electromagnetic

integrated solutions

api technologies corp.

Spectrum Control

optimized designs
for a wide range of
new applications & markets

Defense
- *Specialty Connectors*
- *QPL'd Coaxial Filters*
- *Military Custom Power Filters*
- *Ceramic Capacitors*
- *Magnetics*

Communications
- *Coaxial Interconnects*
- *Commercial Custom Power Filters*
- *Surface Mount Filters*
- *Magnetics*

Avionics
- *Specialty Connectors*
- *Coaxial Filters & Interconnects*
- *Film Modules*
- *Custom Power Filters*
- *Magnetics*

Alternate Energy
- *Film Modules*
- *Specialty Ceramics*
- *Magnetics*

Medical
- *Coaxial Filters & Interconnects*
- *Ceramic Capacitors*
- *Power Filters*
- *Magnetics*

Industrial
- *Ceramic Capacitors*
- *Coaxial Filters & Interconnects*
- *Film Modules*
- *Specialty Connectors & Harnessing*
- *Magnetics*

electromagnetic

integrated solutions

API Technologies has been the world's leading provider of custom application-specific EMI filter solutions since 1968. Whether modifying an existing component or working from a "clean sheet" approach, we'll develop a new product or integrated assembly to help you address the mechanical, electrical and/or power requirements of your next design. API Technologies' Spectrum Control line of electromagnetic integrated solutions includes not only the industry's most complete line of coaxial EMI components, but also an expanded offering of advanced ceramics, power film capacitors, filtered and unfiltered interconnects, and magnetics.

Innovative Solutions
from Components to Complex Assemblies

Understanding how and where potential EMI and other problems exist in an electronic system can be a daunting challenge. API's solutions address all mechanical, electrical, and environmental concerns of your system while ensuring the project is kept on budget and schedule. API's Spectrum Control design process begins with our extensive library of standard components, which we frequently develop into custom assemblies offering a more complete, high performance solution... saving you time and money.

- **Most Complete EMI Line**

  We offer the flexibility to filter EMI at the power source, at the I/O connection, in a barrier wall or on the PCB. Our industry-leading line includes inductors, glass and resin seal filters, SMT filters, filter plates, filtered connectors, power entry and power line filters, and military/aerospace multisection filters... most available RoHS compliant.

- **New Specialty Connectors, Ceramics, Film Capacitors and Magnetics**

  API Technologies' Spectrum Control product line has grown significantly in recent years. We now offer an expanded line of unfiltered and filtered connectors and custom connector harnessing, advanced ceramics and ceramic capacitors, power film capacitors and a broad range of magnetic solutions.

- **Low Cost Manufacturing**

  Our commitment to be the world's most efficient EMI filter, interconnect and magnetics manufacturer has resulted in only using the best technology and people for our global network of design and manufacturing facilities. Our ability to achieve this goal is strengthened by our 75,000 sq. ft. manufacturing plant in Guang Dong, China and our state-of-the-art plant in Juarez, Mexico.

- **MIL Qualified Products**

  We offer over 800 standard QPL products & DSCC part numbers. Look to us for the largest number of MIL-PRF-15733, MIL-PRF-28861, DSCC 84084, MIL-PRF-49470 and MIL-C-11015 filters. Whether a COTS buy or engineered solution, we're the ideal source for your design.

- **Design & Testing Support**

  Integral to solving EMC problems is the ability to test for compliance. We conduct a wide range of EMC and environmental tests and use that data in our design process. The result is the most comprehensive EMI evaluation and design resource available.

- **Meet Vendor Reduction Goals**

  The breadth of API's Spectrum Control product line can help you reduce your sourcing base. Combined with our sister divisions of API Technologies, you've got a real opportunity to reduce suppliers and lower overall costs.

api technologies corp.

