

# 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 P – Pi Filter	A	N – No Hardware P – Combination Jackscrew and Jackpost (See photograph on this page).
	2 – Nickel	15			B	
	4 – Black Anodize	21			C	
	5 – Gold	25			D	
	6 – Chem Film	31			E	
		37			F G	
<b>Sample Part Number</b>						
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	
<b>Capacitance, Picofarads (pF)</b>														
<b>C Filter</b>	19000-28000		16000-22500		9000-16500		4000-6000		1650-2500		400-650		200-300	
<b>Pi Filter</b>	38000-56000		32000-45000		18000-33000		8000-12000		3300-5000		800-1300		400-600	
<b>Insertion Loss, dB Minimum, 25° C.</b>														
<b>Filter Type →</b>	<b>C</b>	<b>Pi</b>	<b>C</b>	<b>Pi</b>	<b>C</b>	<b>Pi</b>	<b>C</b>	<b>Pi</b>	<b>C</b>	<b>Pi</b>	<b>C</b>	<b>Pi</b>	<b>C</b>	<b>Pi</b>
<b>1 MHz</b>	6	10	5	8	3	5	—	1	—	—	—	—	—	—
<b>10 MHz</b>	24	40	23	35	16	25	8	14	4	8	—	2	—	0.8
<b>100 MHz</b>	41	62	39	60	35	57	28	50	21	40	10	15	5	13
<b>500-1000 MHz</b>	50	66	49	62	46	60	41	58	34	52	23	32	17	22



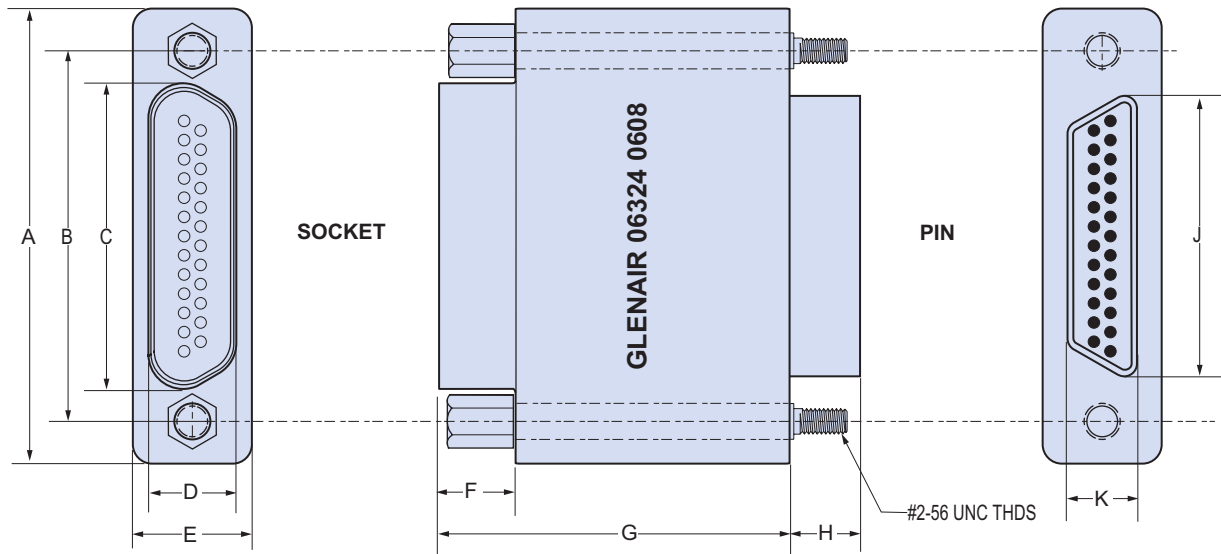
# Micro-D Filter Connectors Pin-Socket In-Line Filter Adapters

## 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 $\mu$ 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	Flourosilicone 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. ± .003	mm. ± 0.08	In.	mm.	In.	mm.	In.	mm.	In. ± .004	mm. ± 0.10	In.	mm.	In. ± .004	mm. ± 0.10	In.	mm.	In.	mm.
9PS	.785	19.94	.565	14.35	.333	8.46	.250	6.35	.310	7.87	.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	.310	7.87	.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	.310	7.87	.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	.310	7.87	.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	.310	7.87	.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	.310	7.87	.195	4.95	1.400	35.56	.183	4.65	1.033	26.24	.184	4.67