

High Performance EMI Filtered D-Sub Connectors

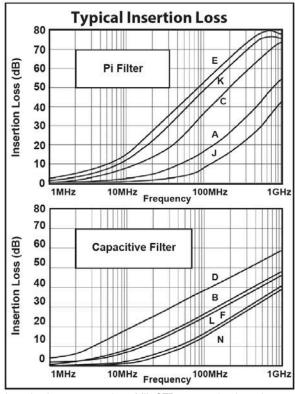
Filter Selection

Spectrum Control's Series 700 D-Sub 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 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.



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

Electrical Specifications: High Performance Connectors

		Capa	citance	3 dB Dielectric Working			Minimum Insertion Loss - Decibels (dB)								
Filter Designations	Filter Circuits	Value	Tol.	Cut-off Frequency Max. (MHz)	With- Standing Voltage	uency Standing	Voltage DC -55°C to +125°C	5 MHz	10 MHz	20 MHz	50 MHz	100 MHz	200 MHz	500 MHz	1 GHz
J		100 pF	+100 -0%	32	300V	100V	_	_	_	2	5	8	16	33	
С		1000 pF	+150 -0%	3.2	300V	100V	-	3	8	17	27	39	58	70	
К	Pi	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	
В	_	1000 pF	+100 -0%	3.2	600V	200V	_	4	9	16	22	28	36	42	
D	С	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. Filter designation "O" for omitted contact and no hole in ground plane.

Above data represents guaranteed minimum.





Specifcations and Connector Ordering

Mechanical Specifications

Shell	Zinc or aluminum diecast, nickel plated 150 μ inches (3.81 μm) min
Insulators	Glass-filled polyester, flammability UL94V-0
Pin Contacts	Copper alloy, 15 μ inches (0.38 μm) gold plated * over nickel
Socket Contacts	Copper alloy, 30 μ inches (0.76 μm) gold plated * over nickel
	* Heavier gold plating available upon request
Terminations	See pg. 23: Connector Options Gold flash for PCB mount and solder cups. Solder dipped also available
Ground Plane	Brass, solder plated
Grounding Springs	Beryllium copper, tin plated per MIL-T-10727
Operating Temperature	-55°C to +125°C
Capacitors	Proprietary barium titanate ceramic formulations

Electrical Specifications

Solder cups accept up to a 20 gauge wire.

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

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 Spectrum Control 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 23 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 Spectrum Control for part number assignment.



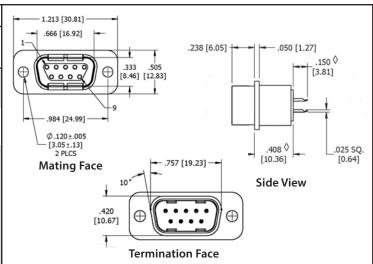


9 Shell Size



Printed Circuit Board Mount

	EMI Filter				
Spectrum Control Part Number	Filter Designation**	Cap. Value			
56-701-002	В	1000 pF C			
56-701-003	С	1000 pF Pi			
56-701-004	D	5000 pF C			
56-701-005	E	4000 pF Pi			
56-701-029	J	100 pF Pi			
56-701-030	K	2500 pF Pi			



Printed Circuit Board Right Angle Mount

	EMI F	ilter	1.213 [30.81]	Ø.120±.005 [3.05±.13]
Spectrum Control Part Number	Filter Designation**	Cap. Value	.505 [12,83]	2 PLCS757 [19.23]
56-702-002	В	1000 pF C		
56-702-003	С	1000 pF Pi	.984 [24.99]	
56-702-004	D	5000 pF C	Mating Face	.020±.005
56-702-005	Е	4000 pF Pi	.238 [6.05]050 [1.27]	Termination Face
56-702-008	J	100 pF Pi	.090 [2.29]	.290
56-702-009	К	2500 pF Pi	\$\displaystyle{\partial 0.09} \begin{picture}(0.09) \\ \partial 0.032 \\ \partial 0.	(7.37) 0.540 [6.99] (13.72] 0.125±.005 (3.18±.13] 2 PLCS. Bottom View
			0.752 [17.05]	Rottom view

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



.740[♦] \oplus

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm]