Spectrum Control

eis.apitech.com

ISO 9001:2008

TS-16949 CERTIFIED

Electromagnetic Integrated Solutions

CERAMIC CAPACITORS

COAX

Specialty Ceramic Components

Applications

Medical implantable devices, EMI/RFI suppression filters, commercial and military applications, power supplies, converters

Features / Benefits

- **Discoidals**
  - Low inductance, non-polar
  - Filtering and decoupling of high frequency applications
  - Reliable, low profile, multi-layered designs
- **Tubular Capacitors**
  - Small, lightweight, reliable, high dielectric strength
  - Uniform insertion loss over a broad frequency range
- **Switch Mode Power Supplies**
  - Ideal for DC-DC power supply applications
  - Capacitor assemblies with low ESR/ESL
  - Leaded configuration safeguards the device against thermal and mechanical stresses
- **Fed/MIL approvals**
  - MIL-PRF-49470 approvals

Performance Characteristics

- **Discoidals**
  - .080 to 0.600 in. diameter
  - 50 to 500 Volt
  - NPO, X7R and Z5U ceramic available
- **Tubular Capacitors**
  - Feed-through and Pi circuit
  - 0.081 to 0.122 in. diameter
  - 50 to 200 Volt
- **Switch Mode Power Supplies**
  - BP, BX, BR or BQ ceramic available
  - Lead options: in, out or straight
  - 50 to 500 Volt

RoHS COMPLIANT

eis.apitech.com/ceramic

Advanced Ceramics

Applications

Chemical and fluid handling systems, microwave hybrid applications, HF/RF power amplifiers, computer, medical and network products, multi line designs, circular and D-sub connectors

Features / Benefits

- **Structural Ceramics**
  - High wear and corrosion resistance
  - Temperature stability and strength
  - Superior thermal shock resistance
  - Custom solutions available
- **Capacitor Arrays**
  - Variable mounting style selection
  - Decreased assembly time – one placement
  - Reduced component stress
  - Parallel and series configurations of chip capacitors
- **Planars**
  - Custom geometry configurations available
  - Design flexibility with multiple capacitance values
  - Established circular, D-sub and mini connector designs available

Performance Characteristics

- **Structural Ceramics**
  - Materials: Steatite, Cordierite and Alumina
  - Finishing methods: glazing, tumbling, plating
- **Planar & Capacitor Arrays**
  - Capacitance values up to 40 µF depending on array
  - Voltage ratings up to 1500 VDC
  - Temperature rating -55°C to 125°C

eis.apitech.com/ceramic

Three Terminal Chips, Power/ Square & Mini Surface Mount Filters

Applications

Cellular telephones and base stations, telecommunication equipment, computer and peripheral equipment, digital AV equipment such as TV, VCR and DVD, power amplifiers, power supplies, and temperature and motor controls

Features / Benefits

Three Terminal Chips

- Non-polar, surface mountable
- Superior filtering characteristics
- Available in 0603, 0805, 1205, and 1806 sizes

Power, Square & Mini Surface Mount Filters

- PSM: 2 – 20 Amps (FT)
  2 – 10 Amps (Pi)
- SSM & MSM: 10 Amps
- High temperature construction
- Small, square mechanical geometry enhances soldering to a PCB
- Tape and reel and bulk packaging
- Simple structure and high withstanding voltage

Performance Characteristics

Three Terminal

- **Voltage** Up to 100 VDC
- **Current** Up to 2 Amps
- **Capacitance** Up to 220,000 pF

PSM/SSM/MSM

- **Rated voltage** 50 – 200 VDC
- **Capacitance** 47 pF to .01 µF
- **Temp range** -55°C to +125°C

RoHS COMPLIANT

eis.apitech.com/smt

Miniature & Solder-in Filters

Applications

Ideal for microwave applications such as attenuators and oscillators. Perform well in high impedance circuits where large capacitance values are not practical

