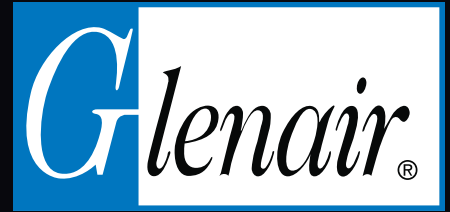


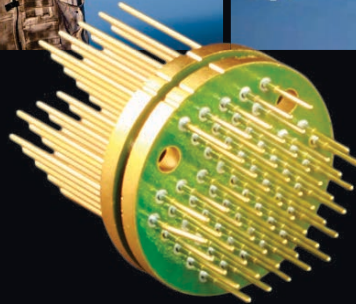
MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



Glenair
SIGNATURE SERIES

EMI / EMP Filter Connectors

C, L-C, C-L, and Pi Filters, plus TVS Solutions



MILITARY-GRADE EMI/EMP FILTER CONNECTORS



Low-Pass Capacitor Array
and TVS Diode-Equipped
Technologies



All diode-equipped
EMP inserts and planar
array EMI filter inserts
produced in-house

Glenair manufactures a full range of filter connectors for use in EMC/EMP management of electronic systems and interconnect cabling. All connectors are designed in accordance with applicable connector specifications, and are designed to mate with plugs with the same insert configuration and opposite contact gender. Planar filter arrays and TVS diodes may be integrated into both standard catalog as well as build-to-order configurations. Glenair's state-of-the-art diode burn-in process tests leaded and surface mount diodes with leakage current monitored throughout the entire test procedure ensuring field reliability.

- Planar, multilayer ceramic capacitive filters, with and without transient voltage suppression diodes
- Space-grade plating and outgassing processing
- C and Pi electrical configurations
- PC tail, crimp or solder cup termination
- 35 – 240,000 pF capacitance
- Fast and reliable diode burn-in and test services
- Turnkey in-house manufacturing of all filter connector elements and processes

Table I: Capacitor Array Code / Capacitance Range		
Class	Pi - Circuit (pF)	C - Circuit (pF)
X	160,000 - 240,000	80,000 - 120,000
Y	80,000 - 120,000	40,000 - 60,000
Z	60,000 - 90,000	30,000 - 45,000
A	38,000 - 56,000	19,000 - 28,000
B	32,000 - 45,000	16,000 - 22,500
C	18,000 - 33,000	9,000 - 16,500
D	8,000 - 12,000	4,000 - 6,000
E	3,300 - 5,000	1,650 - 2,500
F	800 - 1,300	400 - 650
G	400 - 600	200 - 300
J	70-120	35-60

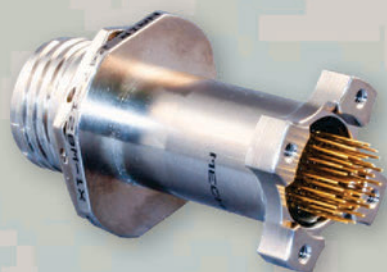


Planar filter arrays and TVS diodes may also be incorporated into rectangular connector packaging such as the Micro-D and Series 79 Micro-Crimp devices shown here.

MILITARY GRADE EMI/EMP Filter connectors



Innovative designs · total vertical integration



Extended-shell
PC-tail cylindrical filter
with threaded standoff



Special-purpose
filter connector cable
adapter (Sav-Con®)



Custom reduced-length
sidecar filter connector design



Series 80 Mighty Mouse
PC-tail filter receptacle



Series 80 Mighty Mouse
solder-cup filter receptacle
with integrated banding porch



MIL-DTL-38999 type
crimp-contact termination
filter receptacle



MIL-DTL-38999 Series
III type EMP TVS diode-
equipped filter connector



MIL-DTL-83723 type filter
connector, gold-plated for atomic
oxygen corrosion resistance



Quick-disconnect circular with
solder-free contact filter array

SERIES 240

MS Type Circular Filter Connectors



The industry's best short lead-time source for planar array type EMI/EMP filter connectors



Glenair's family of circular military standard type EMI/EMP filter connectors is designed to meet stringent military/aerospace performance requirements. Each connector series is offered with standard low-pass Pi or C filter arrays, or with customized filters to meet specific frequency and capacitance requirements. Thermally conductive epoxy protects the filter package from mechanical and heat stress and also provides a waterproof seal. All filtered receptacles are interchangeable with standard plugs and connector savers, and each respective series of connectors is supplied with a range of shell styles in both environmental and hermetic configurations.