^{**}See page 1 for filter performance





9 Shell Size



Solder Cup Termination

	EMI Filter		1213 [30.81]
Spectrum Control Part Number	Filter Designation**	Cap. Value	.565 [16.92]757 [19.23]757 [19.23]
56-701-012	В	1000 pF C	.420
56-701-013	С	1000 pF Pi	
56-701-014	D	5000 pF C	Mating Face 238 to all a cross Townshation Face
56-701-015	Е	4000 pF Pi	(6.05) Termination Face
56-701-041	J	100 pF Pi	[1.65] OD Ø.042 MIN.
56-701-042	К	2500 pF Pi	Ø.120±.005 -[3.05±.13] 2 PLCS. (1.07) ID (1.07) ID (1.07) ID (1.07) ID (1.07) ID (1.07) ID (1.07) ID
			Side View

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





9 Shell Size



Printed Circuit Board Mount

	EMI Filter		
Spectrum Control Part Number	Filter Designation**	Cap. Value	1.213 [30.81] 640 - [16.26]
56-703-002	В	1000 pF C	SQ.
56-703-003	С	1000 pF Pi	.304
56-703-004	D	5000 pF C	1,772,
56-703-005	Е	4000 pF Pi	99
56-703-023	J	100 pF Pi	[24.99] — .150 [3.81] Mating Face
56-703-024	K	2500 pF Pi	757 [10.80]
			10° Side View
			Ø.120±.005 [3.05±0.13] — Termination Face 2 PLCS.

Printed Circuit Board Right Angle Mount

	EMI Filter		1.213 [30.81]	
Spectrum Control Part Number	Filter Designation**	Cap. Value	.640 [16.26]	Ø.120±.005 [3.05±0.13] 2 PICS.
56-704-002	В	1000 pF C	.304 [7.72] \oplus (0 0 0 0 \oplus 1.505 [12.83]	(1111) (420
56-704-003	С	1000 pF Pi	00000000	[10.67]
56-704-004	D	5000 pF C	.984 [24.99]	.020±.005 0.001
56-704-005	Е	4000 pF Pi	Mating Face	Termination Face
56-704-008	J	100 pF Pi	.243 [6.17]	.618 [15.70]
56-704-009	К	2500 pF Pi	\$\frac{\doldown{1.05}{0.105}}{0.25}\$ \$\frac{\doldown{3.75}{0.53}}{0.25}\$ \$\frac{\doldown{3.75}{0.53}}{0.25}\$ \$\frac{\doldown{3.70}{0.50}}{0.25}\$ \$\frac{\doldown{3.70}{0.64}}{0.25}\$ \$\frac{\doldown{3.70}{0.64}}{	250 [7.37] 18.80] 25.005 820.13] PLCS. R.12 [3.05] Bottom View

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance







9 Shell Size



Solder Cup Termination

	EMI Filter		.243 - 0.050
Spectrum Control Part Number	Filter Designation**	Cap. Value	[6.17] CUP640 [16.26]
56-706-002	В	1000 pF C	.505 (12,83) (
56-706-003	С	1000 pF Pi	
56-706-004	D	5000 pF C	♦ .125 (3.18) .065 MAX. O.D.
56-706-005	Е	4000 pF Pi	
56-706-007	J	100 pF Pi	Side View757 [19.23]
56-706-008	K	2500 pF Pi	10*
			Ø.120±.005
			2 PLCS. Termination Face

Pin/Socket Adapter

	EMI F	ilter	1.213 [30.81]520
Spectrum Control Part Number	Filter Designation**	Cap. Value	10° 1 666 [16.92] .050 [1.27]
56-705-002	В	1000 pF C	.505 [12,83] Side View
56-705-003	С	1000 pF Pi	
56-705-004	D	5000 pF C	984 [24,99] - 1.213 [30.81]
56-705-005	E	4000 pF Pi	Ø.120±.005 Pin Face [16.26] -1
56-705-009	J	100 pF Pi	2 PLCS238 [6.06] .505
56-705-010	K	2500 pF Pi	[7.72]
			9-/
			Ø .120 ±.005 [3.05 ±0.13] — 2 PLCS.
			Socket Face