Features / Benefits

- **Small size options**
  Ideal for use when real estate is limited
  - Solder-in, Knurled press-in & 2-56 threaded Spanner
- **Design flexibility**
  Wide range of solder-in bushings with a variety of circuits: C, L, and Pi
  - Custom lead options available
- **Construction**
  High temperature construction
- **Plating**
  Suitable for gold bonding when specified
- **Coaxial**
  Feed-through filtering
- **FED/MIL approvals**
  Qualified to MIL-C-11015 and MIL-PRF-15733

Performance Characteristics

- **Insertion loss range**
  Effective filtering to 18 GHz in a shielded application
- **Capacitance**
  Up to 30,000 pF
- **Operating voltage**
  Up to 750 VDC
- **Temperature range**
  -55°C to +125°C

RoHS COMPLIANT

eis.apitech.com/lowpass

Hermetic/Resin Sealed Filters & MLFT Filters

Applications

Power supplies, signal lines, rocket ignitors, aerospace, DC motors, telecomm & military/secure communications, medical equipment, mining/oil drilling, transceivers, microwave filters, industrial control systems, multi-circuit filter assemblies

Features / Benefits

Hermetic/Resin Sealed

- **Cost-effective solutions**
  Low cost filters provide protection in hostile environments
- **Design flexibility**
  Wide range of bushing sizes, lead configuration options and circuit types including C, L, Pi, transient suppression Pi, T, & TT
- **Reliability**
  Built in accordance with MIL-PRF-15733 or MIL-PRF-28861
- **FED/MIL approvals**
  Qualified to MIL-PRF-15733, MIL-PRF-28861 and DSCC 84084
- **Safety**
  Some select filters U.L. 1459 recognized and CSAC22.2 certified

MLFT - Motor Line Feed-Through Filters

- **One component solution**
  Eliminates the need for multiple capacitors, inductive coils, leads and PCB assemblies
- **Easy installation**
  Provides a connector interface for a space saving EMI solution

Performance Characteristics

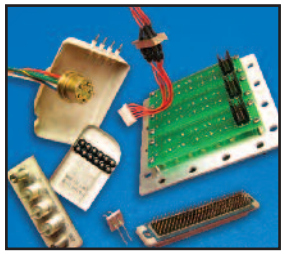
- **Insertion loss range**
  Effective filtering from 10 KHz to 18 GHz with proper installation
- **Capacitance and temperature characteristics**
  To 5.2 µF NPO, X7R, Y5V, Z5U
- **Temperature range**
  -55°C to +125°C
- **Voltage ratings (max.)**
  To 2500 VDC
  - 240 VAC @ 400 Hz
- **Current ratings (max.)**
  To 100 Amps

RoHS COMPLIANT

eis.apitech.com/lowpass

AXIAL FILTERS & INTERCONNECTORS

Filter Plates & Shrouded Latch Plates & Assemblies



Telecommunications equipment, military, industrial, scientific, remote sensory and medical equipment

- **Total reduced costs**
  Economical method of meeting EMC requirements
- **Excellent filtering**
  Outperform surface mount filters at frequencies above 130 MHz; provide an EMI filtered signal line between electronic system modules
- **Reliability**
  Every filter plate is tested 100% for key parameters
- **Standard centers**
  0.100" and 2 mm centers allow for easy termination
- **Easy Mate™ filter plate**
  Design provides for quick installation into predefined cutout
- **Microcircuit packages**
  Custom designs available with a variety of materials, filtering and connectors
- **Rugged construction**
  Shroud protects filter element from potential damage

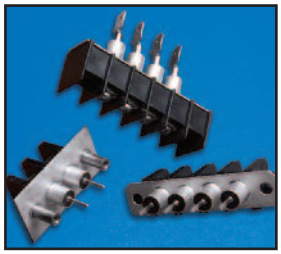
- **Insertion loss range**
  Effective insertion loss from 1 MHz to 18 GHz with proper installation
- **Capacitance**
  Pi: 68 pF to 5000 pF

  Feed-through: 10 pF to 4000 pF
- **Temperature characteristics**
  NPO, X7R, Y5V, Z5U
- **Temperature range**
  -55°C to +125°C
- **Voltage ratings (max.)**
  To 250 VDC
- **Current ratings (max.)**
  To 5 Amps standard

