

# Filtered D-Sub Connectors









EMI Solutions' D-Sub filtered connectors offer the convenience and flexibility of standard configurations while delivering unsurpassed EMI/EMC performance.

Designs for all Mil Spec D-Sub Connectors:

- MIL-24308
- MIL-83513

# **Filtering Options:**

#### C & Pi Filters:

- Highest Filter Performance with Minimal Resonance
- Insertion Loss of 70 80 dB
- Limited number of available capacitances and variations

## **Chip Capacitor**

- Good for "notch" type filtering
- Reduced higher frequency performance due to chip cap resonance
- Insertion Loss of 40 45 dB
- Wide variety of capacitances and variations available

Transient Voltage Suppression (TVS) Components Available with all Filtering Options

## **Termination Options**







**PC Tail** 



Wired

Filtered connectors are the best means of eliminating unwanted noise from any electronic system. Using filtered connectors eliminates the EM and RF noise that will be picked up through the contacts/leads generated by any internal or external source right at the connector's interface. There are a multitude of ways to filter or shield at the board level, but none can outperform filtering at the boxes' interface.

**ENGINEERING SUPPORT:** 949.206.9960

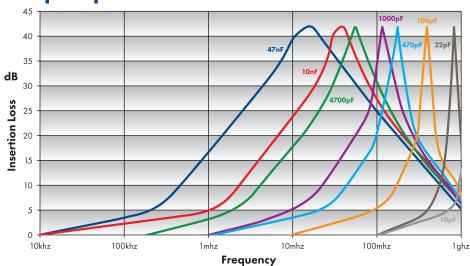








# **Chip Capacitor Filter Performance**

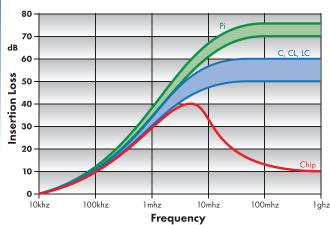






E:lan

## **Filtered Connector Performance**



	Capacitance Options	Filter Performance
Pi with Planar Arrays	100 pF – 1 uF+	70+ dB
Pi Tubes	47 pF – 12,000 pF	70+ dB
Discoidal Capacitor (C)	470 pF – 40,000 pF+	50 – 60 dB
Planar Array (CL & LC)	100 pF – 1 υF+	50 – 60 dB
Chip Capacitor	3 pF – 47,000 pF+	>40 dB



#### Pi Filtering

- Built with Pi Tubes, Discoidal or Planar Arrays
- ► Provides C-L-C Component Configuration
- ► Highest Performance: 70+ dB Insertion Loss
- Very Good High Frequency Performance

### C, C-L or L-C Filtering

- Built with Chip Caps,
  Discoidals, Planars or C Tubes
- ▶ 45 60 dB Insertion Loss
- ► Good Broad Spectrum Filter Performance

### **Chip Capacitor Filtering**

- ► 40+ dB Insertion Loss
- Quick Turn
- ► Lowest Cost Option
- Limited High Frequency Performance

## **About EMI Solutions:**

Headquartered in our expanded facility in Irvine, California, our company was established in 1996 based on the development of our FlexFilter inserts for EMI filtering. Over the years, EMI Solutions has steadily grown by diversifying our product offering to meet our customer's needs.

With over 20 years of acquired expertise in the EMI/EMC marketplace, combined with continuous improvement in materials and processes used to develop our products to comply with the AS9100 and MIL-810/DO-160 standards, we are now recognized as the leading woman owned small business manufacturer of EMI filtering products for the military and aerospace supply chain, as well as a diversity of commercial applications.





www.4EMI.com

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