Filter D–Sub Connectors – FCE17 Series

STANDARD D–SUB WITH INTEGRATED EMI FILTERING

FCE17 D–Sub Filter Connectors provide filtering of unwanted EMI, protecting the integrity of data signals in a mechanically stress–isolated design to ensure that capacitive elements survive shock and vibration. Improved EMI controls outperform the same filter components on a PCB. These connectors come with enhanced EMC compliance and immunity as the radiated and conducted emissions from the device and the external EMI/RFI are both shunted to ground, protecting the device and surrounding environment.

- PCB Space Savings – Integrated filter elements, saves the space on the PCB
- Cost Saving – External filter components are not required, this reduces overall applied cost
- Easy EMI Upgrade – Filtered connectors fit standard non–filtered connector footprints



TARGET MARKETS



FEATURES

BENEFITS

FEATURES	BENEFITS
▪ Patented Stress–Isolated Design	▪ Solderless internal design protects ceramic capacitor filter elements from shock and vibration
▪ Wide Offering with 9/15/25/37 standard arrangements, and Power/Signal Combos, in Pin and Socket Types, with PCB tails or solder cups	▪ Direct replacement of standard non–filtered connectors for both Power and Signal
▪ Wide Operating Temperature Range from –40°C to +85°C	▪ Meets variety of demanding environments
▪ High Strength Thermoplastic components meet UL 94V–0	▪ High reliability in applications requiring UL compliance
▪ Contact plating available in 15u", 30u" or 50u" of gold	▪ Optimization of performance and value as required
▪ Up to 300V Working Voltage, 5A DC per contact (signal), 20–40 A (Power)	▪ Meets demanding electrical requirements
▪ Low impedance chip capacitors (NP0 or X7R) in standard values 50 pf to 47000pf; other values also available	▪ Wide range of Insertion Loss performance characteristics to address various EMI concerns
▪ Variety of Pin/Socket Filtered Adapters available	▪ Add filtering without replacing existing connectors

TECHNICAL INFORMATION

MATERIAL

- Shell: Stamped Steel; Tin Plated
- Contacts: Phosphor Bronze; 15u" Au over Ni; Optional 50u Au available
- Inserts: High Strength Thermoplastic, UL compliance

ELECTRICAL PERFORMANCE

- Contact Resistance: 15MΩ max. per MIL-STD-1344 Method 3002
- Insulation Resistance: 3000MΩ min. per MIL-STD-1344 Method 3003.1
- Current Rating: 5 Amps DC max.

ENVIRONMENTAL

- Temperature Cycling: To MIL-STD-1344, Method 1003, Test Condition A
- Humidity: To MIL-STD-1344, Method 1002, Type I, Test Condition C

SPECIFICATION

- Amphenol Product Specification:
  - MIL-STD-1344
  - UL-STD-94

PACKAGING

- Tray
- Carton

APPROVALS AND CERTIFICATIONS

- RoHS
- UL E135615
- CSA LR68598

MECHANICAL PERFORMANCE

- Operating Temperature: -40°C to +85°C
- Vibration: To MIL-STD-1344, Method 2005, Test Condition III
- Durability: 200 Cycles min. to MIL-STD-1344, Method 2016

TARGET MARKETS/APPLICATIONS


Automotive


Datacom
Telecommunications


Energy
Industrial


Medical

PART NUMBERS

Description	Type	Part Numbers
Filter Connectors	Filter Male/Female adapter 9 size,470 pf	FCE17-E09AD-210
Filter Connectors	Filter Male/Female adapter 9 size, Solder Cup	FCE17-E09SM-290
Filter Connectors	Filter/Power 2W2, Screw Termination	FCE17-E2W2SS-2N0
Filter Connectors	Filter/Power 2M2, Solder Cup	FCE17-E2M2SM-E81
Filter Connectors	15 pin, pin type, Solder Cup	FCE17-A15PM-210
Filter Connectors	15 pin, socket, Straight PCB	FCE17-A15SN-410
Filter Connectors	37 pin, pin type, Solder Cup	FCE17-C37PM-250
Filter Connectors	Filter/Power 5W5, Press Kit	FCE17-B5W5PR-F82
Filter Connectors	8W8 Filter/Power, Solder Cup	FCE17-C8W8SK-690
Filter Connectors	25 pin, Male/Female Adapter	FCE17-B25AD-400
Filter Connectors	9 pin, Solder cup, 47000 pf	FCE17-E09PM-280G
Filter Connectors	25 pin, R/A, .590", bracket, 47000pf	FCE17-B25PC-48B

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Disclaimer
Please note that the above information is subject to change without notice.