RoHS COMPLIANT

eis.apitech.com/plate

Filtered Terminal Blocks



Telecommunications equipment, industrial controls, power supplies, uninterruptible power supplies, military, instrumentation and power distribution equipment

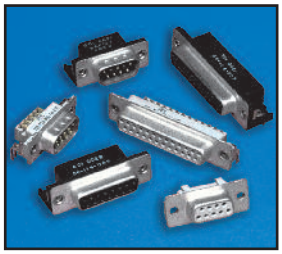
- **Rugged construction**
  Provides protection to filtering element; especially useful for repeated changes in field wiring
- **Design flexibility**
  2 to 6 terminals available in "Barrier Strip" 2 to 12 terminals available in European variety
- **Performance**
  Filter elements provide high insertion loss for EMI filtering of AC and DC power and control lines
- **Reliability**
  Every terminal block is tested 100% for key parameters
- **FED/MIL approvals**
  Barrier strips are recognized to U.L. 1059 file E133076 and approved by CSA Std 22.2 No. 158-1987 and ECN584B, LR92537; 52-160 series 100 VDC UL/CSA 52-257 series 250 VAC UL/CSA

- **Insertion loss range**
  Effective insertion loss from 1 MHz to 18 GHz with proper installation
- **Capacitance**
  2500 pF
- **Temperature range**
  -55°C to +105°C
- **Voltage ratings (max.)**
  Barrier: to 250 VAC
- **Current ratings (max.)**
  Barrier: 30 Amps

RoHS COMPLIANT

eis.apitech.com/block

Low Cost Ferrite Filtered D-Sub Connectors



Personal computers, microcomputers-applied products, peripheral/terminal equipment, industrial process equipment, cellular base stations, PBX telecommunications equipment, graphics workstations, and medical electronics

- **Cost-effective solutions**
  Low cost, high performance; replaces individual filters on PCB, saving cost and space
- **Design flexibility**
  Available in 9, 15 and 25 lines standard density
- **Compact design**
  Interchangeable with standard D-subminiature connectors
- **Performance**
  Gold plated contacts

  Superior filtering of high frequency interference; ground plane design provides superior EMI shielding
- **Reliability**
  Each connector position is tested 100% for critical electrical parameters to ensure consistent performance
- **FED/MIL approvals**
  UL 94V-0, UL/CSA recognized

- **Insertion loss range**
  1 MHz to 5 GHz and beyond
- **Capacitance and temperature characteristics**
  To 120 pF – 1500 pF
- **Temperature range**
  -40°C to +125°C
- **Voltage ratings (max.)**
  500 VDC
- **Current ratings (max.)**
  5 Amps

RoHS COMPLIANT

eis.apitech.com/series100

High Performance Filtered D-Subminiature & Combo Connectors

Telecommunications equipment, cellular base stations, secure communications, medical electronics, industrial process equipment, microwave TX/RX, personal computers, graphics work-stations and aerospace applications

- **Excellent filtering**
  Filter types include Pi or feed-through capacitors; signal, power contacts; groundplane design provides superior EMI shielding.
- **Design flexibility**
  9 through 50 line construction, standard, high density, mixed pin loading & selectively loaded lines
- **Reliability**
  Each connector position is tested 100% for critical electrical parameters to ensure consistent performance
- **Numerous options**
  Hardware, mounting, waved metal gaskets, hooded strain reliefs, combined filter types and plating
- **FED/MIL approvals**
  UL 94V-0, UL/CSA recognized

- **Insertion loss range**
  1 MHz to 18 GHz and beyond
- **Capacitance and temperature characteristics**
  To 5600 pF

  NPO, X7R, Y5V, Z5U
- **Temperature range**
  -55°C to +125°C
- **Voltage ratings (max.)**
  200 VDC
- **Current ratings (max.)**
  5 Amps

