



Filter & Transient Suppression

About Us

Hypertac has provided premium, technically superior interconnect solutions for more than fifty years and continue to add value to customers by addressing their specific needs and industry requirements, using the ultimate in contact performance and reliability.

Years of experience and expertise have enabled Hypertac to create an advanced EMI Filter and Transient Protected Connector capability.

Established to specifically address the European market needs, the facility can provide the latest technological solutions to customers' EMC requirements.

EMI Filtered and Transient Protected connectors can also incorporate the superior Hyperboloid socket contact technology proven in the most demanding of applications.

Our Key Strengths

- Applications knowledge and experience
- Advanced design and development department
- The latest engineering tools
- Flexible and reactive supply chain
- Customer centric logistics and cost aware culture
- Custom built filtering and transient cell
- Full qualification and verification testing

EMI Filtered & Transient Protected Connector

Within a single connector, it is possible to have:

- Different Filter styles e.g. C, LC Pi
- Different Capacitance values e.g. ratios of 10:1 routinely possible
- Unfiltered lines (high speed) and ground lines
- Transient protected lines

Connector Types

- Military Circular (38999, 5015, 26500)
- Rectangular (JN1123, Arinc 600, Arinc 404, 83527) D Style (sub D, 24308, Micro d 83153)
- Feed through Filter Modules



Our EMI Filter Knowledge Enables Us To:

- Specify / recommend optimum filter style (e.g. C, LC and Pi) and value (up to 1microFarad) on receipt of signal type and data rate
- Provide insertion loss simulations / prediction that account for actual source and load impedances
- Verify insertion loss performance across entire frequency range
- Combine EMI Filter and Transient Protection within a single connector
- Provide Transient Protection in accordance with RTCA D160F waveform and level specifications
- Adopt the most appropriate filtering technology for the application



Design, Engineering & Manufacturing Capabilities

- CAD/CAM and solid modelling
- Prototyping
- Finite element analysis
- Extensive machine shops
- Contact manufacturing
- Connector assembly
- Complex cable assembly
- System integration & final test
- Qualification including electrical & mechanical testing
- Project management
- Through life support

Connector Technology

- Available technologies include: planar array multilayer discoidal tubular and multilayer ceramic chip capacitor (MLCC)
- Detailed understanding of ceramic and metal interaction
- Compliant connection technology used for interface between contacts and ceramic and between ceramic and shell
- Design approach results in robust construction not just in application but also in customer assembly (soldering processes)
- Able to commit to delivery schedules and lead times
- Construction approach allows for connector reworkability in case of TVS diode failure
- Local expertise available for problem solving

Applications Knowledge

- Extensive application experience and knowledge base
- Dedicated Filtering & Transient protection team
- Focused on saving weight, space and cost
- DFM approach
- A local extension of your engineering team

Full Verification & Qualification Testing

- Vibration, mechanical shock and durability
- Sealing against water and particle ingress
- DWV at sea level and altitude
- Insulation resistance
- Salt spray
- Earth bond resistance testing/shell to shell conductivity
- Thermal shock and cycling
- Temperature life
- Cyclic humidity
- Current derating
- Transient protection testing



Flexible & Reactive Supply Chain

- Ability to multi source components
- Excellent relationships with ceramic suppliers
- Major user of TVS diodes
- Managing our obsolescence
- Improved logistics
- Cost reduction processes