

Series 400 Ferrite Filtered Connectors

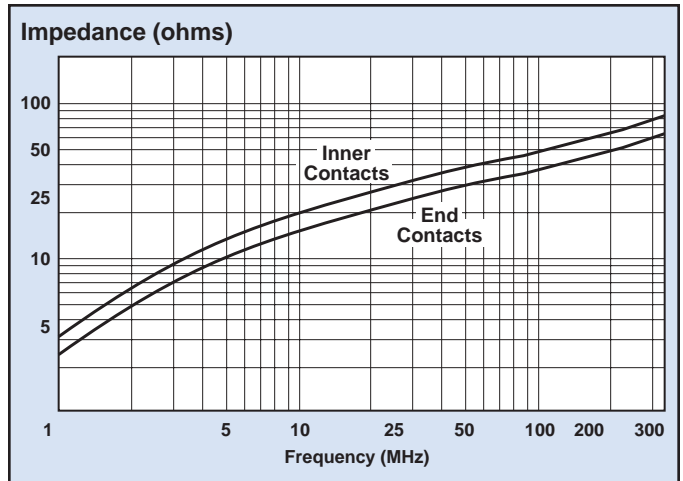
The Series 400 filtered D-subminiature connectors incorporate a solid slab of ferrite material as the filtering element. This rugged one piece design provides a compact connector that is a drop-in replacement for standard connectors. The ferrite material has been chosen for optimum filtering performance in the 10 to 300 MHz. range.

Series 400 Applications

- Personal computers, microcomputer-applied products and peripheral/terminal equipment
- Eliminates common-mode noise along data lines in data communication terminals and digital equipment

Features

- Superior filtering of high frequency interference
- Low cost, high performance ferrite filter
- Prevents common-mode noise in signal lines of data communication terminals and digital devices
- No distortion of wave forms
- Replaces individual ferrite bead filters, saving cost and space
- Provides both pin to ground and pin to pin filtering
- Effective in helping meet requirements of FCC, VDE, EN55022 and Japan's VCCI
- Short, space saving .318" footprint
- Interchangeable with standard D-subminiature connectors
- Can be installed directly over PCB trace pattern with no shorting
- 4-40 UNC locking insert eliminates loose hardware
- Metal shielding front shell
- Gold plated contacts
- Stacked ferrite connectors also available. Consult factory for more information.



Mechanical Specifications

- Shell* Steel (Tin Plated)
- Insulators* PBT + 30% Glass Fiber (UL 94V-0)
- Pin Contacts* Phosphor Bronze or Brass
- Contact Plated.* Gold Flash
- Operating Temperature* -40°C to +105°C

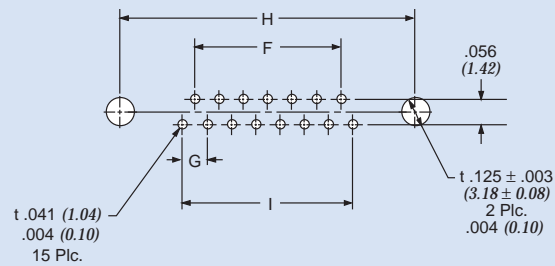
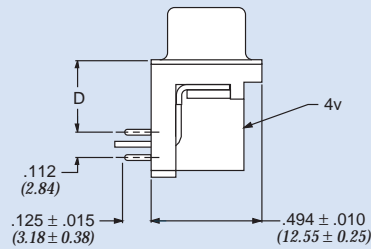
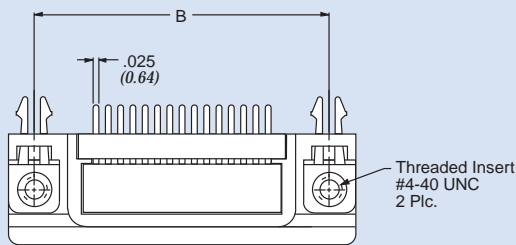
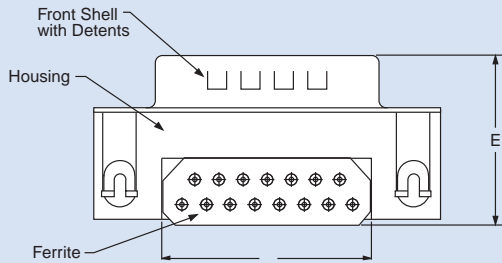
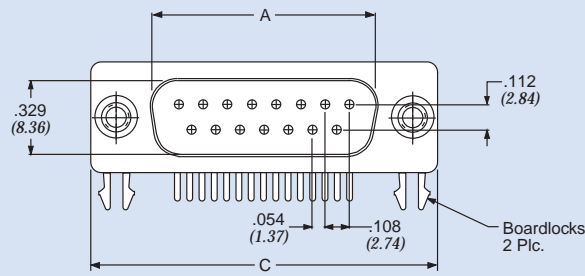
Electrical Specifications