RoHS COMPLIANT

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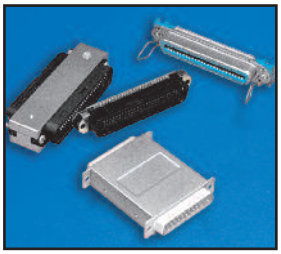
Filtered Datacom Connectors



Data networking equipment, personal and industrial computers and peripherals, workstations, fax/modems, copy machines, original telephone manufacturing, medical equipment, broadband transmission equipment, bay connectorization and multiplexing

- **Cost-effective solutions**
  Miniature ribbon connectors and adapters with chip capacitors

  Rugged USB connector
- **Design flexibility**
  Miniature ribbon connectors and adapters available in 50-line configurations with a variety of hardware options

- **Reliability**
  Each connector position is tested 100% for critical electrical parameters
- **Insertion loss/ inductance range**
  Effective insertion loss from 1 MHz to 18 GHz with proper installation
- **Capacitance**
  Up to 820 pF
- **Temperature range**
  -55°C to +125°C
- **Voltage ratings (max.)**
  1000 VDC DWV (miniature ribbon connectors)
  500 VAC DWV (rugged USB)
- **Current ratings (max.)**
  1.5 Amps

RoHS COMPLIANT

eis.apitech.com/data

CONNECTORS & HARNESSING

Specialty Connectors

Commercial and military avionics, satellites, telecommunications, power supplies, electronic warfare, ground/air weapon systems and mining and oil drilling exploration

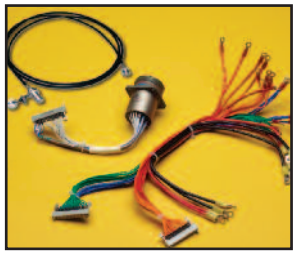
- **Excellent filtering**
  Tubular and planar filtered arrays using Pi, LC, T, and C circuits; TVS protection available
  - **Design flexibility**
    Filtered MIL-DTL-38999, MIL-DTL-83723, MIL-DTL-26482, MIL-DTL-24308, MIL-DTL-55116 as well as custom filtered connectors
- **Reliability**
  Each connector position is tested 100% for critical electrical parameters
  - **Specialty Unfiltered Connectors**
    Built to MIL specifications, custom shells to fit available space. Integral strain relief. Power, signal & coax line combinations

- **Insertion loss range**
  Effective insertion loss from 1 MHz to 18 GHz with proper installation
- **Capacitance and temperature characteristics**
  To 0.1 µF

  COG, X7R, Z5U
  - **Temperature range**
    -55°C to +125°C
  - **Voltage ratings (max.)**
    125 VAC @ 400 Hz
    up to 1000 VDC

eis.apitech.com/circular

Custom Cable & Harnessing



Commercial and military avionics, telecommunications, industrial equipment, mining & oil exploration, medical equipment

Signal & Discrete Cables
Point-to-point, multi-conductor, branched harness, flex, semi-rigid, rigid circuit card assembly

RF Cables
Phase matching, rigid/semi-rigid cable, custom RF cable builder tool

Power Cables
Cooper "Roughneck" 4/00 + power distribution cable fabrication

- **Interconnects**
  Harnesses can include a wide range of interconnects both unfiltered or API – Spectrum filtered products, sensors & potentiometers
- **Manufacturing expertise**
  Services include lead wire preparation, soldering & tinning, marking & ribbon cable processing

  Overmolding – rapid custom mold development (2 weeks typical)
- **100% tested**
  Continuity

  Isolation (1500VDC)

- **Standard assured**
  All cable assemblies & harnessing built in accordance with WHMA-IPC-620 & J-Std-001

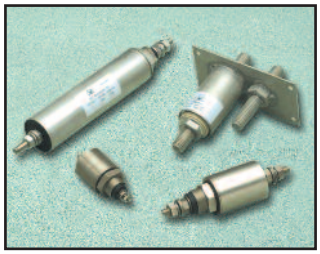
  Printed circuit board assemblies built in accordance with IPC-A-610