^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





15 Shell Size



Printed Circuit Board Mount

	EMI Filter		
Spectrum Control Part Number	Filter Designation**	Cap. Value	.994 [25.25] .050 [1.27] .025
56-711-002	В	1000 pF C	505 12.83]
56-711-003	С	1000 pF Pi	15-
56-711-004	D	5000 pF C	1.512 [33.32]
56-711-005	Е	4000 pF Pi	.408 V
56-711-029	J	100 pF Pi	Mating Face [10.36] Fig. Side View
56-711-030	К	2500 pF Pi	1.085 [27.56] 10°

Printed Circuit Board Right Angle Mount

	EMI F	ilter	1.541 [39.14]	1.085 [27.56]
Spectrum Control Part Number	Filter Designation**	Cap. Value		10°
56-712-002	В	1000 pF C	[12.83]	.420 [10.67] (10.67) (10.67) (10.67)
56-712-003	С	1000 pF Pi	1.312 [33.32]	100000000000000000000000000000000000000
56-712-004	D	5000 pF C	Ø.120±.005 \(\square\) [3.05±0.13]	Termination Face
56-712-005	Е	4000 pF Pi	Mating Face	.942 [23.93] —
56-712-008	J	100 pF Pi	.238 [6.05]	<u> </u>
56-712-009	К	2500 pF Pi	0.090 [2.29] 3.358 [9.09] 0.32 [0.81] Typ. 0.090 [2.67] 500 [14.99] 5ide 1.702 \$\dots\$ View	.275 [6.99] 0.275 [6.99] 0.125 ± .005 [18.80] 0.125 ± .005 [3.18±0.13] 2 PLCS. 0.125 ± .005 [3.18±0.13] 2 PLCS. 0.125 ± .005 [3.18±0.13] 2 PLCS.

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance







15 Shell Size



Solder Cup Termination

	EMI F	ilter	1.541 [39.14]
Spectrum Control Part Number	Filter Designation**	Cap. Value	994 [25.25]
56-711-012	В	1000 pF C	.505 [12.83] (+ (3.333) (8.46) (8.46)
56-711-013	С	1000 pF Pi	[6.05]050 [1.27]
56-711-014	D	5000 pF C	15— 0.42 MIN. ID (1.07) (1.07) (1.07) (1.08)
56-711-015	E	4000 pF Pi	Mating Face
56-711-041	J	100 pF Pi	10
56-711-042	К	2500 pF Pi	1.085 [27.56] 10

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





15 Shell Size



Printed Circuit Board Mount

Printed Circuit Board Right Angle Mount

	EMI	Filter	1.541 [39.14]
Spectrum Control Part Number	Filter Designation**	Cap. Value	304 (6000000) 505
56-714-002	В	1000 pF C	
56-714-003	С	1000 pF Pi	
56-714-004	D	5000 pF C	φ.120±.005 [3.05±0.13] Termination Face
56-714-005	E	4000 pF Pi	2 P.Cs. Mating Face R.12 [3.05]
56-714-007	J	100 pF Pi	2 PLCS.
56-714-008	К	2500 pF Pi	243 (6.17) .050 [1.27] .050 [1



^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance



15 Shell Size



Solder Cup Termination

	EMI	Filter	1.541 [39.14]
Spectrum Control Part Number	Filter Designation**	Cap. Value	.968 [24.59] — .968 [24.59] — .968 [1.65] .065 [1.65] .065 [1.67] .042 [1.07]
56-716-002	В	1000 pF C	505 (322) (322) (322)
56-716-003	С	1000 pF Pi	[12.83]
56-716-004	D	5000 pF C	15 SOLDER
56-716-005	Е	4000 pF Pi	1.312 [33.32] - CUP
56-716-007	J	100 pF Pi	Mating Face 1.085 [27.56] 15±.020 1.5±.020 92±0.51]
56-716-008	К	2500 pF Pi	Side View (#) (120±.005