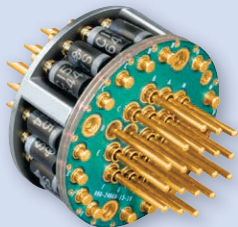
ARINC 600 size 2 filter connector. Glenair also manufactures narrow-profile size 1 and double-wide size 3. All configurations are environmentally sealed for rugged airframe applications.

SERIES 240 EMI/EMP Filter connectors



Fast, reliable in-house manufacturing

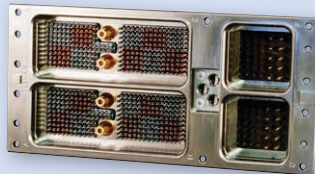
Unique and Special Purpose EMI/EMP Filter Connectors



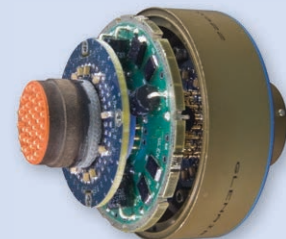
EMI Filter Package with
TVS EMP Diodes



Unique Filter Package with
Sidecar Filter Elements



ARINC Rack and Panel
Filter Connector



EMP Diode-Equipped Connector
with Oversized Shell

Performance Ratings

Shock and Vibration	IAW MIL-DTL-38999
Thermal Shock	-55° C to +125° C per EIA-364-32; 380 cycles
Operating Temperature	-55° C to +125° C
Mating Cycles	500 Mating Cycles
Corrosion Resistance	1000 Hours on Stainless Steel Shells
Shielding Effectiveness	Effective over a range of 100MHz to 10GHz with a minimum 50dB effectiveness at 10GHz
Immersion Rating	MIL-STD-810 Method 512; 1 Meter for 1 Hr. (selected series)
Shell-to-Shell Resistance	2.5 Millivolt drop maximum, per EIA-364-83

Electrical Performance

Current Rating	up to 220 Amps
Capacitance	10pF to 1,000,000pF
Insulation Resistance	5GΩ
Dielectric Withstanding Voltage	100 to 2500 VDC
Dissipation Factor	2.5% Max
Diode Clamping Voltage Range	3.3V to 260V
Diode Peak/Pulse Power	up to 30KW

Requirement Compliance:

MIL-STD-449D: RF Spectrum
MIL-STD-461E: EMI Susceptibility
MIL-STD-1310G: Shipboard EMC
MIL-STD-1512: Electroexplosive Subsystems
MIL-STD-1541A: EMC for Space Systems
MIL-STD-1795A: Aerospace Lightning Protection
MIL-STD-1857: Grounding, Bonding and Shielding
MIL-STD-1542B: EMC and Grounding for Space Systems
EN 61000-4-2, 3, 4, 5, 6, 8: EM, RF and Power
RTCA/DO-160 Sec 22: Pin/Cable Level and Waveform

The Industry's Most Comprehensive and Compliant Filter Service

Connector Series:

38999	83513
Series I, II, III, IV	5015
26482	Sr. 80 Mighty Mouse
83723	Sr. 79 Micro-Crimp
28840	Sr. ITS Reverse-Bayonet
24308	Sr. 28 HiPer-D
ARINC 600	Sr. 970 PowerTrip

Line Types:

CAN BUS	TTL
ARINC 429	Analog Sensors
RS 232	Thermocouple Wires
RS 422	USB
RS 485	Ethernet

Filter Module Elements

Multilayer Ceramic Planar Array:

Containing a network of capacitors, feedthrus and ground lines.

Inductors:

Ferrite Beads to provide inductance and increase insertion loss

Contact Types:

Choose from Solder Cup, PC Tail or Piggy-Back Crimp (Consult Factory for PC Tail Length Options).

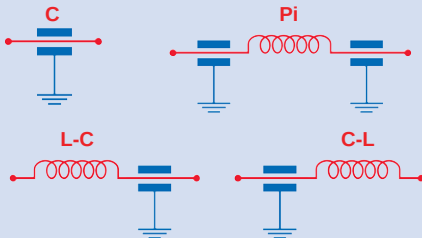
Contact Material:
Gold Plated Copper Alloy.

Pin/Hole Intersection:

The business-end of the filter, providing each contact with its capacitance value and grounding.

Filter Types

- C** Single capacitor with low self inductance
- LC, CL** Single capacitor combined with an inductive element
- Pi** Dual capacitors with a single inductive element positioned between.





MISSION-CRITICAL INTERCONNECT SOLUTIONS

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