

Series 700 High Performance Filtered Connectors

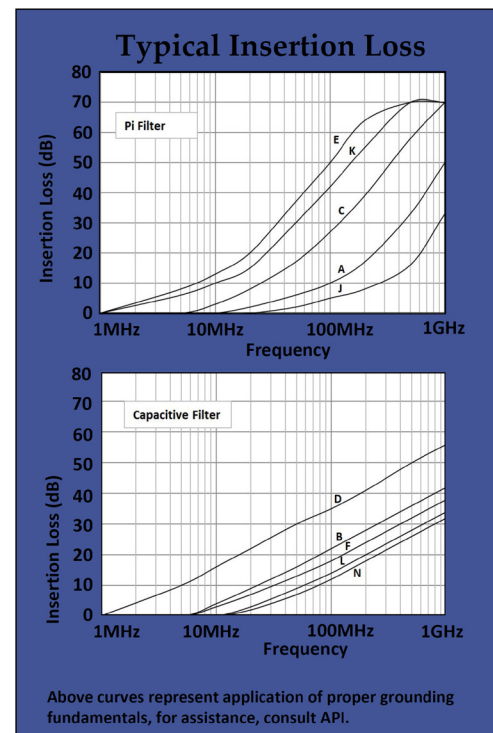
Filter Selection

APITech's Series 700 connectors offer the highest performance filtering for all types of professional applications.

Features

- Available in 9, 15, 25, 37, and 50 shell sizes
- Variety of termination configurations including right angle and straight PCB for both pin and socket contact and as an adapter
- Capacitive and Pi type filters in a full range of capacitance values

The catalog data for this series is presented in order of shell size, and grouped by pin and socket contacts. Part numbers must be selected from the tables within the series section.



Electrical Specifications: High Performance Connectors

Insertion loss measured per MIL-STD-220, no load, 50ohm source and load.

Filter Designations	Filter Circuits	Capacitance		3 dB Cut-off Frequency Max. (MHz)	Dielectric With-standing Voltage	Working Voltage DC -55°C to +125°C	Minimum Insertion Loss - Decibels (dB)									
		Value	Tol.				5 MHz	10 MHz	20 MHz	50 MHz	100 MHz	200 MHz	500 MHz	1 GHz		
J	Pi	100 pF	+100 -0%	32	300V	100V	—	—	—	2	5	8	16	33		
A		310 pF	±25%	15.9	300V	100V	—	—	2	6	10	17	33	50		
C		1000 pF	+150 -0%	3.2	300V	100V	—	3	8	17	27	39	58	70		
K		2500 pF	+100 -0%	1.3	150V	50V	6	10	15	30	42	55	70	70		
E		4000 pF	+100 -0%	0.8	150V	50V	8	13	20	37	50	64	70	70		
N	C	375 pF	±25%	13.7	600V	200V	—	—	2	7	12	18	26	32		
L		500 pF	±25%	10.2	600V	200V	—	—	3	9	14	20	28	34		
F		830 pF	±25%	6.1	600V	200V	—	3	7	13	18	24	32	38		
B		1000 pF	+100 -0%	3.2	600V	200V	—	4	9	16	22	28	36	42		
D		5000 pF	+100 -0%	0.64	300V	100V	10	16	22	30	35	41	50	56		

Filter designation "G" for grounded contacts, "I" for insulated (not filtered) contacts.

Above data represents guaranteed minimum.

Filter designation "O" for omitted contact and no hole in ground plane.

Series 700 High Performance Filtered Connectors

Specifications and Connector Ordering

Mechanical Specifications

<i>Shell</i>	Zinc or aluminum diecast, nickel plated 150 µ inches (3.81 µm) min.
<i>Insulators</i>	Glass-filled polyester, flammability UL94V-0
<i>Pin Contacts</i>	Copper alloy, 15 µ inches (0.38 µm) gold plated * over nickel
<i>Socket Contacts</i>	Copper alloy, 30 µ inches (0.76 µm) gold plated * over nickel * Heavier gold plating available upon request. See pg. 24: Connector Options
<i>Terminations</i>	Gold flash for PCB mount and solder cups. Solder dipped also available.
<i>Ground Plane</i>	Brass, solder plated
<i>Grounding Springs</i>	Beryllium copper, tin plated per MIL-T-10727
<i>Operating Temperature</i>	-55°C to +125°C
<i>Capacitors</i>	Proprietary barium titanate ceramic formulations

Electrical Specifications

<i>Current Rating</i>	5 Amps
<i>R.F. Current Rating</i>	0.3 Amps
<i>Contact Resistance</i>	10 milliohms maximum
<i>UL Recognized</i>	Under category of communication circuit accessories, File #E149046
<i>Inductance on PI Filters</i>	~ 860 nH between 100 kHz and 1 MHz

Solder cups accept up to a 20 gauge wire.

Ordering Your Connector

Step 1: Selecting the Filter

- Using the insertion loss graphs on page 1 determine which filters provide the required attenuation at the troublesome frequency, while not affecting the signal frequency by more than 3 to 6 dB.
- Choose the filter type, either feedthrough capacitor or Pi. Pi is generally considered better due to its superior high frequency performance and steeper curve. The feedthrough capacitor is lower cost.
- Select capacitance value.
- Note the APITech letter designation for the filter chosen from the table on page 1.

Step 2: Selecting the Connector

- Turn to the appropriate size section (9, 15, 25, 37, 50).
- Choose either pin contacts (plug) or socket contacts (receptacle).
- Choose the required termination type.
- From the table on the appropriate connector page, using the filter letter designation chosen in step 1 above, select the part number.

Step 3: Specifying Options

- Refer to page 24 for special options including heavy gold plating, 4-40 mounting threads, grounding brackets, hardware, and others.
- Most options are available within the standard lead times.
- Some options require a part number suffix, while other combinations may require factory assistance for part number assignment. If a suffix is shown, add it to your selected part number. If more than one option is needed, contact APITech for part number assignment.

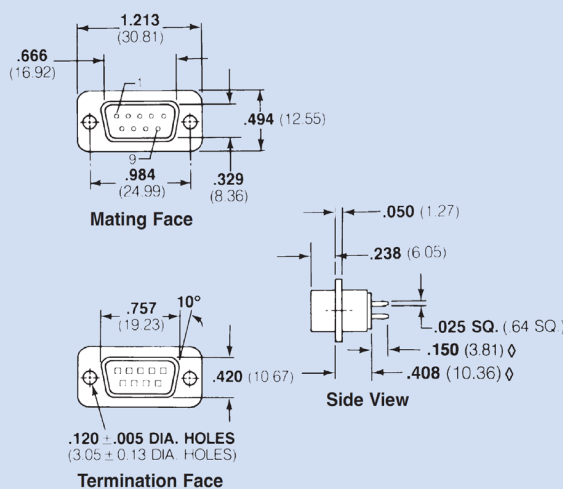
Series 700 Pin Contact

9 Shell Size

Printed Circuit Board Mount



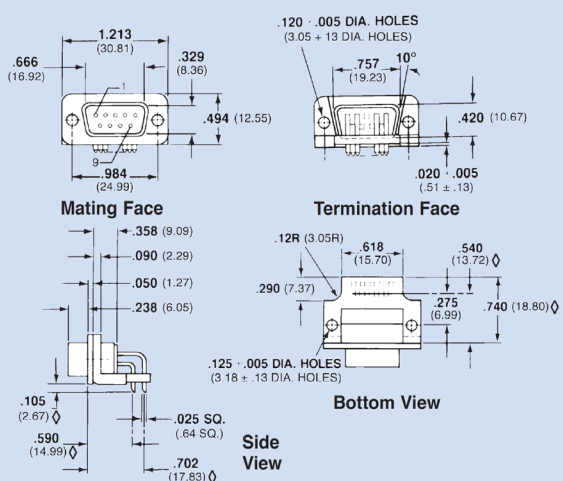
APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
56-701-001	A	310 pF Pi
56-701-002	B	1000 pF C
56-701-003	C	1000 pF Pi
56-701-004	D	5000 pF C
56-701-005	E	4000 pF Pi
56-701-028	F	830 pF C
56-701-029	J	100 pF Pi
56-701-030	K	2500 pF Pi
56-701-047	N	375 pF C
56-701-086	L	500 pF C



