



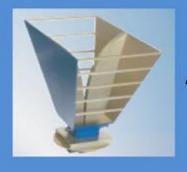
# All Products Brochure



**EMI Filters** 



**Microwave Products** 



# **Antenna Products**

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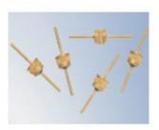


#### **Bolt-In Filters**



Resin sealed filters are manufactured for installation into a threaded or thru-hole application. Filters are available in sizes from 2-56 to ½-28. Filters are available in "C", "L" and "Pi" configurations and are available in various capacitance and voltage ranges. Corry Micronics will custom make filters to your application.

#### **Press-In Filters**



The GC136 Press-In EMI filters are offered in capacitance values ranging from 5pF-30,000pF. The GC136 series is rated at 5 Amperes with Dielectric Withstanding Voltages as high as 200 volts DC. The GC136 series filters are glass sealed on the bottom-side.

#### Solder-In Filters



Many designers have opted to semiintegrate feedthrus by soldering feedthrus directly into the housings. The solder-in feedthrus are available in a glass forward or reverse seal. This feature offers improved hermetic qualities to environmental conditions. Corry Micronics offers the industry standard .156 at the flange, as well as a wide range of capacitance values.

#### **Hermetic Filters**



Some applications require the need for a complete hermetic package. Corry Micronics offers the industry standard broadband filters in 1/4-28 thread with a .383 body and the 5/16-24 thread with a .702 body. Both packages are available in C, LB, LT. Pi and T configurations. Custom packages are available.

#### Single and Multi-line Filters

#### Email: components@rfpcbs.com

### Spanner-Head Filters



Spanner bushings save space and are easy to install. Spanner filters can be installed on center-to-center spacing down to .110" (2.8mm) Sizes range from 2-56 to 8-32 and are available in capacitance values up to 10,000pF.

## High Current Filters



Available in three standard current ratings. Available in 50, 150, and 200 ampere designs. Standard filters are rated at 200 VDC and 140V AC and with .22µF.

#### **Filter Plates**



Our industry standard filter plate arrays are built to .100" and 2mm centers. The .100" centered filter plate arrays are available in "C" and "Pi" configurations with capacitance values from 68pF to 5,000pF. The highdensity filter plate arrays with lead spacing of 2mm are offered only in the "C" configuration up to 5,000pF.

## Filtered Circular Connectors



Filtered Circular connectors meet the following MIL specifications: MIL-C-38999, MIL-C-26482, MIL-C-5015 and MIL-C-83733. All filtered connectors are suitable for extreme environmental conditions and connectors can have transient voltage protection added. The connectors are designed for airborne, marine and ground controlled equipment.

#### Filtered Terminal Blocks



Corry Micronics offers a full range of filtered terminal blocks with value added harnessing and high current designs up to 200 amps and are readily available.

### SMT Filtered D-Sub Adapters



The capacitive SMT filtered adapters are primarily used where the development effort has been completed and there remains a need for additional filtering. A wide range of capacitance values is available from 180pF to 5,000pF. Custom capacitance values are available with a minimum purchase commitment. Connectors are available with pin counts of 9, 15, 25, and 37.

## Ceramic Tubular Filtered D-Sub Connectors



These filtered connectors are used in applications requiring high levels of attenuation or where the interference covers a wide range of frequencies. The ceramic tubular style is offered as "C" or "Pi" configurations with capacitance values of 68pF to 5.000pF. Filtered connectors are available with pin counts of 9, 15, 25, 37, and 50.

### Ceramic Tubular Filtered Adapters



Ceramic tubular adapters are used where high levels of attenuation or where the interference covers a wide range of frequencies. Available in "C" or "Pi" circuit configurations with capacitance values of 68pF to 5,000pF. Connectors with pin counts of 9, 15, 25, 37, and 50.

#### Multi-line and Specialized Filters

Email: components@rfpcbs.com

#### SMT filtered D-Sub Connectors



Capacitive SMT filtered adapters are primarily used where the development effort has been completed and there remains a need for additional filtering. A wide range of capacitance values is available from 180pF to 5,000pF. Custom capacitance values are available with a minimum purchase commitment. Connectors are available with pin counts of 9, 15, 25, and 37.

