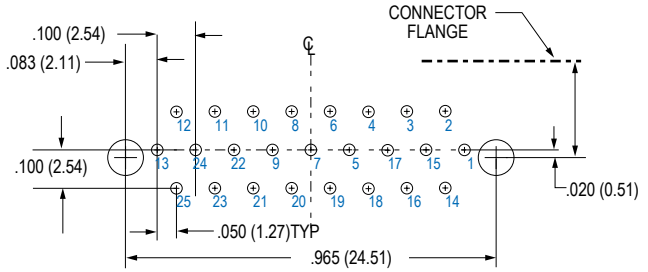
9 Contacts



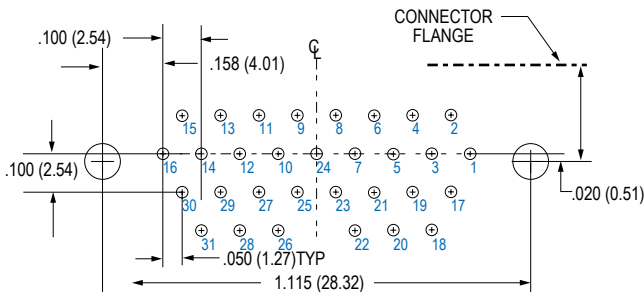
15 Contacts



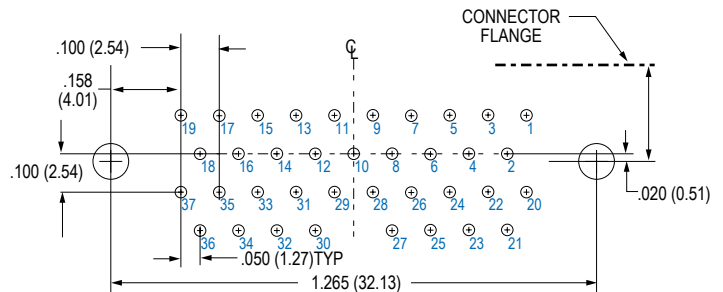
21 Contacts



25 Contacts



31 Contacts



37 Contacts