*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Mount

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-702-001	A	310 pF Pi
56-702-002	B	1000 pF C
* 56-702-003	C	1000 pF Pi
56-702-004	D	5000 pF C
* 56-702-005	E	4000 pF Pi
56-702-007	F	830 pF C
56-702-008	J	100 pF Pi
56-702-009	K	2500 pF Pi
56-702-013	N	375 pF C
* 56-702-033	L	500 pF C



*Replace "56-" with "56F" to indicate RoHS compliant

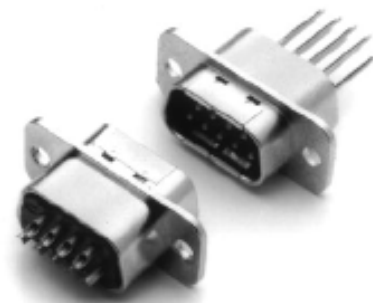
Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

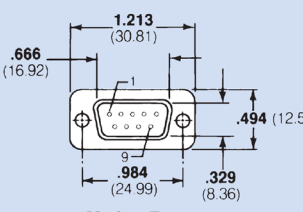
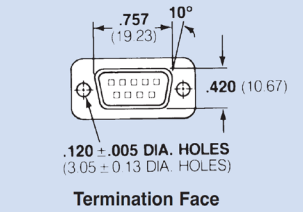
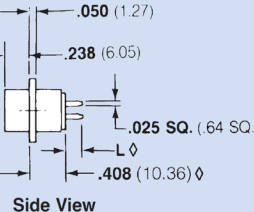
Series 700 Pin Contact

9 Shell Size

Solderless Wire Wrap



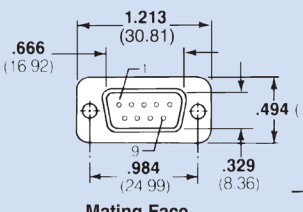
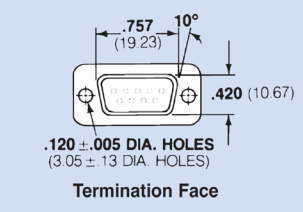
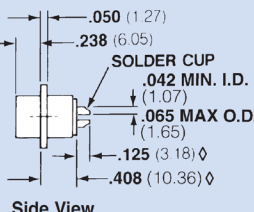
APITech Part Number <i>Select one</i>	EMI Filter				
	L .500	L .375	L .250	Filter Desig.**	Cap. Value
56-701 -006 -022 -017				A	310 pF Pi
56-701 -007 -023 -018				B	1000 pF C
56-701 -008 -024 -019				C	1000 pF Pi
56-701 -009 -025 -020				D	5000 pF C
56-701 -010 -026 -021				E	4000 pF Pi
56-701 -037 -034 -031				F	830 pF C
56-701 -038 -035 -032				J	100 pF Pi
56-701 -039 -036 -033				K	2500 pF Pi
56-701 -050 -049 -048				N	375 pF C

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-701-011	A	310 pF Pi
* 56-701-012	B	1000 pF C
* 56-701-013	C	1000 pF Pi
* 56-701-014	D	5000 pF C
* 56-701-015	E	4000 pF Pi
* 56-701-040	F	830 pF C
56-701-041	J	100 pF Pi
56-701-042	K	2500 pF Pi
56-701-081	N	375 pF C
56-701-087	L	500 pF C

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

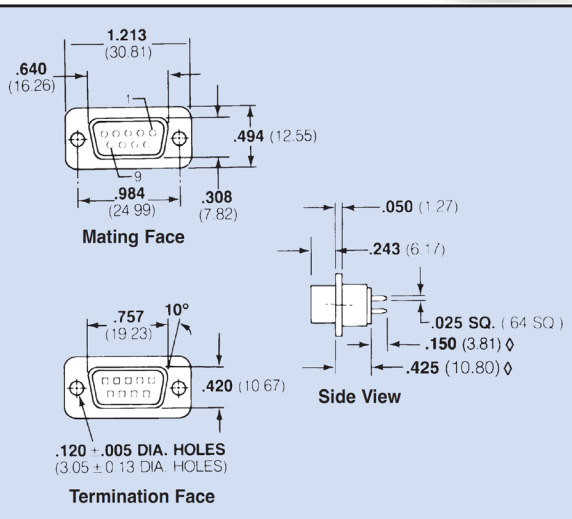
Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact

9 Shell Size

Printed Circuit Board Mount

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
56-703-001	A	310 pF Pi
56-703-002	B	1000 pF C
56-703-003	C	1000 pF Pi
56-703-004	D	5000 pF C
56-703-005	E	4000 pF Pi
56-703-022	F	830 pF C
56-703-023	J	100 pF Pi
56-703-024	K	2500 pF Pi
56-703-036	N	375 pF C
56-703-047	L	500 pF C

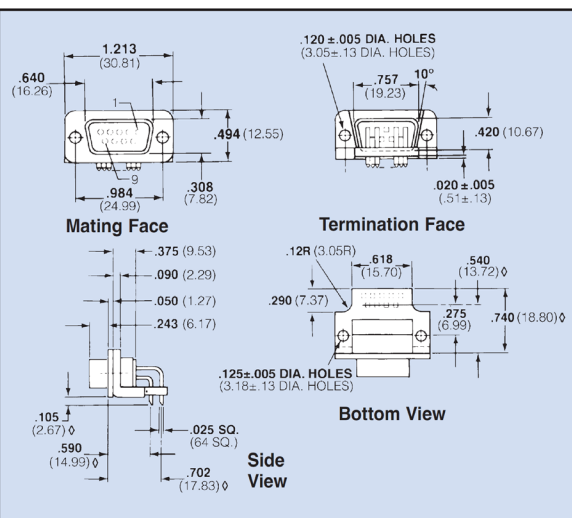


Technical drawings of the Series 700 Socket Contact showing Mating Face, Termination Face, and Side View with dimensions in inches and mm.

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
56-704-001	A	310 pF Pi
56-704-002	B	1000 pF C
* 56-704-003	C	1000 pF Pi
56-704-004	D	5000 pF C
* 56-704-005	E	4000 pF Pi
56-704-007	F	830 pF C
56-704-008	J	100 pF Pi
56-704-009	K	2500 pF Pi
56-704-018	N	375 pF C
56-704-035	L	500 pF C



Technical drawings of the Series 700 Socket Contact showing Mating Face, Termination Face, Bottom View, and Side View with dimensions in inches and mm.