  In house design & build
- **Wire processing range**
  28AWG to 350MCM
- **Temperature range**
  -55°C to +200°C
- **Current ratings (max.)**
  To 750 Amps
- **Frequency ratings**
  To 40 GHz

eis.apitech.com/harness

POWER FILTERS & FILM M

High Current Feed-Through Filters



Cellular base stations, telephone racks, high current switch mode power supplies, power amplifiers and servers, industrial equipment and laser welders

- **Easy installation**
  Bolt-in style, surface mount
- **Design flexibility**
  Available with single, dual, triple and quad configurations, different stud lengths, mounting brackets hardware and EMI gasketing available
- **Performance**
  Ideally suited to help meet NEBS, GR1089, and EN55022
- **Agency approvals**
  Designed to meet agency approvals, some selected filters UL 1950 recognized, CSA C22.2 certified and TüV approved
- **Custom options**
  Custom interfacing, contact pins, wire leads, multiple outputs
- **Environmental**
  Can be used in both indoor and outdoor applications

- **Current ratings (max)**
  To 500 Amps
- **Voltage ratings (max)**
  To 1000 VDC and to 240 VAC
- **Insertion loss range**
  AC: 1 MHz to 1 GHz

  DC: 150 KHz to 10 GHz

  High performance options available with IL up to 100 dB
- **Temperature range**
  -55°C to +125°C
- **Capacitance**
  4.7µF max

  Class Y2 and Y4 available

RoHS COMPLIANT

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Power Entry Modules

Digital equipment, personal computers and peripherals, measuring instruments, home appliances, monitor and display units

- **Rugged construction**
  Designed to perform in industrial environments
- **Design flexibility**
  Available in PCB mount, bolt-in, and snap-in configurations, fast-on tab, solder lug or flying leads, Fused and Switched and Fused options available
- **Performance**
  Ideally suited for products that must conform to FCC part 15 regulations

  Meets over voltage of IEC 664 category II and complies with IEC 950

  Metal case provides high performance
- **Agency approvals**
  UL recognized, CSA certified, TüV approved (tested and found to be in accordance with VDE 0565 Part 3)
- **Custom options**
  Value added connectors, wire leads, ring terminals

- **Current ratings (max)**
  Up to 15 Amps

  Switched/Fused 2, 4, and 6 Amps
- **Voltage ratings (max)**
  From DC to 250 VAC, 60 Hz
- **Insertion loss range**
  Effective filtering from 100 KHz to 30 MHz
- **Temperature range**
  -25°C to +85°C
- **Leakage current**
  0.35 mA to 0.50 mA max for general purpose filters

  0.005 mA to 0.10 mA max for medical filters

RoHS COMPLIANT

eis.apitech.com/pem

Power Line Filters & 3 Phase Power Line Filters

Digital equipment, personal computers and peripherals, measuring instruments, medical, industrial, telecommunications equipment, factory automation, UPS, vending machines, elevators, and switch mode power supplies, welders, appliances, inverters and converters

- **Rugged construction**
  Designed to perform in industrial environments
- **Design flexibility**
  Available with fast-on or bolt-in terminals

  Single and dual stage

  Delta and Wye configurations
- **Performance**
  Ideally suited for products that must conform to FCC part 15 regulations

  Both metal and plastic cases provide high performance

  Excellent attenuation for high voltage impulse
- **Agency approvals**
  Several styles are UL recognized, CSA certified, TüV approved (tested and found to be in accordance with VDE 0565 Part 3)

- **Current ratings (max)**
  1 Amp to 100 Amps

  3 Amps to 200 Amps (3 Phase)
- **Voltage ratings (max)**
  From 48 VDC to 250 VAC, 60 Hz

  250 VAC to 440 VAC (3 Phase)
- **Insertion loss range**
  Effective filtering from 100 KHz to 30 MHz
- **Temperature range**
  -25°C to +85°C

