

Series 700 Specifications and Connector Ordering

Mechanical Specifications

- Shell* Zinc or aluminum diecast, nickel plated
 150 μ inches (3.81 μ m) min.
- Insulators* Glass-filled polyester,
 flammability UL94V-0
- Pin Contacts* Copper alloy, 15 μ inches
 (0.38 μ m) gold plated * over nickel
- Socket Contacts* Copper alloy, 30 μ inches
 (0.76 μ m) gold plated * over nickel
 * Heavier gold plating available upon request.
 See pg. FC43: Connector Options
- Terminations* 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

- 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
- Solder cups accept up to a 20 gauge wire.

Note:
 For additional mechanical, electrical, and
 environmental specifications, refer to page FC79.

Ordering Your Connector

STEP 1: SELECTING THE FILTER

- Using the insert loss graphs on page FC20 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 feed-through capacitor or Pi. The Pi is generally considered better due to its superior high frequency performance and steeper curve. The feed-through capacitor is lower cost.
- Select capacitance value.
- Note the Spectrum letter designation for the filter chosen from the table on page FC20.

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 FC43 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, consult with factory for part number assignment.

25 Series 700 Shell Size Pin/Socket Adapter



Solderless Wire Wrap

Spectrum Part Number <i>Select one</i>	EMI Filter			Filter Design.**	Cap. Value
	L .500	L .375	L .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	

Solder Cup Termination

Spectrum 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

Pin/Socket Adapter

Spectrum 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

€ Also available through API's authorized European distributors/agents.

* May be available from distributor stock.

** See page FC20 for filter performance.

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

API TECHNOLOGIES • 8061 Avonia Rd. • Fairview, PA 16415 • Ph: 814-474-1571 • Fax: 814-474-3110 • eis.apitech.com

API TECHNOLOGIES' SPECTRUM CONTROL GmbH • Hansastrasse 6 • 91126 Schwabach, Germany • Phone: (49)-9122-795-0 • Fax: (49)-9122-795-58

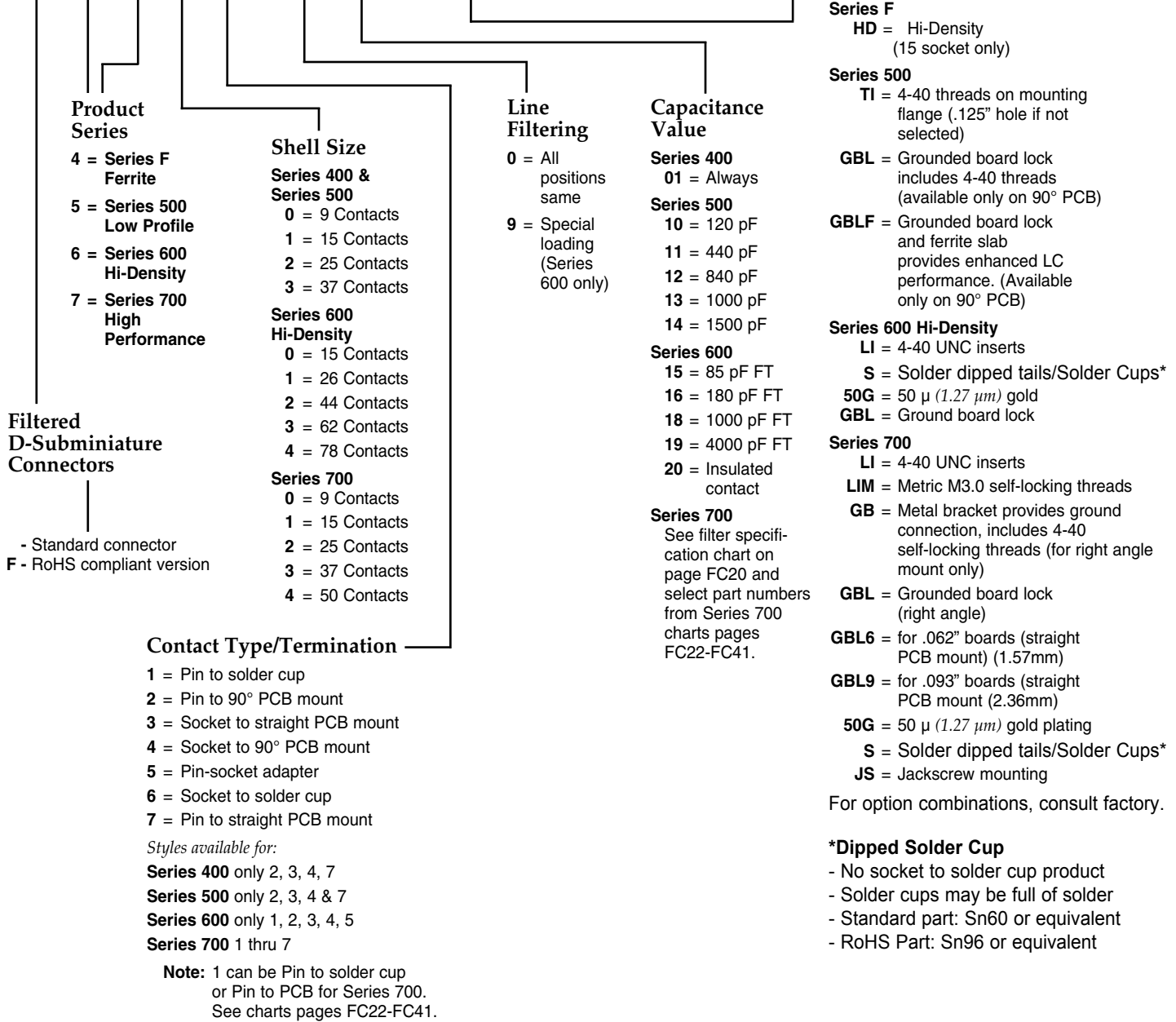
Dimensions in inches (mm)

D-Subminiature Part Numbering System

Ordering Information

Example: **56-513-012-TI**

56 - **5** - **1** - **3** - **0** - **12** - **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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Spectrum Control:](#)

[56F725-003](#)