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact & Pin/Socket Adapter

9 Shell Size

Solderless Wire Wrap

APITech Part Number <i>Select one</i>	EMI Filter				Filter Desig.**	Cap. Value
	L .500	L .375	L .250			
56-703	-006	-016	-011		A	310 pF Pi
56-703	-007	-017	-012		B	1000 pF C
56-703	-008	-018	-013		C	1000 pF Pi
56-703	-009	-019	-014		D	5000 pF C
* 56-703	-010	-020	* -015		E	4000 pF Pi
56-703	-031	-028	-025		F	830 pF C
56-703	-032	-029	-026		J	100 pF Pi
56-703	-033	-030	-027		K	2500 pF Pi
56-703	-039	-038	-037		N	375 pF C

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-706-001	A	310 pF Pi
56-706-002	B	1000 pF C
* 56-706-003	C	1000 pF Pi
56-706-004	D	5000 pF C
* 56-706-005	E	4000 pF Pi
56-706-006	F	830 pF C
56-706-007	J	100 pF Pi
* 56-706-008	K	2500 pF Pi
56-706-009	N	375 pF C
56-706-017	L	500 pF C

*Replace "56-" with "56F" to indicate RoHS compliant

Solderless Wire Wrap

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-705-001	A	310 pF Pi
56-705-002	B	1000 pF C
* 56-705-003 €	C	1000 pF Pi
56-705-004	D	5000 pF C
* 56-705-005 €	E	4000 pF Pi
* 56-705-008	F	830 pF C
56-705-009	J	100 pF Pi
56-705-010	K	2500 pF Pi
56-705-026	N	375 pF C
56-705-049	L	500 pF C

*Replace "56-" with "56F" to indicate RoHS compliant

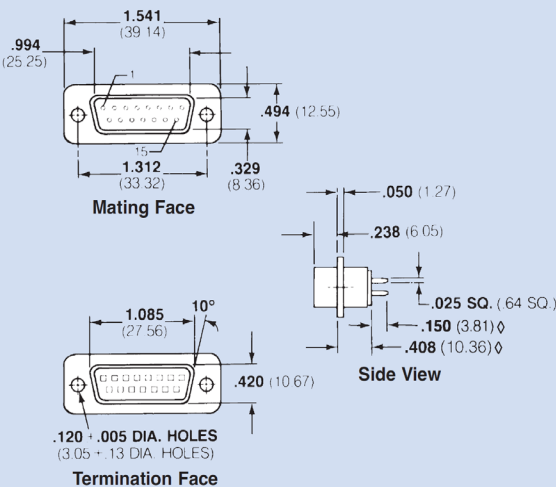
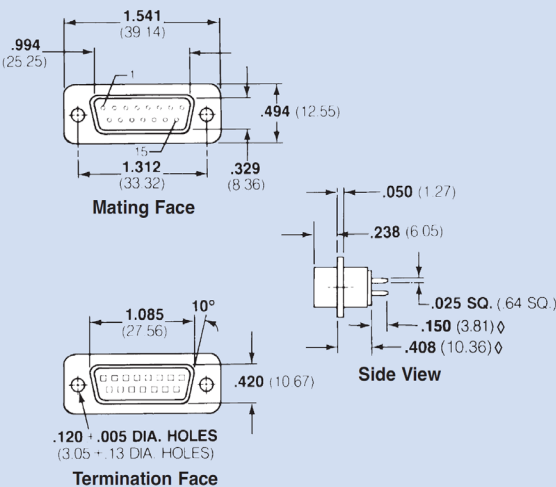
Dimensions in inches (mm)

Standard Tolerance = $\pm .005$ except where noted, $\phi = \pm .015$

Series 700 Pin Contact

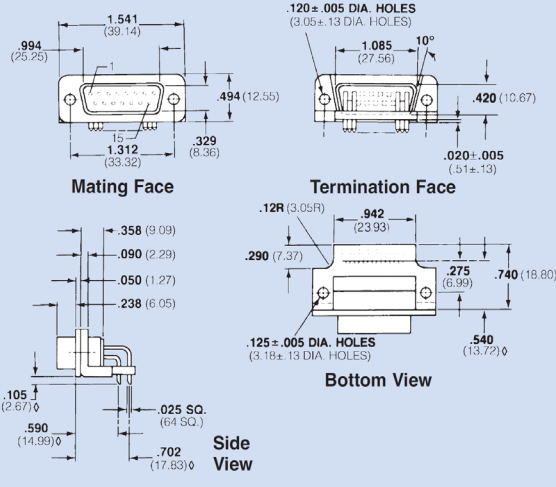
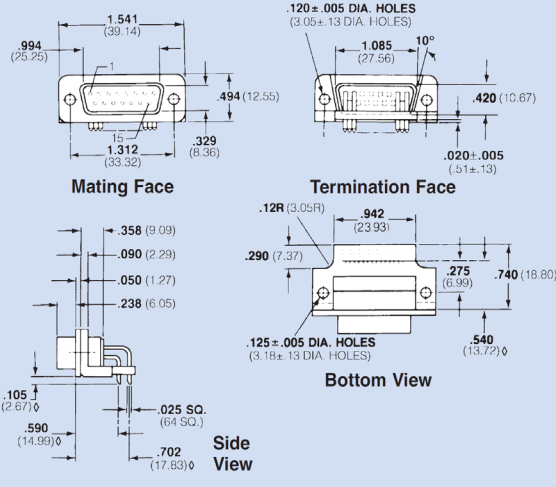
15 Shell Size

Printed Circuit Board Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-711-001	A	310 pF Pi	
56-711-002	B	1000 pF C	
56-711-003	C	1000 pF Pi	
56-711-004	D	5000 pF C	
56-711-005	E	4000 pF Pi	
56-711-028	F	830 pF C	
56-711-029	J	100 pF Pi	
56-711-030	K	2500 pF Pi	
56-711-048	N	375 pF C	
56-711-088	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
* 56-712-001	A	310 pF Pi	
56-712-002	B	1000 pF C	
* 56-712-003	C	1000 pF Pi	
56-712-004	D	5000 pF C	
* 56-712-005	E	4000 pF Pi	
* 56-712-007	F	830 pF C	
56-712-008	J	100 pF Pi	
56-712-009	K	2500 pF Pi	
56-712-017	N	375 pF C	
56-712-039	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Pin Contact

15 Shell Size

Solderless Wire Wrap

APITech Part Number <i>Select one</i>				EMI Filter	
	L .500	L .375	L .250	Filter Desig.**	Cap. Value
56-711 -006 -023 -018				A	310 pF Pi
56-711 -007 -024 -019				B	1000 pF C
56-711 -008 -025 -020				C	1000 pF Pi
56-711 -009 -026 -021				D	5000 pF C
56-711 -010 -027 -022				E	4000 pF Pi
56-711 -037 -034 -031				F	830 pF C
56-711 -038 -035 -032				J	100 pF Pi
56-711 -039 -036 -033				K	2500 pF Pi
56-711 -051 -050 -049				N	375 pF C

Mating Face

Termination Face

Side View

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-711-011	A	310 pF Pi
56-711-012	B	1000 pF C
* 56-711-013	C	1000 pF Pi
56-711-014	D	5000 pF C
* 56-711-015	E	4000 pF Pi
* 56-711-040	F	830 pF C
56-711-041	J	100 pF Pi
56-711-042	K	2500 pF Pi
56-711-085	N	375 pF C
56-711-086	L	500 pF C

Mating Face

Termination Face

Side View

*Replace "56-" with "56F" to indicate RoHS compliant

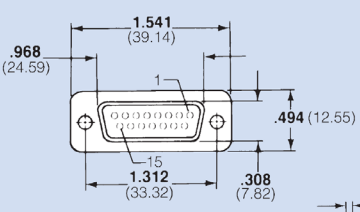
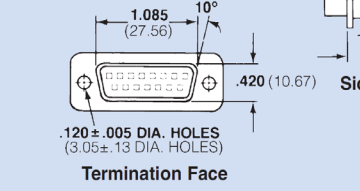
Dimensions in inches (mm)