  -40°C to +85°C (3 Phase)
- **Leakage current**
  0.35 mA to 3.0 mA max

RoHS COMPLIANT

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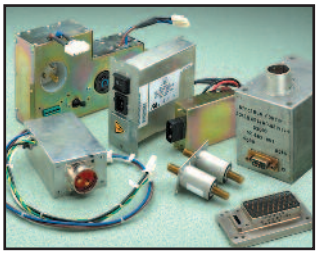
ODULES

Military/Aerospace Multisection Filters & Custom Commercial Assemblies



Commercial and military avionics, satellites, secure communications, ruggedized computer, radar, electronic warfare and ground weapons systems, telecommunications, cellular base stations, medical equipment, telephone switching and traffic control systems

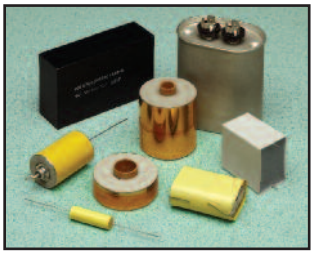
- **Rugged construction**
  Metal enclosures built to withstand MIL-STD environmental conditions, designed to perform in industrial or military environments
- **Design flexibility**
  Filters designed to meet customers' requirements
  Transient protection
  Circuit breakers
  Voltage cut-off
  Other options available
- **Performance**
  Provides quick and economical solutions to meet customers' specific requirements
  Increases speed-to-market and decreases development time
  Designs optimized through EMC verification
- **Military approvals**
  Available to meet MIL-PRF-15733 and MIL-STD-461
  Military testing IAW MIL-STD-202, MIL-STD-105
  Designed to meet NEBS and safety agency approvals
- **EMI design verification**
  Equipment verification can be accomplished through Spectrum Control's EMI test lab

- **Current ratings (max)**
  Up to 250 Amps
- **Voltage ratings (max)**
  400 VDC and 250 VAC standard; custom voltage ratings available
- **Insertion loss range**
  Effective filtering from 10 KHz to 10 GHz
- **Temperature range**
  -55°C to +125°C
- **Leakage current**
  Standard and low leakage designs available

RoHS COMPLIANT

eis.apitech.com/power

Film Capacitors & Modules



Renewable energy conversion equipment; electric vehicle inverter and charger equipment; laser pulse power and radar systems; industrial welders, elevators and medical defibrillators; high voltage and aircraft power supplies and motor drives

- **Design flexibility**
  Wide range of dielectrics: polypropylene, polyester (mylar), polyphenylene sulphide (PPS)
  Variety of terminations: radial or axial leads, machined, stamped, lugs, PCB mount, threaded, inserts
  Multiple enclosures: metal case, pre-molded plastic, wrap and fill
  Hermetic, non-hermetic
  Various geometries: cylindrical, flat, modular, oval-wound
  Encapsulation options: Dry or impregnated
  Multitude of sizes: less than an inch to several cubic feet
- **Performance**
  Deliver high DC current, high pulse capability, high stability, low self-inductance, and low ESR
- **Compact size**
- **Testing & Verification**
  Simulation software replicates real work environment
  In house testing and verification insures function and compliance

- **Voltage ratings**
  AC: Up to 750 VAC
  DC: Up to 20,000 VDC
- **Temperature range**
  -55°C to +150°C
- **DF**
  0.3% to 0.15% typical
- **IR**
  3 GΩ min
- **Ripple currents**
  Up to 400 arms

RoHS COMPLIANT

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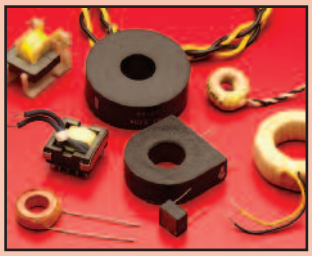
MAGNETICS

