

# EMI-Filtered High-Performance D-Sub Pi Adapters and Connectors >

Compact and highly efficient, EMI-Filtered High-Performance D-Sub Pi Adapters and Connectors provide a reliable solution to mitigate electromagnetic interference (EMI) in demanding environmental electronic systems. These products enhance signal integrity (SI), comply with regulatory standards and offer a versatile, space-saving design that simplifies implementation while improving the overall performance and reliability of system applications.

## ADVANTAGES AND FEATURES

### Provides efficient space utilization

EMI filters built into the connectors offer additional space on the PCB board.

### Withstands lightning and AC transient environment conditions (up to DO160 Level IV)

Transient options are available.

### Enhances high-frequency performance

One-piece, die-cast connector shells have ground-plane shielded interface.

### Promotes consistent performance with power and signal filtering in a single package

A large capacitance pin-to-pin ratio range is included.

Current	5.0A; RF current-0.3A
UL Recognized	Yes
Shell Sizes	9, 15, 25, 37, 50
Operating Temperatures	-55 to +125°C

### Offers vertical integration; saves time

These products are manufactured in the US for control over supply chain.

### Allows superior performance and minimal impedance compared to onboard filter with high impedance

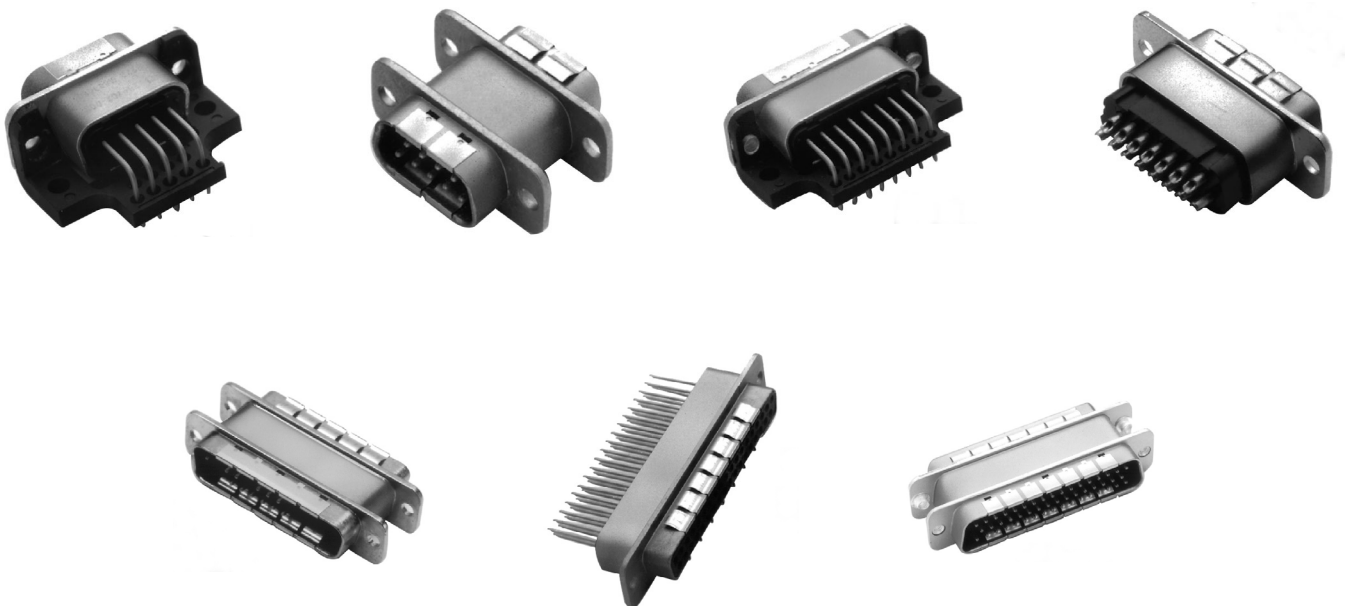
These connectors have low ground impedance.

### Provides versatility for ease of design

The adapters and connectors are available in an extensive selection of mechanical configurations.

### Saves PCB space

Grounded and insulated lines are in the same connector.



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## APPLICATIONS

### Military and Commercial aircrafts

Flight controls  
Engine controls  
Navigation systems

### Military (defense)

Tactical weapons  
Unmanned aerial vehicle (UAV)  
flight controls  
Target acquisition systems  
Night vision sensors  
Airborne radios

### Medtech

Electronics  
Imaging equipment

### Telecommunications

Cellular base stations  
Mobile/cellular repeaters

### Industrial automation

Process equipment  
Gas monitors



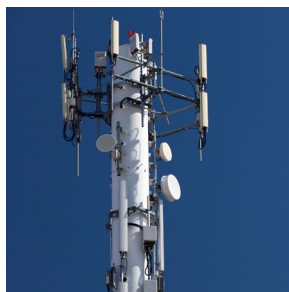
Navigation Systems



UAV Flight Controls



Imaging Equipment



Cellular Base Stations



Gas Monitors

## SPECIFICATIONS

### Electrical

Voltage (max.): 100V  
Current (max.): 5.0A  
RF Current (max.): 0.3A  
Contact Resistance (max.): 10 milliohms  
UL recognized: Yes

### Mechanical

Shell Sizes: 9, 15, 25, 37, 50  
Contact Type/Terminations

- Pin to 90° PCB mount
- Pin to solder cup
- Pin to straight PCB mount
- Pin-socket adapter
- Socket to 90° PCB mount
- Socket to solder cup
- Socket to straight PCB mount

### Physical

Operating temperatures: -55 to +125°C  
Grounding Springs: Beryllium copper, tin plated per MIL-T-10727  
Connectors designed to MIL-DTL-24308

Options

- Threaded locking inserts
- Grounding bracket
- Grounding bracket with board lock

# EMI-Filtered High-Performance D-Sub Pi Adapters and Connectors

Capacitance		3dB Max Cutoff Freq. (MHz)	Dielectric Withstanding Voltage	Contact Rating	Contact Resistance	Working Voltage DC	Minimum Insertion Loss (dB)							
PICOFARAD (pF)	Tolerance					-55 to 125° C	5 MHz	10 MHz	20 MHz	50 MHz	100 MHz	200 MHz	500 MHz	1 GHz
100pF	+100%/-0%	32.0	300V	5.0A	10 Milliohms Max	100V	-	-	-	2	5	8	16	33
1000pF	+150%/-0%	3.2	300V			100V	-	3	8	17	27	39	58	70
2500pF	+100%/-0%	1.3	150V			50V	6	10	15	30	42	55	70	70
4000pF	+100P/-0%	0.8	150V			50V	8	13	20	37	50	64	70	70

[www.molex.com](http://www.molex.com)