Series 700 Socket Contact

15 Shell Size

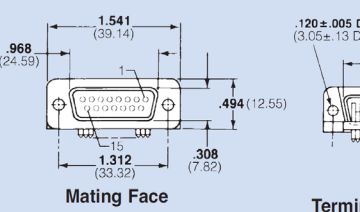
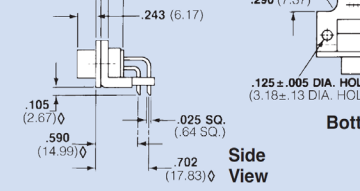


Printed Circuit Board Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-713-001	A	310 pF Pi	
56-713-002	B	1000 pF C	
56-713-003	C	1000 pF Pi	
56-713-004	D	5000 pF C	
56-713-005	E	4000 pF Pi	
56-713-021	F	830 pF C	
56-713-022	J	100 pF Pi	
56-713-023	K	2500 pF Pi	
56-713-037	N	375 pF C	
56-713-045	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
* 56-714-001	A	310 pF Pi	
56-714-002	B	1000 pF C	
* 56-714-003	C	1000 pF Pi	
56-714-004	D	5000 pF C	
* 56-714-005	E	4000 pF Pi	
* 56-714-006	F	830 pF C	
56-714-007	J	100 pF Pi	
56-714-008	K	2500 pF Pi	
56-714-017	N	375 pF C	
56-714-031	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ±.005 except where noted, ◊ = ±.015

Series 700 Socket Contact & Pin/Socket Adapter

15 Shell Size



Solderless Wire Wrap

APITech Part Number <i>Select one</i>				EMI Filter	
	L .500	L .375	L .250	Filter Design.**	Cap. Value
56-713	-006	-016	-011	A	310 pF Pi
56-713	-007	-017	-012	B	1000 pF C
56-713	-008	-018	-013	C	1000 pF Pi
56-713	-009	-019	-014	D	5000 pF C
56-713	-010	-020	-015	E	4000 pF Pi
56-713	-030	-027	-024	F	830 pF C
56-713	-031	-028	-025	J	100 pF Pi
56-713	-032	-029	-026	K	2500 pF Pi
56-713	-040	-039	-038	N	375 pF C

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-716-001	A	310 pF Pi
56-716-002	B	1000 pF C
* 56-716-003	C	1000 pF Pi
56-716-004	D	5000 pF C
* 56-716-005	E	4000 pF Pi
56-716-006	F	830 pF C
56-716-007	J	100 pF Pi
* 56-716-008	K	2500 pF Pi
56-716-009	N	375 pF C
56-716-013	L	500 pF C

*Replace "56-" with "56F" to indicate RoHS compliant

Pin/Socket Adapter

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-715-001	A	310 pF Pi
56-715-002	B	1000 pF C
* 56-715-003 €	C	1000 pF Pi
56-715-004	D	5000 pF C
* 56-715-005 €	E	4000 pF Pi
56-715-007	F	830 pF C
56-715-008	J	100 pF Pi
56-715-009	K	2500 pF Pi
56-715-015	N	375 pF C
56-715-040	L	500 pF C

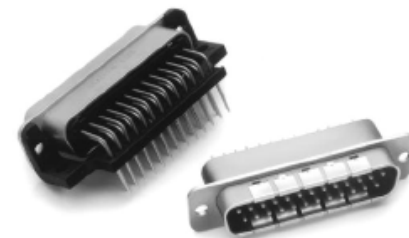
*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

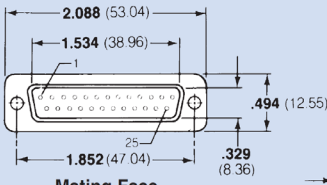
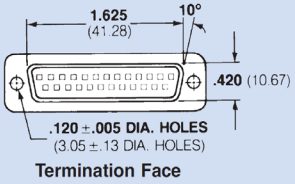
Standard Tolerance = ± 0.005 except where noted, $\varnothing = \pm 0.015$

Series 700 Pin Contact

25 Shell Size

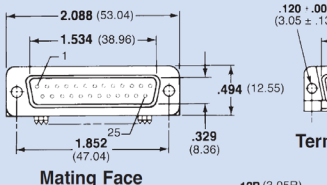
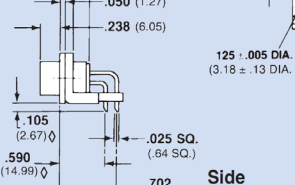


Printed Circuit Board Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-721-001	A	310 pF Pi	
56-721-002	B	1000 pF C	
56-721-003	C	1000 pF Pi	
56-721-004	D	5000 pF C	
56-721-005	E	4000 pF Pi	
56-721-033	F	830 pF C	
56-721-034	J	100 pF Pi	
56-721-035	K	2500 pF Pi	
56-721-063	N	375 pF C	
56-721-111	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
* 56-722-001	A	310 pF Pi	
56-722-002	B	1000 pF C	
* 56-722-003	C	1000 pF Pi	
56-722-004	D	5000 pF C	
* 56-722-005	E	4000 pF Pi	
* 56-722-008	F	830 pF C	
56-722-009	J	100 pF Pi	
56-722-010	K	2500 pF Pi	
56-722-027	N	375 pF C	
56-722-060	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ±.005 except where noted, ◊ = ±.015

Series 700 Pin Contact

25 Shell Size

Solderless Wire Wrap



APITech Part Number <i>Select one</i>				EMI Filter		
	L .500	L .375	L .250	Filter Desig.**	Cap. Value	
56-721 -006 -028 -024				A	310 pF Pi	
56-721 -007 -029 -025				B	1000 pF C	
56-721 -008 -030 -026				C	1000 pF Pi	
56-721 -009 -031 -022				D	5000 pF C	
56-721 -010 -032 -027				E	4000 pF Pi	
56-721 -042 -039 -036				F	830 pF C	
56-721 -043 -040 -037				J	100 pF Pi	
56-721 -044 -041 -038				K	2500 pF Pi	
56-721 -066 -065 -064				N	375 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
* 56-721-011	A	310 pF Pi	
* 56-721-012	B	1000 pF C	
* 56-721-013	C	1000 pF Pi	
56-721-014	D	5000 pF C	
* 56-721-015	E	4000 pF Pi	
* 56-721-045	F	830 pF C	
56-721-046	J	100 pF Pi	
56-721-047	K	2500 pF Pi	
56-721-070	N	375 pF C	
56-721-112	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact

25 Shell Size

Printed Circuit Board Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-723-001	A	310 pF Pi	
56-723-002	B	1000 pF C	
56-723-003	C	1000 pF Pi	
56-723-004	D	5000 pF C	
56-723-005	E	4000 pF Pi	
56-723-023	F	830 pF C	
56-723-024	J	100 pF Pi	
56-723-025	K	2500 pF Pi	
56-723-045	N	375 pF C	
56-723-069	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
* 56-724-001	A	310 pF Pi	
56-724-002	B	1000 pF C	
* 56-724-003	C	1000 pF Pi	
56-724-004	D	5000 pF C	
* 56-724-005	E	4000 pF Pi	
* 56-724-008	F	830 pF C	
56-724-009	J	100 pF Pi	
56-724-010	K	2500 pF Pi	
56-724-021	N	375 pF C	
56-724-046	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact & Pin/Socket Adapter

25 Shell Size



Solderless Wire Wrap

APITech Part Number <i>Select one</i>				EMI Filter	
L	L	L		Filter Desig.**	Cap. Value
.500	.375	.250			
* 56-723	-006	-017	* -012	A	310 pF Pi
56-723	-007	-018	-013	B	1000 pF C
* 56-723	-008	-019	* -014	C	1000 pF Pi
56-723	-009	-020	-015	D	5000 pF C
* 56-723	-010	-021	* -016	E	4000 pF Pi
* 56-723	-032	-029	* -026	F	830 pF C
56-723	-033	-030	-027	J	100 pF Pi
56-723	-034	-031	-028	K	2500 pF Pi
56-723	-048	-047	-046	N	375 pF C

Technical drawing of the Solderless Wire Wrap component. It includes three views: Mating Face, Termination Face, and Side View. Dimensions are provided in inches and millimeters. Key features include .120 ± .005 DIA. HOLES (3.05 ± .13 DIA. HOLES) and .050 (1.27) spacing.