- Impedance.* @ 5 MHz - 15 ohms
@ 25 MHz - 30 ohms
@ 100 MHz - 50 ohms
@ 300 MHz - 75 ohms
- Frequency Range.* 10 - 300 MHz
- Current Rating* 5 Amps
- Dielectric Withstand Voltage.* 1000 VRMS for one minute
- Insulator Resistance.* 1000 megohms Min. @ 500VDC



Series 400 Ferrite Filtered Connectors

Pin Contact – Right Angle Mount



PC Board Mounting Dimensions

Series 400 Ferrite Filtered Connectors

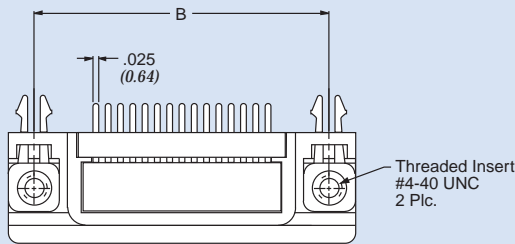
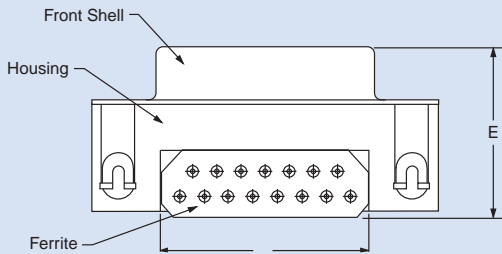
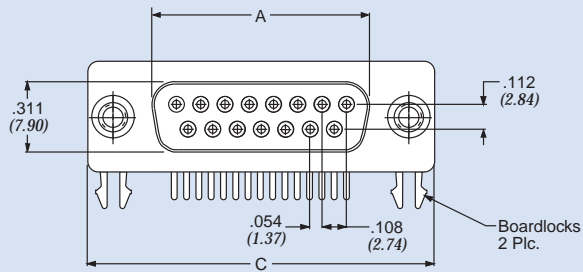
Part Number	Description	Typ. Impedance (Ohms)		Frequency Range	A +/-	B +/-	C +/-	D +/-	E +/-	F +/-	G +/-	H +/-	I +/-
		25 MHz	100 MHz		0.010 (0.25)	0.005 (0.13)	0.015 (0.38)	0.010 (0.25)	0.015 (0.38)	0.005 (0.13)	0.004 (0.10)	0.005 (0.13)	0.005 (0.13)
€ 56-402-001	D-Sub 9 pin	30	50	10 MHz to 300 MHz	0.666 (16.92)	0.984 (25.00)	1.213 (30.81)	0.318 (8.08)	0.751 (19.10)	0.327 (8.31)	0.109 (2.77)	0.984 (25.00)	0.436 (11.07)
€ 56-412-001	D-Sub 15 pin				0.994 (25.25)	1.312 (33.32)	1.541 (39.14)	0.318 (8.08)	0.751 (19.10)	0.654 (16.61)	0.109 (2.77)	1.312 (33.32)	0.763 (19.38)
€ 56-422-001	D-Sub 25 pin				1.534 (38.96)	1.852 (47.04)	2.088 (53.04)	0.318 (8.08)	0.751 (19.10)	1.199 (30.45)	0.109 (2.77)	1.852 (47.04)	1.308 (33.22)

