Electromagnetic Integrated Solutions

Industry Leading Technologies

With the broadest offering of filter products and manufacturing capabilities coupled with EMC expertise and environmental test proficiencies, API provides customers world class inception to compliance solutions.

Discrete Coaxial Filters
- Most QPL designs in the industry and largest selection of mechanical configurations for unparalleled versatility and ease of design
- Tubular Filters Designs
  - High performance above 1GHz compared to surface mount solutions
  - Largest capacitance range compared to competition due to embedded electrode technologies
  - Rugged encapsulating material to meet MIL-QPL requirements and extreme environments
- Discoidal Filters Designs
  - AC lightning rated coaxial ceramic materials for transient environments
  - Large selection of discoidal sizes, from miniature solder-in to high-current cases
  - Hermetically sealed products available

Filtered Interconnects and Arrays
- One piece die-cast connector shells, unmatched high frequency performance with shielded interface
- Snap-in “easy mate” and bolt-in plate configurations for versatile assembly options
- Large range of capacitance available
  - Selectively loaded tubular line designs available
  - Large planar capacitance pin to pin ratio range to provide power and signal filtering in a single package
  - Insulated and ground line options
  - Predictable line to line isolation for segregated line IL performance
- AC and lightning withstand designs for transient environments

EMI Power Filters
- Rugged modeling capability (structural, thermal, electrical) providing outstanding analytical design support
- Film capacitor capabilities for AC, self-healing, and safety requirements
- Coaxial filter technology and internal isolation, multi-pole feedthrough techniques for superior IL
- API magnetics and ceramics technologies incorporated
- Vertically integrated design and manufacture of custom, ruggedized, high reliability filters providing shorter lead times

Military/Aerospace Specialty Connectors
- Soldered construction for better high frequency performance over mechanical designs
- Large planar capacitance pin to pin ratio range to provide power and signal filtering in a single package
- Insulated and ground line options
- Predictable line to line isolation for segregated line IL performance
- Stainless steel, aluminum, composite shells available for environmental and weight sensitive applications
- Cadmium, nickel, black nickel zinc plating available for military and RoHS environments
- Vertically integrated shells and ceramics providing shorter lead times
- AC and lightning withstand designs for transient environments

Ceramic Capacitor Solutions
- USA designed and produced in State College, PA facility
- Largest selection of tubular “K” materials in the industry enabling tight tolerance NPO designs to high IL applications
- Transient and high voltage ceramic capacitors
- Solid wall and embedded technologies for commercial to high performance military applications
- Largest offering of EMI capacitor sizes and configurations (cylindrical and rectangular geometries)
- Multiple termination materials (F.O.S., Silver, Gold, Nickel, Copper) for specific customer requirements
- RF ceramics for high frequency applications
- Conformal coated ceramics available for high voltage and customer installation requirements

Magnetics, Inductors, Transformers
- Design and manufacture of custom, ruggedized, high reliability magnetic components
- Offer full range of passive magnetic components including, inductors, chokes, switching transformers, power transformers, current transformers, audio and RF magnetics

EMC Testing
- Full EMC compliance lab utilized for customer compliance to system requirements
- Transient capabilities (military, lightning, ESD)