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-726-001	A	310 pF Pi
56-726-002	B	1000 pF C
* 56-726-003	C	1000 pF Pi
56-726-004	D	5000 pF C
* 56-726-005	E	4000 pF Pi
56-726-006	F	830 pF C
56-726-007	J	100 pF Pi
* 56-726-008	K	2500 pF Pi
56-726-009	N	375 pF C
56-726-021	L	500 pF C

Technical drawing of the Solder Cup Termination component. It includes three views: Mating Face, Termination Face, and Side View. Dimensions are provided in inches and millimeters. Key features include .120 ± .005 DIA. HOLES (3.05 ± .13 DIA. HOLES) and .050 (1.27) spacing. A SOLDER CUP is shown on the termination face.

*Replace "56-" with "56F" to indicate RoHS compliant

Pin/Socket Adapter

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-725-001	A	310 pF Pi
56-725-002	B	1000 pF C
* 56-725-003 €	C	1000 pF Pi
56-725-004	D	5000 pF C
* 56-725-005 €	E	4000 pF Pi
* 56-725-019	F	830 pF C
56-725-020	J	100 pF Pi
* 56-725-021	K	2500 pF Pi
56-725-064	N	375 pF C
56-725-073	L	500 pF C

Technical drawing of the Pin/Socket Adapter component. It includes three views: Socket Face, Pin Face, and Side View. Dimensions are provided in inches and millimeters. Key features include .120 ± .005 DIA. HOLES (3.05 ± .13 DIA. HOLES) and .050 (1.27) spacing.

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

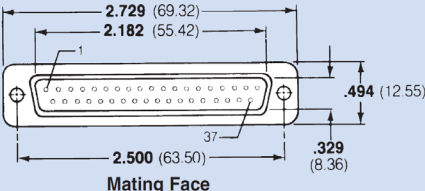
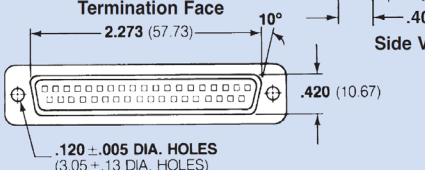
Standard Tolerance = ±.005 except where noted, ∅ = ±.015

Series 700 Pin Contact

37 Shell Size

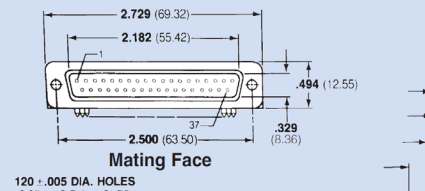
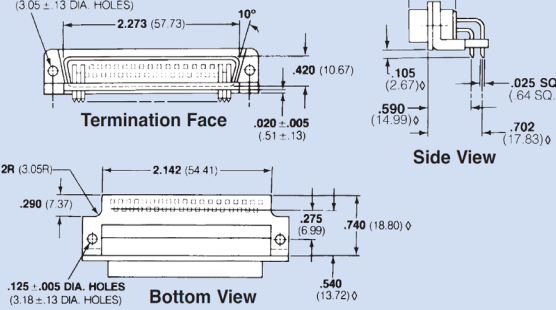


Printed Circuit Board Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-731-001	A	310 pF Pi	
56-731-002	B	1000 pF C	
56-731-003	C	1000 pF Pi	
56-731-004	D	5000 pF C	
56-731-005	E	4000 pF Pi	
56-731-028	F	830 pF C	
56-731-029	J	100 pF Pi	
56-731-030	K	2500 pF Pi	
56-731-048	N	375 pF C	
56-731-076	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-732-001	A	310 pF Pi	
56-732-002	B	1000 pF C	
* 56-732-003	C	1000 pF Pi	
56-732-004	D	5000 pF C	
* 56-732-005	E	4000 pF Pi	
56-732-006	F	830 pF C	
56-732-007	J	100 pF Pi	
56-732-008	K	2500 pF Pi	
56-732-009	N	375 pF C	
56-732-023	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ±.005 except where noted, φ = ±.015

Series 700 Pin Contact

37 Shell Size



Solderless Wire Wrap

APITech Part Number <i>Select one</i>	EMI Filter				Filter Desig.**	Cap. Value	
	L .500	L .375	L .250				
56-731 -006 -023 -018					A	310 pF Pi	
56-731 -007 -024 -019					B	1000 pF C	
56-731 -008 -025 -020					C	1000 pF Pi	
56-731 -009 -026 -021					D	5000 pF C	
56-731 -010 -027 -022					E	4000 pF Pi	
56-731 -037 -034 -031					F	830 pF C	
56-731 -038 -035 -032					J	100 pF Pi	
56-731 -039 -036 -033					K	2500 pF Pi	
56-731 -051 -050 -049					N	375 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
* 56-731-011	A	310 pF Pi	
56-731-012	B	1000 pF C	
* 56-731-013	C	1000 pF Pi	
56-731-014	D	5000 pF C	
* 56-731-015	E	4000 pF Pi	
* 56-731-040	F	830 pF C	
56-731-041	J	100 pF Pi	
56-731-042	K	2500 pF Pi	
56-731-060	N	375 pF C	
56-731-077	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact

37 Shell Size



Printed Circuit Board Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-733-001	A	310 pF Pi	
56-733-002	B	1000 pF C	
56-733-003	C	1000 pF Pi	
56-733-004	D	5000 pF C	
56-733-005	E	4000 pF Pi	
56-733-021	F	830 pF C	
56-733-022	J	100 pF Pi	
56-733-023	K	2500 pF Pi	
56-733-035	N	375 pF C	
56-733-046	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-734-001	A	310 pF Pi	
56-734-002	B	1000 pF C	
56-734-003	C	1000 pF Pi	
56-734-004	D	5000 pF C	
56-734-005	E	4000 pF Pi	
56-734-006	F	830 pF C	
56-734-007	J	100 pF Pi	
56-734-008	K	2500 pF Pi	
56-734-012	N	375 pF C	
56-734-021	L	500 pF C	

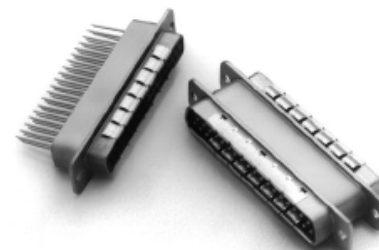
*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact & Pin/Socket Adapter

37 Shell Size



Solderless Wire Wrap

APITech Part Number <i>Select one</i>				EMI Filter	
	L .500	L .375	L .250	Filter Design**	Cap. Value
* 56-733	-006	-016	* -011	A	310 pF Pi
56-733	-007	-017	-012	B	1000 pF C
56-733	-008	-018	-013	C	1000 pF Pi
56-733	-009	-019	-014	D	5000 pF C
56-733	-010	-020	-015	E	4000 pF Pi
56-733	-030	-027	-024	F	830 pF C
56-733	-031	-028	-025	J	100 pF Pi
56-733	-032	-029	-026	K	2500 pF Pi
56-733	-038	-037	-036	N	375 pF C