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

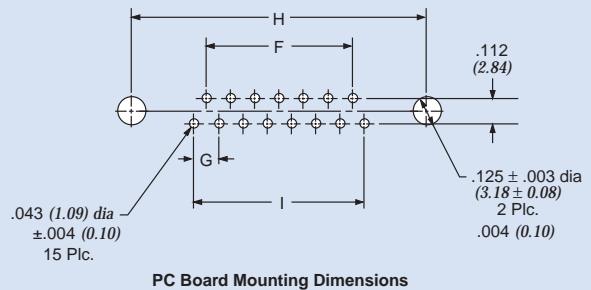
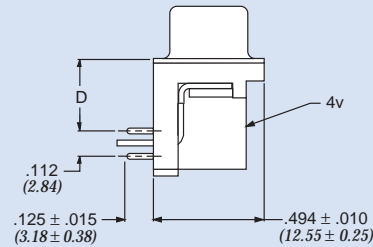
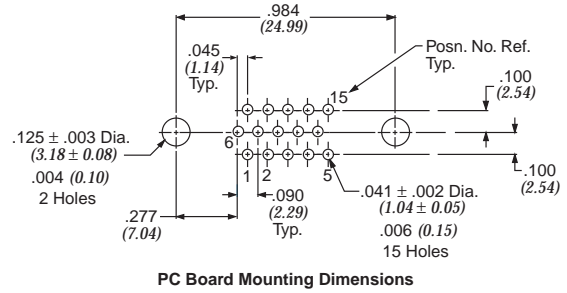
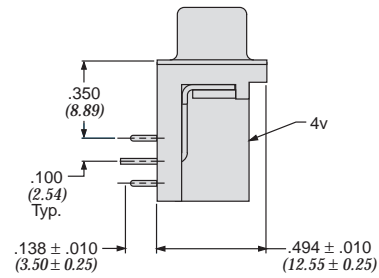
Dimensions in inches (mm)

Series 400 Ferrite Filtered Connectors

Socket Contact – Right Angle Mount



*Hi-Density



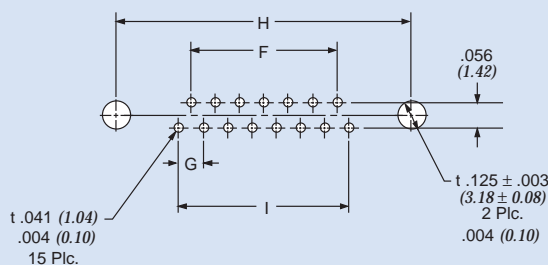
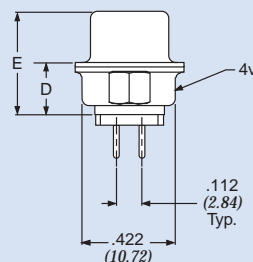
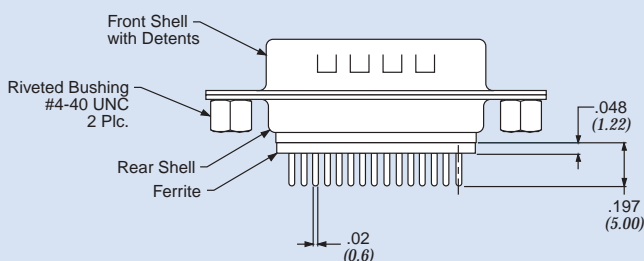
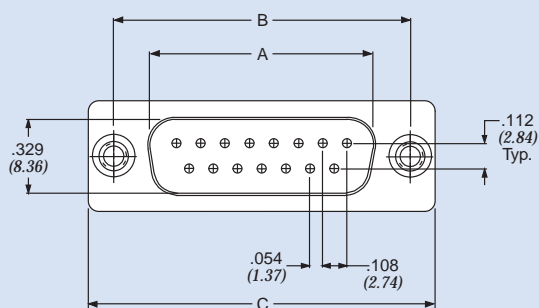
Part Number	Description	Typ. Impedance (Ohms)		Frequency Range	A +/-	B +/-	C +/-	D +/-	E +/-	F +/-	G +/-	H +/-	I +/-
		25 MHz	100 MHz		0.010 (0.25)	0.005 (0.13)	0.015 (0.38)	0.010 (0.25)	0.015 (0.38)	0.005 (0.13)	0.004 (0.10)	0.005 (0.13)	0.005 (0.13)
€ 56-404-001	D-Sub 9 socket	30	50	10 MHz to 300 MHz	0.643 (16.33)	0.984 (25.00)	1.213 (30.81)	0.318 (8.08)	0.755 (19.20)	0.327 (8.31)	0.109 (2.77)	0.984 (25.00)	0.436 (11.07)
€ 56-414-001	D-Sub 15 socket				0.971 (24.66)	1.312 (33.32)	1.541 (39.14)	0.318 (8.08)	0.755 (19.20)	0.654 (16.61)	0.109 (2.77)	1.312 (33.32)	0.763 (19.38)
€ 56-424-001	D-Sub 25 socket				1.511 (38.38)	1.852 (47.04)	2.088 (53.04)	0.318 (8.08)	0.755 (19.20)	1.199 (30.45)	0.109 (2.77)	1.852 (47.04)	1.308 (33.22)
€ 56-414-001-HD	Hi-Density 15 socket				0.643 (16.33)	0.984 (25.00)	1.213 (30.81)	* See inset drawing					