Pin/Socket Adapter

	EMI	Filter	1.541 [39.14]
Spectrum Control Part Number	Filter Designation**	Cap. Value	994 [25.25] - [13.21] - [13.21] - [12.7]
56-715-002	В	1000 pF C	.505 [12,831]
56-715-003	С	1000 pF Pi	Side View
56-715-004	D	5000 pF C	1,312 [33,32]
56-715-005	E	4000 pF Pi	Ø.1201.005 / [3.05±0.13] - 1.541 [39.14] - 2PLCS 238 [6.05]
56-715-008	J	100 pF Pi	Pin Face
56-715-009	К	2500 pF Pi	505 [12.83]

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





25 Shell Size



Printed Circuit Board Mount

	EMI	Filter	.238050
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.088 [53.04] [6.05] [1.27] .025 SQ. [0.64]
56-721-002	В	1000 pF C	.505
56-721-003	С	1000 pF Pi	[12.83] (12.83) (18.46)
56-721-004	D	5000 pF C	25
56-721-005	Е	4000 pF Pi	1.852 [47.04]
56-721-034	J	100 pF Pi	Mating Face [10.36] Side View
56-721-035	К	2500 pF Pi	# 1.625 [41.28] 10° # (20 ± .005

Printed Circuit Board Right Angle Mount

	EMI	Filter
Spectrum Control Part Number	Filter Designation**	Cap. Value
56-722-002	В	1000 pF C
56-722-003	С	1000 pF Pi
56-722-004	D	5000 pF C
56-722-005	E	4000 pF Pi
56-722-009	J	100 pF Pi
56-722-010	К	2500 pF Pi

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





25 Shell Size



Solder Cup Termination

	EMI	Filter	2.088 [53.04]
Spectrum Control Part Number	Filter Designation**	Cap. Value	1.534 [38.06] .238 .050 [1.27] .042 MIN. [1.07] ID
56-721-012	В	1000 pF C	.505 .333 .333
56-721-013	С	1000 pF Pi	[12.83]
56-721-014	D	5000 pF C	25-7
56-721-015	Е	4000 pF Pi	1.852 [47.04] Mating Face
56-721-046	J	100 pF Pi	SOLDERCUP
56-721-047	К	2500 pF Pi	1.625 [41.28] 10° 10° 115 [2.92] ±.020
			9.120±.005 Termination Face
			[3.05±0.13] 2 PLCS.

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





25 Shell Size



Printed Circuit Board Mount

	EMI	Filter	2.088 [53.04]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.088 [53.04]050 [1.27]055 Q
56-723-002	В	1000 pF C	505 (60000000000) (304
56-723-003	С	1000 pF Pi	[12.83]
56-723-004	D	5000 pF C	25
56-723-005	Е	4000 pF Pi	1.852 [47.04]
56-723-024	J	100 pF Pi	Mating Face [10.80] Side View
56-723-025	К	2500 pF Pi	1.625 [41.28] 1.625

Printed Circuit Board Right Angle Mount

	EMI	Filter	2.088 [53.04]
Spectrum Control Part Number	Filter Designation**	Cap. Value	1.508 (38.30) 10 (Jalalalalalalalalalalalalalalalalalalal
56-724-002	В	1000 pF C	505 [12.83]
56-724-003	С	1000 pF Pi	0.20±.005 Termination Factors (0.51±0.13)
56-724-004	D	5000 pF C	1.852 [47.04]
56-724-005	Е	4000 pF Pi	Mating Face
56-724-009	J	100 pF Pi	[9.53] .050 .290 + • • • • • • • • • • • • • • • • • •
56-724-010	К	2500 pF Pi	0.90 (2.29) (1.27) (7.37) (1.37) (2.29) (2.2

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





25 Shell Size



Solder Cup Terminaton

	EMI	Filter	2.088 [53.04]
Spectrum Control Part Number	Filter Designation**	Cap. Value	[6.17] Ø .065 OD. [1.65] MAX. 0-42 ID [1.07] MIN.
56-726-002	В	1000 pF C	505 (304
56-726-003	С	1000 pF Pi	[12.83]
56-726-004	D	5000 pF C	-25
56-726-005	Е	4000 pF Pi	1.852 [47.04] .115±.020
56-726-007	J	100 pF Pi	Mating Face [2.92±0.51]
56-726-008	K	2500 pF Pi	1.625 [41.28] Side View
			φ.120±.005 [3.05±0.13] Termination Face