Mating Face

Termination Face

Side View

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-736-001	A	310 pF Pi
56-736-002	B	1000 pF C
* 56-736-003	C	1000 pF Pi
56-736-004	D	5000 pF C
* 56-736-005	E	4000 pF Pi
56-736-006	F	830 pF C
56-736-007	J	100 pF Pi
* 56-736-008	K	2500 pF Pi
56-736-009	N	375 pF C
56-736-015	L	500 pF C

Mating Face

Termination Face

Side View

*Replace "56-" with "56F" to indicate RoHS compliant

Pin/Socket Adapter

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
* 56-735-001	A	310 pF Pi
56-735-002	B	1000 pF C
* 56-735-003 €	C	1000 pF Pi
56-735-004	D	5000 pF C
* 56-735-005 €	E	4000 pF Pi
* 56-735-008	F	830 pF C
56-735-009	J	100 pF Pi
56-735-010	K	2500 pF Pi
56-735-025	N	375 pF C
56-735-034	L	500 pF C

Socket Face

Pin Face

Side View

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\phi = \pm 0.015$

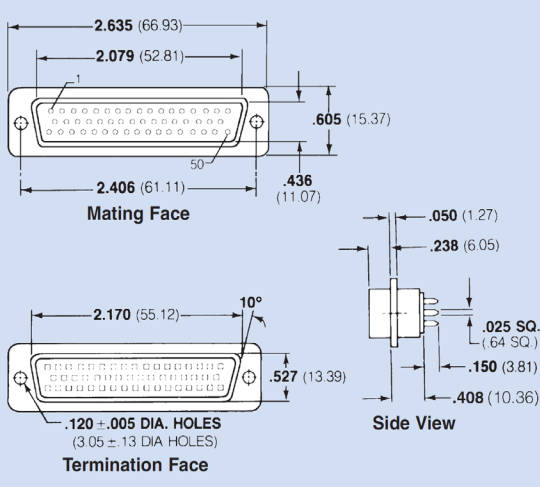
Series 700 Pin Contact

50 Shell Size



Printed Circuit Board Mount

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
56-741-001	A	310 pF Pi
56-741-002	B	1000 pF C
56-741-003	C	1000 pF Pi
56-741-004	D	5000 pF C
56-741-005	E	4000 pF Pi
56-741-027	F	830 pF C
56-741-028	J	100 pF Pi
56-741-029	K	2500 pF Pi
56-741-042	N	375 pF C
56-741-066	L	500 pF C



Mating Face

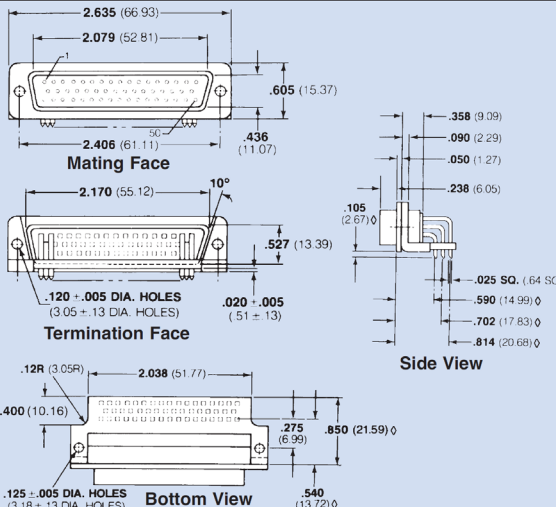
Termination Face

Side View

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter	
	Filter Designation**	Cap. Value
56-742-001	A	310 pF Pi
56-742-002	B	1000 pF C
56-742-003	C	1000 pF Pi
56-742-004	D	5000 pF C
56-742-005	E	4000 pF Pi
56-742-006	F	830 pF C
56-742-007	J	100 pF Pi
56-742-008	K	2500 pF Pi
56-742-009	N	375 pF C
56-742-022	L	500 pF C



Mating Face

Termination Face

Bottom View

Side View

*Replace "56-" with "56F" to indicate RoHS compliant

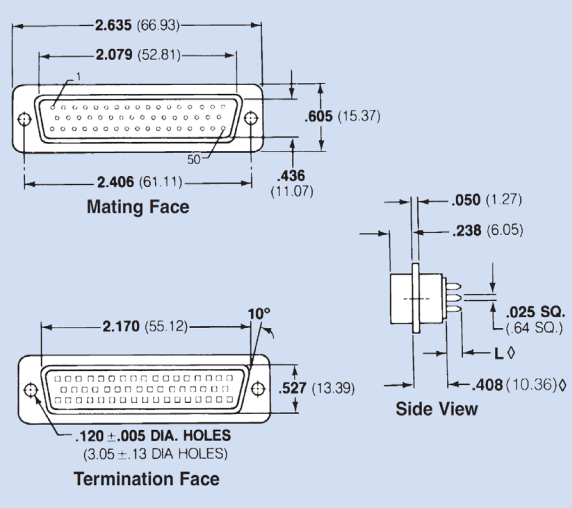
Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Pin Contact

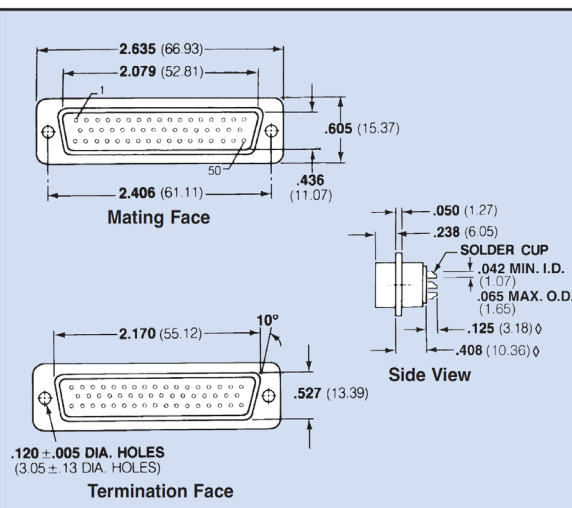
50 Shell Size

Solderless Wire Wrap

APITech Part Number <i>Select one</i>					EMI Filter		
	L .500	L .375	L .250		Filter Desig.**	Cap. Value	
56-741 -006 -022 -017					A	310 pF Pi	
56-741 -007 -023 -018					B	1000 pF C	
56-741 -008 -024 -019					C	1000 pF Pi	
56-741 -009 -025 -020					D	5000 pF C	
56-741 -010 -026 -021					E	4000 pF Pi	
56-741 -036 -033 -030					F	830 pF C	
56-741 -037 -034 -031					J	100 pF Pi	
56-741 -038 -035 -032					K	2500 pF Pi	
56-741 -045 -044 -043					N	375 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
* 56-741-011	A	310 pF Pi	
* 56-741-012	B	1000 pF C	
* 56-741-013	C	1000 pF Pi	
* 56-741-014	D	5000 pF C	
* 56-741-015	E	4000 pF Pi	
56-741-039	F	830 pF C	
56-741-040	J	100 pF Pi	
56-741-041	K	2500 pF Pi	
56-741-063	N	375 pF C	
56-741-067	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

