

FILTERED D-SUB

OVERVIEW

In applications where connectors are used as an interface in shielded enclosures, the plastic isolating body of connectors provide no shielding against any interference signals that may be present. In such cases, high frequency interference signals can be passed in or out of the system without hindrance. Filtered connectors can help to maintain signal integrity and EMC protection in critical applications and thereby safeguard the function of electrical devices and systems.

The connector is constructed by combining standard D-Sub components with a filter element mounted between each contact and the ground shell. The end product has footprint dimensions similar to standard versions, making the changeover from a standard Non-Filtered connector in an existing Electronic system to a filter connector simple.

FCI's Filtered D-Sub is designed to provide a solution for EMI & RFI protection in a wide variety of applications in Telecommunication, Medical, Data, Consumer, Instrumentation and Military.



FEATURES

- Filter element mounted between each contact and the Ground Shell
- C Type Filter with Planar Array Filter is used
- Intermateable with standard Non-Filtered D-Sub Connectors
- Accessories used in standard Non-Filtered version D-Sub Connectors can be used
- Filter integrated within the Connector
- Existing Non-Filtered Connector can be easily replaced with Filter Connector in existing application
- Both external EMI & EMI generated internally from the device will be re-directed to ground circuit via Metallic body of the Connector
- Filtered Power D-Sub can be developed in 2V2, 3W3, 5W5, 8W8

BENEFITS

- A unique solution for Power Line Filtering
- Cost effective and most popular
- Existing Cable Connector can be used
- Standardisation of accessories
- Enables PCB space saving and helps Connector fit into footprints of standard Non-Filtered version D-Sub Connectors.
- Can achieve improved EMC performance
- Can safeguard the function of electrical devices and systems
- Can be installed directly on the Backplane, Back Panel, Module or Power Supply Cable



TECHNICAL INFORMATION

MATERIALS

- Insulator Material: Thermoplastic UL94V0
- Contact Material: Copper Alloy
 - Contact Side: Au over Ni
 - Termination Side: Tin Plated
- Shells: Steel, Tin Plated
- Accessories: Steel/Copper Alloy, Tin Plated

ELECTRICAL PERFORMANCE

- Nominal Current: 40A
- Capacitance: 47 K pF \pm 20%
- Working Voltage: 200 Vdc
- Dielectric Withstanding Voltage: 1500 V
- Surge Voltage Per IEC 61000-4-5 & IEC 60-2, Test Class 2
 - 1000 V Pin to Ground
 - 500 V Pin to Pin

ENVIRONMENTAL

- Climatic Category: 55/125/21
- Temperature Range -55 °C to +125 °C
- Damp Heat Steady State 21 Day

TARGET MARKET / APPLICATIONS

- Industrial & Instrumentation
 - Aerospace
 - Industrial process control
 - Medical
 - Military
 - Peripheral terminals
 - Test & Measurement
 - Other Industrial equipment
- Data
 - Computer work stations
 - Micro Computer products
 - Personal computers
- Communications
 - Switching and transmission equipment
 - Telecommunication base station equipment