### Glass-to-Metal Seals



Glass-to-metal seals offered in DC and 50-ohm configurations. These feedthrus are available in standard and customized packages. Custom-designed glass-to-metal feedthrus are available in quantities as low as 5,000 pieces.

#### **Eyelet Style Filters**



Eyelet filters are available in a range of values up to 5,000pF and are available in "C" or "Pi" circuit configurations. The standard sizes measured across the flange range from .138 to .195.

### Filter Installation and Testing



We offer a full turn-key process:

- Design services
- Housing machining
- Silver and goldplating
- Filter installation
- Electrical, mechanical, and hermetic seal testing.

We offer competitive pricing without compromise; small volume prototype orders to high volume production.

#### **SMT Filters**



The HCSF Series of surface mount filters are available with a capacitance range from 100pF to 5,000pF and are temperature rated from -40° to 125° C. The HCSF series is available as a "C" or "Pi" circuit. Our unique plating process allows for a trouble-free installation. The surface mount filters are rated to 10 amps and are bulk-or tapeand-reel packaged.

#### **Filter Pin**



Filter pins are available in a range of values up to 5,000pF in .090 diameters and are manufactured as "C" or "Pi" circuit configurations. Custom sizes are available.

#### Coaxial Diplexer



Coaxial Resonator
Diplexers offer
additional benefits
over standard
diplexers. The coaxial
diplexers mechanical
size is reduced; they
are extremely
temperature stable
and have almost no
aging issues. The
ceramic resonator
designed diplexers
performance is also
more repeatable

#### Wilkinson Power Divider Combiner



We offer Wilkinson style power dividers, with N or SMA connector styles in the broadband or ultrabroadband style. The power dividers are configured as 2 to 8 ways, frequencies to 40GHz and have a forward power rating of 30 watts.

#### RF and Microwave Products

# Diplexers and Multiplexers



Diplexers are three port devices that are used to combine or split signals at different frequencies. The two frequencies are generally the receive and transmit frequencies that have been offset so that the two signals do not interfere with each other. Multiplexers also combine signals on to one port so that a single transmission medium can be used to carry the both signals.

#### Reactive Power Divider



The Reactive Power
Dividers are available
up to 500 watts and
can be configured as 2,
3 and 4 way dividers.
Typical frequencies of
700MHz to 2700MHz.
Reactive dividers offer
no isolation between
ports so they are not
used as combiners.

#### **Cavity Filters**



Cavity filters are well suited for applications that require low insertion loss with extremely high levels of rejection. Our off the shelf designs cover the frequency range of 30MHz to 40GHz. Most cavity filters are designed to the customers' requirements.

# CM

Hybrid

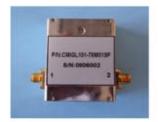
The power hybrid is designed to cover the frequency range from 870MHz to 2,200MHz. The 90° hybrid outputs are equal but are now 90° apart. There is also a fourth termination port that absorbs any reflected unmatched signals. Standard product comes with N Connectors.

#### **RF Switches**



The pin diode RF
Switch product line
covers a wide
frequency range from
20MHz to 18GHz. The
RF switches are
designed to be TTL
compatible operating
at ±5v DC. Standard
switches are rated for
1 watt of continuous
power.

#### Isolators and Circulators



These ferrite constructed devices are designed to circulate in a clockwise or counter-clockwise direction. Circulators are designed to duplex two signals. Many times duplexers are used to combine transmit and receive channels coming from the antenna. Isolators have one port terminated. Unwanted signals are absorbed before getting to the transmission circuit.

#### Remote Control RF Switch



The DCR-8 is an eight port switch remotely controllable via USB or Ethernet. The switch automatically recognizes either type of control connection. The operating frequency of the DCR-8 is from 20MHz to 18GHz. The DCR-8 can be custom designed for customer specific bandwidths and switching port applications.

#### **RF Attenuators**



RF attenuators are designed as a 4 or 6 bit attenuator. The attenuators require a supply voltage of ± 5v DC. The voltage variable attenuators are current-controlled devices. These devices are offered as reflective or absorptive. The attenuators are capable of attenuation of 2dB to 50dB.