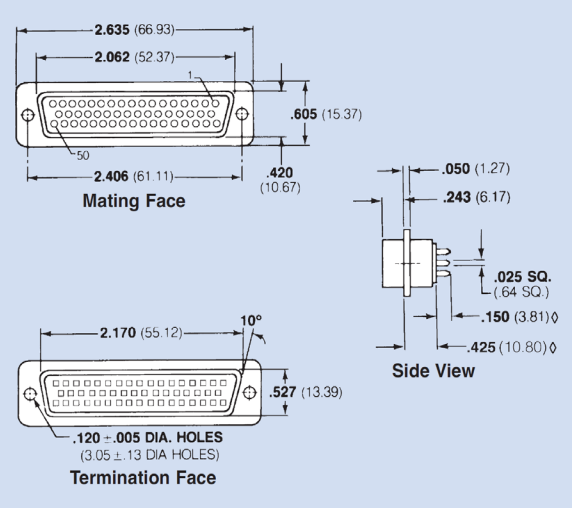
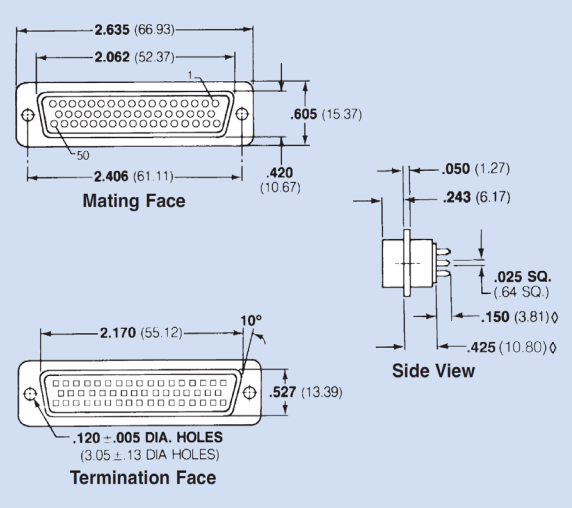
Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact

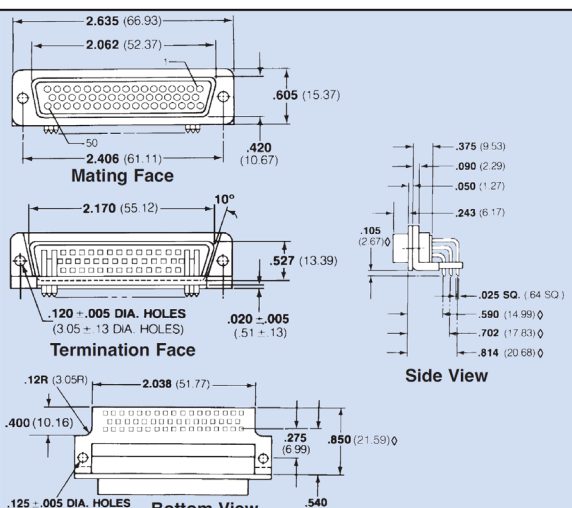
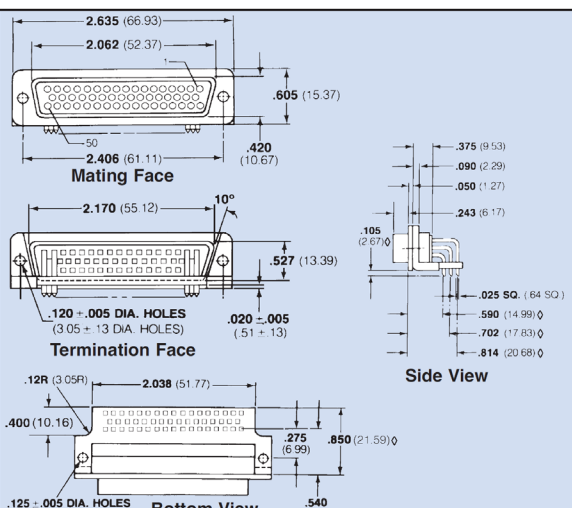
50 Shell Size

Printed Circuit Board Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-743-001	A	310 pF Pi	
56-743-002	B	1000 pF C	
56-743-003	C	1000 pF Pi	
56-743-004	D	5000 pF C	
56-743-005	E	4000 pF Pi	
56-743-021	F	830 pF C	
56-743-022	J	100 pF Pi	
56-743-023	K	2500 pF Pi	
56-743-033	N	375 pF C	
56-743-043	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Printed Circuit Board Right Angle Mount

APITech Part Number	EMI Filter		
	Filter Designation**	Cap. Value	
56-744-001	A	310 pF Pi	
56-744-002	B	1000 pF C	
56-744-003	C	1000 pF Pi	
56-744-004	D	5000 pF C	
56-744-005	E	4000 pF Pi	
56-744-006	F	830 pF C	
56-744-007	J	100 pF Pi	
56-744-008	K	2500 pF Pi	
56-744-009	N	375 pF C	
56-744-012	L	500 pF C	

*Replace "56-" with "56F" to indicate RoHS compliant

Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\diamond = \pm 0.015$

Series 700 Socket Contact & Pin/Socket Adapter

50 Shell Size

Solderless Wire Wrap

APITech Part Number <i>Select one</i>	EMI Filter				Filter Desig.**	Cap. Value		
	L .500	L .375	L .250					
56-743	-006	-016	-011		A	310 pF Pi		
56-743	-007	-017	-012		B	1000 pF C		
56-743	-008	-018	-013		C	1000 pF Pi		
56-743	-009	-019	-014		D	5000 pF C		
56-743	-010	-020	-015		E	4000 pF Pi		
56-743	-030	-027	-024		F	830 pF C		
56-743	-031	-028	-025		J	100 pF Pi		
56-743	-032	-029	-026		K	2500 pF Pi		
56-743	-036	-035	-034		N	375 pF C		

*Replace "56-" with "56F" to indicate RoHS compliant

Solder Cup Termination

APITech Part Number	EMI Filter			
	Filter Designation**	Cap. Value		
56-746-001	A	310 pF Pi		
56-746-002	B	1000 pF C		
56-746-003	C	1000 pF Pi		
56-746-004	D	5000 pF C		
56-746-005	E	4000 pF Pi		
56-746-006	F	830 pF C		
56-746-007	J	100 pF Pi		
56-746-008	K	2500 pF Pi		
56-746-009	N	375 pF C		
56-746-018	L	500 pF C		

*Replace "56-" with "56F" to indicate RoHS compliant

Pin/Socket Adapter

APITech Part Number	EMI Filter			
	Filter Designation**	Cap. Value		
* 56-745-001	A	310 pF Pi		
56-745-002	B	1000 pF C		
* 56-745-003	C	1000 pF Pi		
56-745-004	D	5000 pF C		
* 56-745-005	E	4000 pF Pi		
56-745-006	F	830 pF C		
56-745-007	J	100 pF Pi		
56-745-008	K	2500 pF Pi		
56-745-019	N	375 pF C		
56-745-027	L	500 pF C		