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

Dimensions in inches (mm)

Series 400 Ferrite Filtered Connectors

Pin Contact – Vertical Mount



PC Board Mounting Dimensions

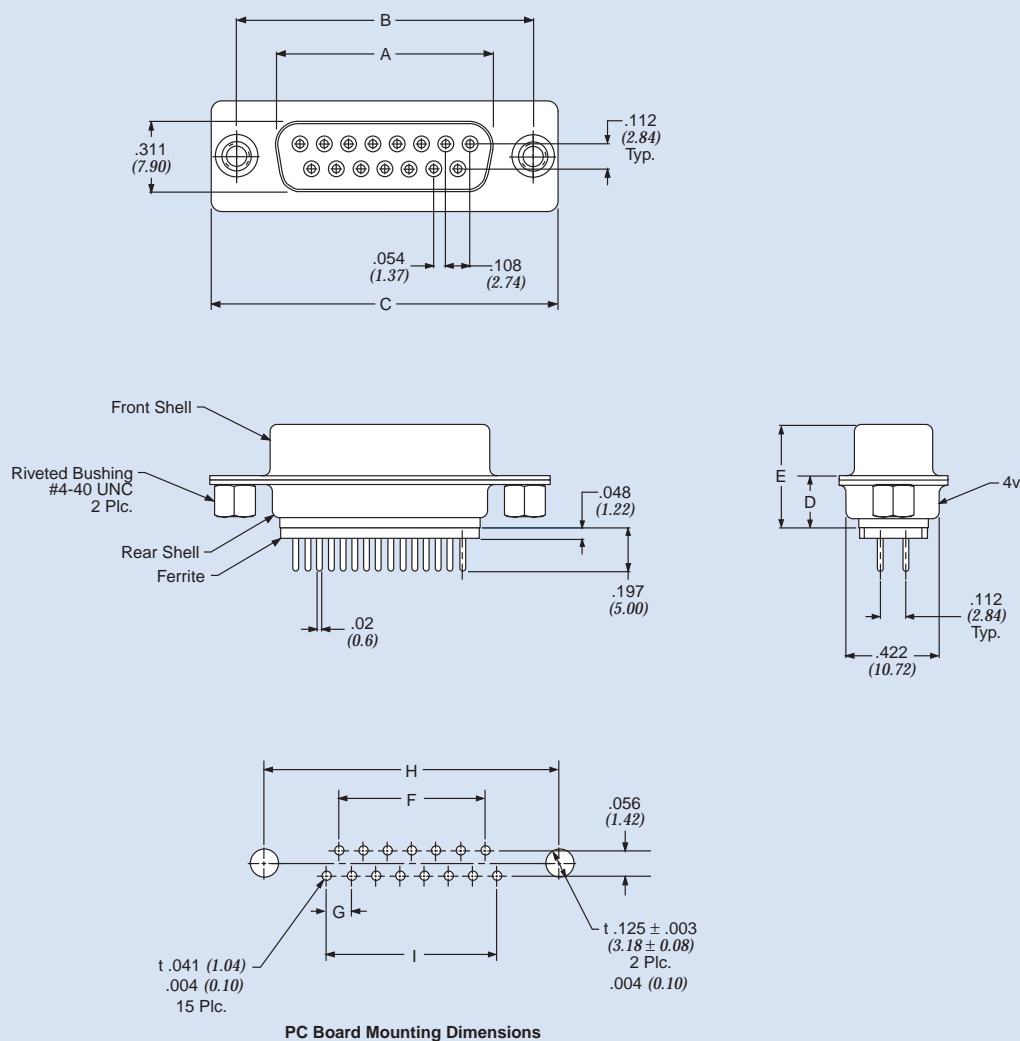
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Part Number	Description	Typ. Impedance (Ohms)		Frequency Range	A +/-	B +/-	C +/-	D +/-	E +/-	F +/-	G +/-	H +/-	I +/-
		25 MHz	100 MHz		0.010 (0.25)	0.005 (0.13)	0.015 (0.38)	0.010 (0.25)	0.015 (0.38)	0.005 (0.13)	0.004 (0.10)	0.005 (0.13)	0.005 (0.13)
56-407-001	D-Sub 9 pin	30	50	10 MHz to 300 MHz	0.666 (16.92)	0.984 (25.00)	1.213 (30.81)	0.236 (5.99)	0.468 (11.88)	0.327 (8.31)	0.109 (2.77)	0.984 (25.00)	0.436 (11.07)
56-417-001	D-Sub 15 pin				.994 (25.25)	1.312 (33.32)	1.541 (39.14)	0.236 (5.99)	0.468 (11.88)	0.654 (16.61)	0.109 (2.77)	1.312 (33.32)	0.763 (19.38)
56-427-001	D-Sub 25 pin				1.534 (38.96)	1.852 (47.04)	2.088 (53.04)	0.236 (5.99)	0.468 (11.88)	1.199 (30.45)	0.109 (2.77)	1.852 (47.04)	1.308 (33.22)