#### **RF Switch and Microwave Products**

#### Electro-Mechanical RF Switch



Mechanical RF
switches have several
key advantages that
make them a
designer's choice.
Mechanical switches
operate from DC to
18GHz and have the
lowest insertion loss of
any RF switch. Typical
switching speeds are
20 ms and can be
designed for high
power requirements.

### High Power and Custom Mechanical RF Switch Designs



Designs that exceed 200 watts and offer additional features such as selectable attenuation and special communication protocols. Our engineering team is available to discuss your project and to offer solutions that are cost effective and designed to meet your needs.

### Connectorized Bandpass Filters



CMI manufactures two through eight pole ceramic resonator type band-pass filters. These filters have great temperature stability, while offering a Q factor as high as 2,000 with a temperature range from -30°C to 85°C. Also, the filters are engineered with very low insertion loss. Filters are available packaged in bulk or tape and reel. Custom designs are available.

### SMT Bandpass Filters



Surface mount ceramic dielectric bandpass filters from 2-8 poles are standard. Frequencies from 250 MHz to 3.0 GHz. Custom layouts and packaging available.

# Microwave Interconnects and Antennas

#### **Directional Couplers**



Directional couplers are designed as four different types. The four types are lumped element, ultra-broadband. communications band and the high current series. Directional couplers come in varying package types: SMT, Plug-in, Coaxial, SMA and N type packages. All directional couplers are designed with minimum through-loss attenuation.

#### Feed Horn Antennas



The antennas are offered in a wide range of feed horns available in the 260MHz to 325GHz frequency range. Standard feed horns are available with 10, 15, and 20dB of gain. These antennas are also offered in multiple flange types. The feed horn antennas are available with Waveguide flanges to SMA, N Type or Coax adapter styles.

### **Lumped Element Power** Divider



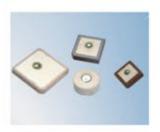
The standard dividers are offered as 0°, 90° and 180° phase dividers. Many package styles are available and up to 24 outputs. The lumped element covers a wide range of frequencies from 100MHz to 5GHz; units offer excellent phase and amplitude balance with low insertion loss and high port-toport isolation.

#### **Waveguide Components**



Waveguide components range from rectangular to the standard gain horn antenna adapters, to waveguide isolators and circulators to waveguide directional couplers. The product line also consists of bend, twist and straight assemblies. The waveguide components can handle up to 2,000 watts and frequencies to 325 GHz.

#### **Ceramic Patch Antennas**



Ceramic Patch Antennas are used for the Global Positioning Systems (GPS) and WiFi devices. Ceramic patch antennas have excellent stability and sensitivity through the use of high performance ceramic dielectrics. The antennas have an offset single-feed point that goes through the ground plane; center frequencies of 1570, 1575. 1580, and 2,450 with sizes ranging from 10x10mm to 36x36mm.

#### **Engineering Design** Services

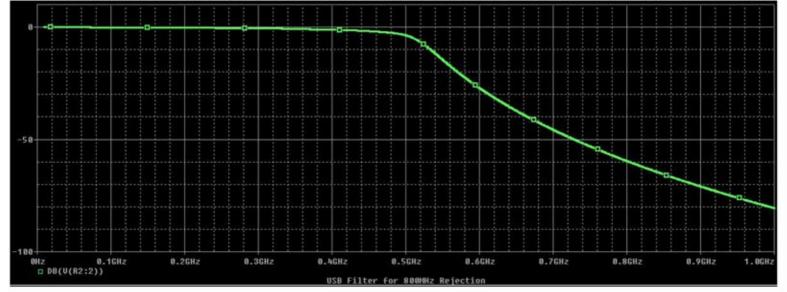


Our engineering services group focuses on solving our customers' problems. Our engineering service group offers the following services:

- RF switch designs
- Microwave filters
- Custom antenna designs
- Antenna tuning
- Single and multiple-line filters
- Temperature, humidity and hermetic seal test services

**USB Lab Grade Filter** 





### The Dual Channel USB 2.0 Filter

- USB compliant
- Greater than 80 dB of attenuation above 1 GHz
- 90 ohm impedance
- Custom designs

## **Class A Manufacturing Facilities**





# **Micro-Assembly**



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