*Replace "56-" with "56F" to indicate RoHS compliant

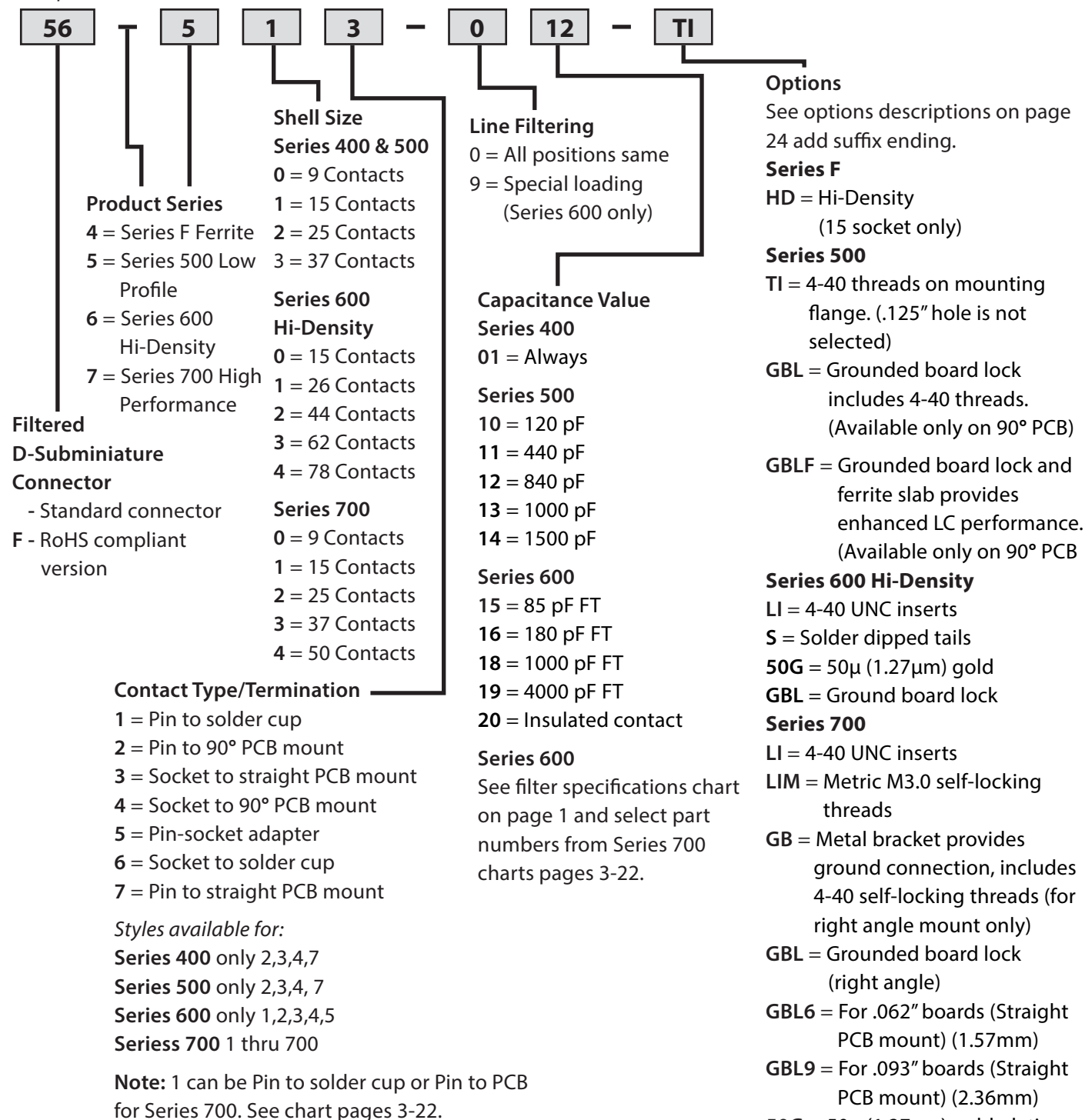
Dimensions in inches (mm)

Standard Tolerance = ± 0.005 except where noted, $\phi = \pm 0.015$

D-Subminiature Part Numbering System

Ordering Information

Example: 56-513-012-TI



To assist your efforts in selecting the correct Filtered Connector to meet your needs, we have developed a part numbering system. All of the standard products are shown in their respective catalog pages.

Part number 56-513-012-TI represents a Series 500 connector with 15 contacts in a socket to straight PCB mount configuration. All connector positions have a capacitance value of 840 pF and there are 4-40 threads on mounting flange.

D-Subminiature Connector Options

Threaded Inserts

Available on Series 500, 600 & 700.

- #4-40 UNC or metric M3.0 threaded inserts in mounting flanges.
- Allows ease of panel-assembly.
- Plated steel inserts with last thread upset for torque.

Grounding Bracket

For right angle mount PCB connectors, available on Series 700.

- Metal bracket in place of plastic.
- Provides ground connection direct from circuit board.
- Allows shell grounding to board.
- Includes 4-40 threads.

Stand-off with Board Lock Feature

For straight PCB connectors, available on Series 700.

- Allows shell grounding to board.
- Eliminates stress on filter temperature.
- Tin plated brass stand-off with snap-in feature.
- Available for .062" (1.57mm) or .093" (2.36mm).

Grounding Bracket with Board Lock

For right angle mount PCB connectors, available on Series 500 & 700.

- Metal bracket provides grounding.
- Snap-in, no hardware needed, 4-40 threads included.
- For use on .062" (1.57mm) thick boards.

Gold Plating

Available on Series 600 & 700.

- High reliability applications, 50μ" (1.27μm) gold over 50μ" nickel.

Solder Dipped Tails

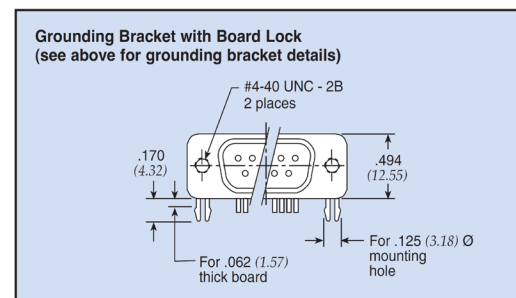
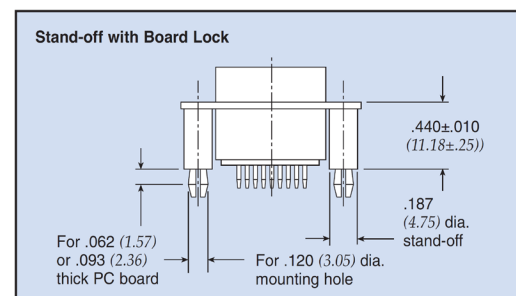
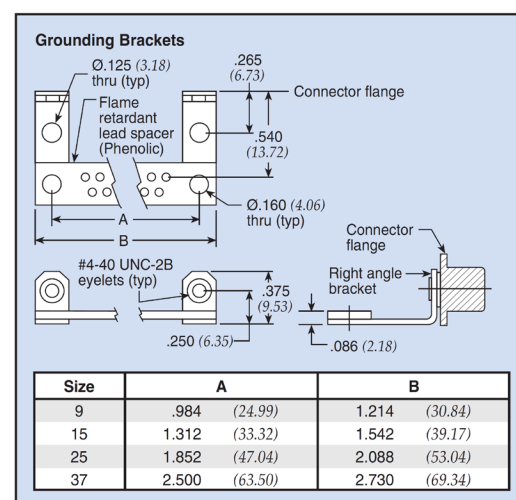
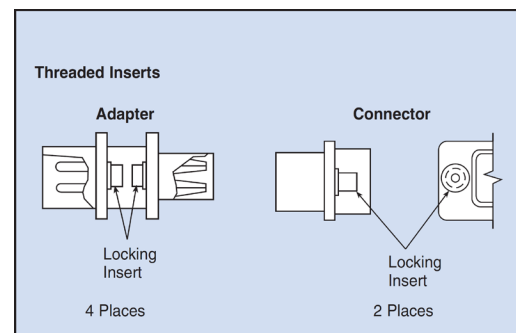
Available on Series 600 & 700 connectors.

- Solder dipped tails added standard gold flash.

Water Block

Consult APITech engineers for specifics.

- Internally sealed in accordance with NEMA Standard Rain Test section 6.4 (also UL50 part 28 ram test submersion, section 6.10.1.



Dimensions in inches (mm)