Dimensions in inches (mm)

Series 400 Ferrite Filtered Connectors

Socket Contact – Vertical Mount



Part Number	Description	Typ. Impedance (Ohms)		Frequency Range	A +/-	B +/-	C +/-	D +/-	E +/-	F +/-	G +/-	H +/-	I +/-
		25 MHz	100 MHz		0.010 (0.25)	0.005 (0.13)	0.015 (0.38)	0.010 (0.25)	0.015 (0.38)	0.005 (0.13)	0.004 (0.10)	0.005 (0.13)	0.005 (0.13)
56-403-001	D-Sub 9 socket	30	50	10 MHz to 300 MHz	0.643 (16.33)	0.984 (25.00)	1.213 (30.81)	0.236 (5.99)	0.472 (11.98)	0.327 (8.31)	0.109 (2.77)	0.984 (25.00)	0.436 (11.07)
56-413-001	D-Sub 15 socket				.971 (24.66)	1.312 (33.32)	1.541 (39.14)	0.236 (5.99)	0.472 (11.98)	0.654 (16.61)	0.109 (2.77)	1.312 (33.32)	0.763 (19.38)
56-423-001	D-Sub 25 socket				1.511 (38.38)	1.852 (47.04)	2.088 (53.04)	0.236 (5.99)	0.472 (11.98)	1.199 (30.45)	0.109 (2.77)	1.852 (47.04)	1.308 (33.22)

Dimensions in inches (mm)