Pin/Socket Adapter

	EMI	Filter
Spectrum Control Part Number	Filter Designation**	Cap. Value
56-725-002	В	1000 pF C
56-725-003	С	1000 pF Pi
56-725-004	D	5000 pF C
56-725-005	E	4000 pF Pi
56-725-020	J	100 pF Pi
56-725-021	К	2500 pF Pi

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





37 Shell Size



Printed Circuit Board Mount

	EMI	Filter	2.729 [69.32]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.182 [55.42]
56-731-002	В	1000 pF C	505 - 333 333 333
56-731-003	С	1000 pF Pi	[12.83]
56-731-004	D	5000 pF C	
56-731-005	Е	4000 pF Pi	2.500 [63.50]
56-731-029	J	100 pF Pi	Mating Face Side View
56-731-030	К	2500 pF Pi	2.273 [57.73] (9) (0.120±.005 [3.05±0.13] 2.273 [57.73] (1.005) (2.120±.005) (2.120±.005) (2.120±.005) (2.120±.005) (2.120±.005) (2.120±.005) (3.105±0.13) (3.105±0.13) (4.120±.005) (4.

Printed Circuit Board Right Angle Mount

	EMI	Filter	2.729 [69.32]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.182 [55.42] 2.273 [57.73] 10° [10.67]
56-732-002	В	1000 pF C	[12.83]
56-732-003	С	1000 pF Pi	0.120:.005 [3.05:0.13] Termination Face [0.51:.0.13] 2 PLCS.
56-732-004	D	5000 pF C	2.500 [63.50]
56-732-005	Е	4000 pF Pi	358 [9.09]
56-732-007	J	100 pF Pi	.238090 [2.29]
56-732-008	К	2500 pF Pi	.050 [1.27] .290 [7.37] .290 [

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





37 Shell Size



Solder Cup Termination

	EMI	Filter	2.729 [69.32]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.182 [55.42]
56-731-012	В	1000 pF C	(1.27) (1.27) (1.27)
56-731-013	С	1000 pF Pi	
56-731-014	D	5000 pF C	2.500 [63.50] Mating Face
56-731-015	E	4000 pF Pi	△ .042 ID
56-731-041	J	100 pF Pi	2.273 [57.73] 10° [10.36] .065 OD
56-731-042	К	2500 pF Pi	\$\frac{1}{420} \\ \frac{420}{10.67} \\ \frac{37}{\phi.120\pm.005}\$\frac{1}{\phi.120\pm.005}\$\frac{1}{\phi.120\pm.005}\$\frac{115\pm.020}{10.67} \\ \frac{100\pm.005}{10.67}\$\frac{115\pm.020}{10.67} \\ \frac{115\pm.020}{10.67} \\ \frac{120\pm.005}{10.67}\$\\ \frac{120\pm.005}{10.67}\$\frac{115\pm.020}{10.67} \\ \frac{115\pm.020}{10.67} \\ \frac{120\pm.005}{10.67}\$\\ \frac{120\pm.005}{10.67}\$\\ \frac{115\pm.020}{10.67}\$\\ \frac{120\pm.005}{10.67}\$\\ \frac{115\pm.020}{10.67}\$\\ \frac{120\pm.005}{10.67}\$\\ \frac{120\pm.005}{10.67}\$\\ \frac{115\pm.020}{10.67}\$\\ \f
			[3.05±0.13] —/ 2 PLCS. Termination Face

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance



37 Shell Size



Printed Circuit Board Mount

	EMI	Filter	2.729 [69.32]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.156 [54.76] [6.17] [1.27] .025 SQ. [0.64]
56-733-002	В	1000 pF C	.505 (12.83) (1.83) (1.83) (1.83) (1.83)
56-733-003	С	1000 pF Pi	25 .304 .150
56-733-004	D	5000 pF C	[7.72]
56-733-005	Е	4000 pF Pi	♦ 1723 10.80]
56-733-022	J	100 pF Pi	Mating Face Side View
56-733-023	К	2500 pF Pi	2.273 [57.73] 10° 420 [10.67] \$\phi\$.120 ±.005 [3.05 ± 0.13] 2 PLCS. Termination Face

