



EMI / EMP Filter Connectors and TVS Devices

Series 24 EMI/EMP Filter Connectors

EMI EMP CONNECTORS

Turnkey in-house fabrication including multi-pin planar arrays

- Turnkey EMI/EMP solutions: from analysis to delivery, Glenair does it fast and right
- Order straight from the catalog or specify a custom design

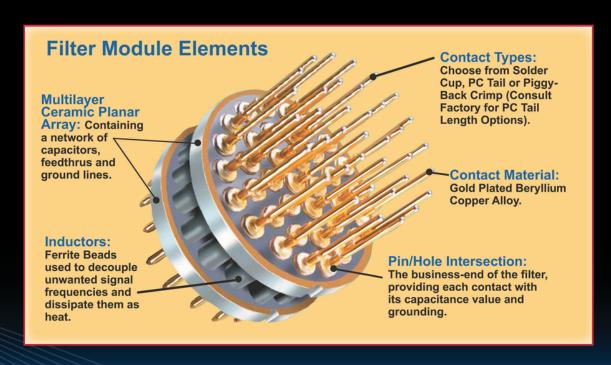




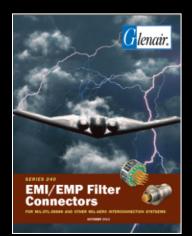
Basic Filter Array Module Elements

Architecture of planar array enables mixed capacitance values









Standard Catalog Filter Solutions: Circulars





Series 80 Mighty Mouse

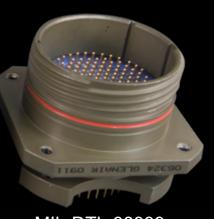
Series 970 PowerTrip™



MIL-DTL-5015 type



MIL-DTL-38999 Series I type



MIL-DTL-38999 Series III type



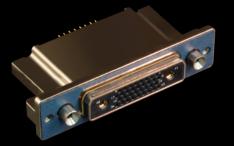


Standard Catalog Filter Solutions: Rectangulars









Series 79 Micro-Crimp



M24308 and HiPer-D

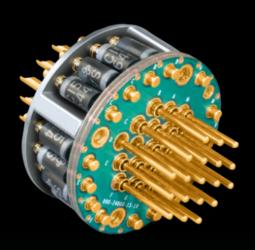


ARINC 400 and 600

Protecting Sensitive Circuits from EMP

Zener diode equipped EMI/EMP sub-assembly











Glenair EMC Solutions for High-Performance Interconnect Systems



- Full-spectrum EMC capabilities:
 Screening, grounding, and filtering
- Capacitor array clean room manufacturing
- Unmatched depth of knowledge and technical support in EMC technology
- Burn-in / test services



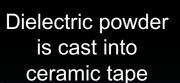


In-House Filter Array Fabrication

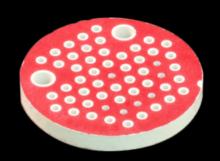
Key process steps



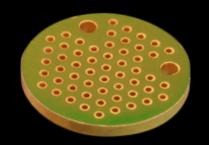




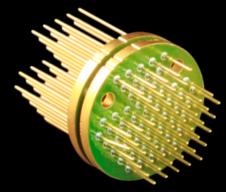




An array of ceramic tape and conductive layers with varying capacity is formed



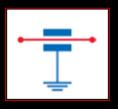
The array is fired.
Pin holes and outside edge are gold plated



Multiple arrays and contacts are soldered together into a finished subassembly

Comparison of Filter Types





C Filter

- Approx. 20 dB per decade
- Typical application is for power lines



Pi Filter

- Approx. 60 dB per decade
- Degraded performance in high DC current environment
- Typical application is for data lines



Filter Connector Termination Types

For direct PCB and wire-to-board applications









Solder cup



Crimp contact



Filter Connector Sav-Con[®] Connector Savers

For pain-free resolution of EMI in deployed electronics



Micro-D



D-sub



D38999 Series III





EMITS: EMI Troubleshooting Kit

EMI EMP CONNECTORS

EMI/RFI filter connector saver sets, available for troubleshooting and test

- Available on loan from Glenair
- Wide range of insert arrangements and capacitance values
- Determine filter type and capacitance before you buy

Series	P/N lead-off	Status
Micro-D	240-033	 Size 9 – 37 with Class A, Pi filter Class A, C filter Class E, C filter
D-Sub	240-051	 All M24308 insert arrangements Class A, Pi filter Class A, C filter Class D, C filter
D38999 Series III	240-383B	40 layouts (socket plug side) universal keyedClass A, Pi filter



Filter Connector Package Growth

D38999 Series III Shell Size 19









Filtered



TVS Diode



TVS Devices: DO-160 Section 22

The Lightning Handbook

- Damage tolerance standards for electronic equipment subjected to transient voltage events simulating lightning strike
- Interconnecting cable standards subjected to single stroke, multiple stroke, and multiple burst voltage transients to evaluate suppression capability (clamping)







TVS Applications

Commercial and military aerospace as well as industrial electronics surge protection

- Hardening against lightning strike in all classes of commercial and military aircraft
- Electrostatic discharge
- Power surge
- Transient voltage







Catalog TVS Connectors

Fastest turnaround

MIL-DTL-38999 Series III type

- Sav-Con[®] adapter
- TVS plug
- TVS receptacle

RJ45 SuperSeal® MIL-DTL-38999 Series III type

- Jam nut and wall mount configurations
- Solder cup or PC tail













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