Current Transformers

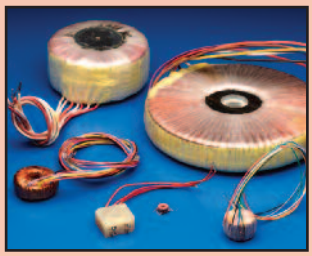


Current Sensors
- Measures electrical current (AC & DC) and can transform current from high to low measurable values
- Wide primary current range of 3.5 Amps to 800 Amps

High Frequency Current Transformers
- 20 kHz-100 kHz operating frequency
- Available totally encapsulated, with or without wound primary turns and loading resistor
- Built to UL, MIL, VDE, CE specs, EMRL current transformers meet UL1244

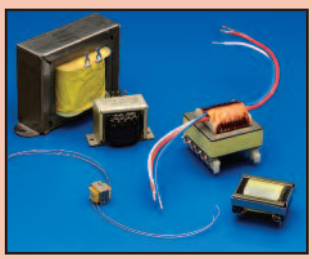
Load Detector Current Sensors
- Innovative Snap-On load detectors mount on pre-wired systems without disrupting existing connections
- Broad frequency response of 30Hz to 15 kHz
- Measure currents up to 40 Amps RMS continuous and 120 Amps intermittent

Toroidal Power Transformers



- 50/60HZ, 5-15,000V (Europe ER series)
- 60 Hz 120V (U.S. FR series)
- 400Hz 115-230V (Military DR series)
- Lower magnetic leakage, lower electrical noise and mechanical hum

Laminate Power Transformers



- Value ranges from 3 VA to 100,000 VA
- Transform line voltage to any other voltage

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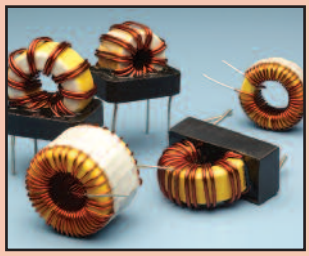
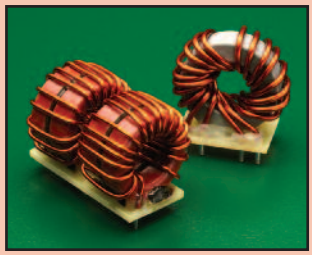
Switch Mode Power Supply Inductors



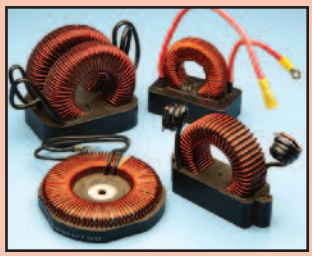
- Filter inductors, toroidal current sense transformers and high frequency inverter transformers
- Performance verified in 25kHz power supply
- 10 to 1,000 watts with low power losses

Power Inductors/Chokes



- Precision wound heavy-duty toroidal inductors
- Up to 100 amps, standard
- Lighting dimmers – low wattage residential to higher wattage commercial, motor controls, SCR controls and line filters

Lighting Chokes & Inductor/Filters



- Precision wound heavy-duty toroidal inductors
- 120 volt models from 12.5 to 100 Amps
- 240 volt models from 8.3 to 60 Amps

Modem & Module Transformers

- Broadband and voiceband transformers used for datacom and telecom applications
- xDSL, T1/E1, T3/DS3/E3/STS-1, ISDN interface modules
- ADSL / POTS splitter modules
- Impedance and line matching transformers

Custom designs available for all magnetics

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About API Technologies

API Technologies Corp. is a trusted provider of RF/microwave, microelectronics, and security solutions for critical and high-reliability applications. The company designs, develops and manufactures electronic components, modules, systems and products for technically demanding defense, commercial/industrial and aerospace applications. API Technologies' customers include many leading Fortune 500 companies, as well as a majority of NATO governments. While API was founded in 1981, our heritage brands have served the demanding, hi-rel marketplace for more than 60 years. API Technologies trades on the NASDAQ under the symbol ATNY.

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