Printed Circuit Board Right Angle Mount

	EMI	Filter
Spectrum Control Part Number	Filter Designation**	Cap. Value
56-734-002	В	1000 pF C
56-734-003	С	1000 pF Pi
56-734-004	D	5000 pF C
56-734-005	Е	4000 pF Pi
56-734-007	J	100 pF Pi
56-734-008	К	2500 pF Pi

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm]



^{**}See page 1 for filter performance



37 Shell Size



Solder Cup Termination

	EMI	Filter	2.729 [69.32]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.156 [54.76]
56-736-002	В	1000 pF C	.505 [12.83] (a)
56-736-003	С	1000 pF Pi	304 (7.72)
56-736-004	D	5000 pF C	2.500 [63,50] .042 [1.07] MIN I.D.
56-736-005	Е	4000 pF Pi	Mating Face .575 SOLDERCUPS
56-736-007	J	100 pF Pi	[14.00]
56-736-008	К	2500 pF Pi	© .120±.05.013]

Pin/Socket Adapter

	EMI	Filter	2.182 [55.42]520
Spectrum Control Part Number	Filter Designation**	Cap. Value	1 (6.17) (5.05) (12.83) (1.27) (1.27) (1.27) (1.27) (1.283) (1
56-735-002	В	1000 pF C	Side view
56-735-003	С	1000 pF Pi	2.500 [63.50]
56-735-004	D	5000 pF C	Ø.120±.005 [3.05±0.13]
56-735-005	E	4000 pF Pi	2 PLCS. 2.729 [69.32] Pin Face 2.156 [54.76]
56-735-009	J	100 pF Pi	
56-735-010	К	2500 pF Pi	(12.83) (12.83
			Ø.120±.005 [3.05±0.13] 2 PLCS.
			Socket Face

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





50 Shell Size



Printed Circuit Board Mount

	EMI	Filter	
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.635 [66.93]050 [1.27]
56-741-002	В	1000 pF C	615
56-741-003	С	1000 pF Pi	[15.62] 000000000000000000000000000000000000
56-741-004	D	5000 pF C	50-/
56-741-005	Е	4000 pF Pi	2.406 [61.11]
56-741-028	J	100 pF Pi	Mating Face Side View
56-741-029	К	2500 pF Pi	2.170 [SS.12] 10°

Printed Circuit Board Right Angle Mount

	EMI	Filter	2.635 [66.93]	2.170 [55.12]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.079 [52.81]	(0.51) 10° 10° 10° 10° 10° 10° 10° 10° 10° 10°
56-742-002	В	1000 pF C	.615 [15.62] \oplus .440 [11.18]	1 V amanananananananananananananananananana
56-742-003	С	1000 pF Pi	50-	↓ Ø.120±.005 [3.05±0.13] 2 PLCS.
56-742-004	D	5000 pF C	2.406 [61.11]	Termination Face
56-742-005	Е	4000 pF Pi	Mating Face	
56-742-007	J	100 pF Pi	.238 [6.05]358 [9.09] 090 [2.29]	275 - 2,038 [51,77]
56-742-008	К	2500 pF Pi	\$\frac{0.550}{(1.27)}\$ \$\frac{\phi}{(1.27)}\$ \$\frac{\phi}{(2.67)}\$ \$\frac{\phi}{(2.68)}\$ \$\frac{\phi}{(17.83)}\$ \$Side View	(5.90) (10.56) (13.72)

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





50 Shell Size



Solder Cup Termination

	EMI	Filter	2.635 [66.93]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.079 [52.81] .050 [6.05] .042[1.07]
56-741-012	В	1000 pF C	.615 [15.62]
56-741-013	С	1000 pF Pi	MAX. O.D.
56-741-014	D	5000 pF C	2.406 [61.11]
56-741-015	Е	4000 pF Pi	Mating Face
56-741-040	J	100 pF Pi	SOLDERCUP
56-741-041	K	2500 pF Pi	
			\$\(\frac{\cdot \cdot \cd



^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





50 Shell Size



Printed Circuit Board Mount

	EMI	Filter	2.635 [66.93]	***
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.062 [52.37]	.243 [6.17] .050 [1.27
56-743-002	В	1000 pF C	.615 [15.62]	
56-743-003	С	1000 pF Pi	[13.52]	
56-743-004	D	5000 pF C	2.406 [61.11]	♦ .425
56-743-005	Е	4000 pF Pi	Mating Face	[10.80]
56-743-022	J	100 pF Pi	3	Side View
56-743-023	К	2500 pF Pi	2.170 [55.12]	10°
			Ø.120±.00: [3.05±0.33] 2 PLCS.	

Printed Circuit Board Right Angle Mount

	EMI	Filter	2.635 [66.93]	
Spectrum Control Part Number	Filter Designation**	Cap. Value	615 (15.62) (10.77)	2.170 [55.12]
56-744-002	В	1000 pF C	115.62]	(13.39)
56-744-003	С	1000 pF Pi	2.406 [61.11]	
56-744-004	D	5000 pF C	Ø.120±.005 [3.05±0.13] 2 PICS.	Termination Face
56-744-005	Е	4000 pF Pi	Mating Face	
56-744-007	J	100 pF Pi	[6.17]	
56-744-008	К	2500 pF Pi	.105 .590 [2.59] .105 .590 [0.64] .772 [17.83] Side View	R.12 (3.05) 2 P(CS.

^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance





50 Shell Size



Solder Cup Termination

	EMI Filter		2.635 [66.93]
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.062 [52.37] MIN LD
56-746-002	В	1000 pF C	.615 [15.62] (3.62) (3.62) (4.16) (10.57)
56-746-003	С	1000 pF Pi	50
56-746-004	D	5000 pF C	CUP
56-746-005	Е	4000 pF Pi	2.406 [61.11]
56-746-007	J	100 pF Pi	Mating Face
56-746-008	K	2500 pF Pi	2.170 [55.12] 10° Side View
			φ.120±.005 [13.05±0.13] 2 PLCS. Termination Face

Pin/Socket Adapter

	EMI Filter		2.635 [66.93] - 2.4352([6.17] [13.2
Spectrum Control Part Number	Filter Designation**	Cap. Value	2.079 [52.81]
56-745-002	В	1000 pF C	.440 (11.18) (10.00000000000000000000000000000000000
56-745-003	С	1000 pF Pi	2.406 [61.11]
56-745-004	D	5000 pF C	Ø.153±.005
56-745-005	Е	4000 pF Pi	[3.89±0.13] 2 PLCS. 2.635 [66.93] 238 [6.05]
56-745-007	J	100 pF Pi	Pin Face 2.062 [52.37] Side View
56-745-008	К	2500 pF Pi	.615 [15.62] (10.57]
			2.406 [61.11] Ø.153±.005
			[3.89±0.13] Socket Face



^{*}Replace "56-" with "56F" to indicate RoHS compliant Dimensions in inches [mm] **See page 1 for filter performance



D-Subminiature Connector Options Threaded Locking Inserts (LI)

Available on Series 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 (GB)

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 (GBL6)

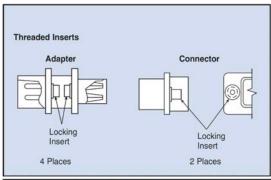
For straight PCB connectors, available on Series 700.

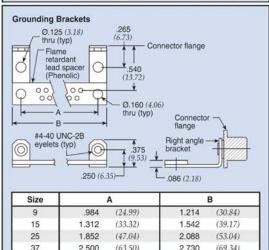
- Allows shell grounding to board.
- · Eliminates stress on flter temperature.
- Tin plated brass stand-of with snap-in feature.
- Available for .062" (1.57mm) or .093" (2.36mm).

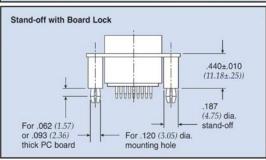
Grounding Bracket with Board Lock (GBL)

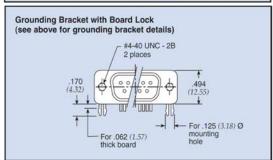
For right angle mount PCB connectors, available on Series 600 & 700.

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









Dimensions in inches [mm]

