

High Performance Filters for Military and Space Applications

Trusted for 25+ Years Supporting Mission Critical Systems with Low-Cost Production, First-Class Engineering, and Responsive Manufacturing



EW



Radar



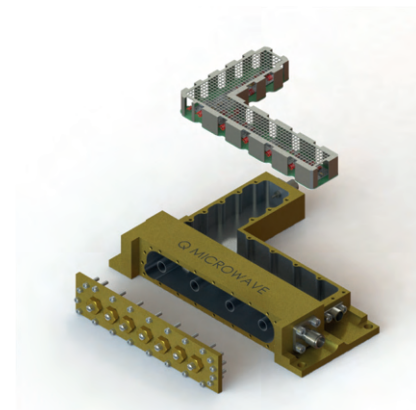
SATCOM



Signal Intelligence

Specializing in filters that provide superior performance

- Wideband Multioctave Filters featuring
 - Steep Roll-off Rejections
 - Low Insertion Loss
 - High Power Handling
- Unique Multiplexer Designs
- Custom Package Options for System Integration
- Rapid Prototyping, Low Cost



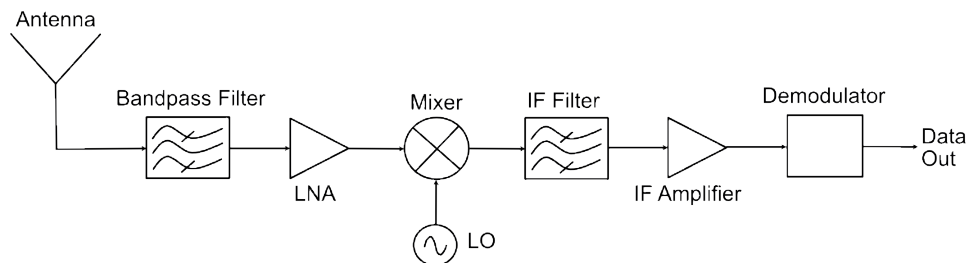
US Based Facilities
Classified Test Capabilities



Why Q Microwave

RF and Microwave Filters play a critical role in Military and Space Systems enabling effective communication, detection, and protection in challenging operational environments.

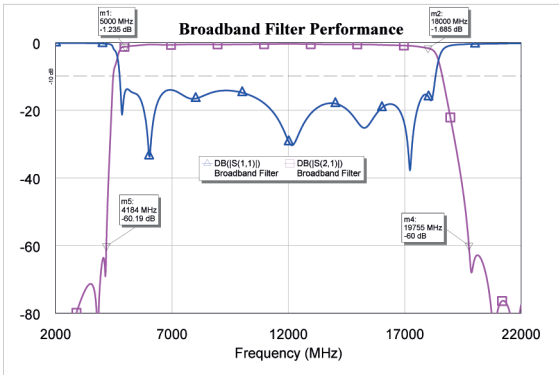
Since 1998, Q Microwave has designed filters that are found throughout Electronic Warfare (EW), Radar, Missile Guidance, SIGINT, and SATCOM systems, to ensure signals are transmitted and received accurately, and unwanted signals are minimized.



While many of the components in a system are commercially available, filters remain specialized. This is a key challenge for designers of high-performance systems, as they require custom filtering – since no one filter technology is optimal for all applications. Different filter technologies provide tradeoffs across various performance metrics.

You can trust Q Microwave’s industry experience to help you find the solution you need for your application. Our expert team of engineers will work with you to design and manufacture a filter to meet your requirements within the packaging needed.

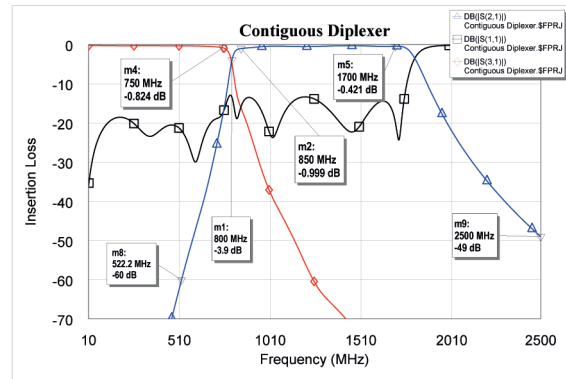
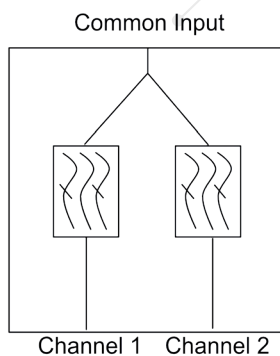
	Lumped Element	Ceramic	Cavity / Combine	Microstrip	MMIC / CHIP
Frequency Range	0.1MHz - 22 GHz	500 MHz - 6 GHz	300 MHz - 26 GHz	500 MHz - 50 GHz	1 GHz - >80 GHz
Band Width	5% - >100%	.5% - 30%	.1% - 75%	5% - 75%	1% - 50%
Insertion Loss	Medium	Low	Lowest	High	High
Size	Small to Medium	Small to Medium	Medium to Large	Small	Small
NRE Cost	\$	\$	\$	\$\$	\$\$\$
Unit Cost	\$\$	\$	\$\$	\$	\$
Power Handling (CW)	40W - 200W	100W - 500W	200W - 1kW	1W - 25W	1W - 10W



Filter Technologies, (Q Microwave Offerings in Green)- Example Filter Performance

Multiplexer Filters

For designs that require complex frequency planning or single input multi-channel output interfaces, Q Microwave can provide high performance Multiplexers.



Package Options

Our design team works directly with you to create custom mechanical outlines for easy integration into your assemblies. We can provide SolidWorks models or PCB foot prints for ease of design layout.

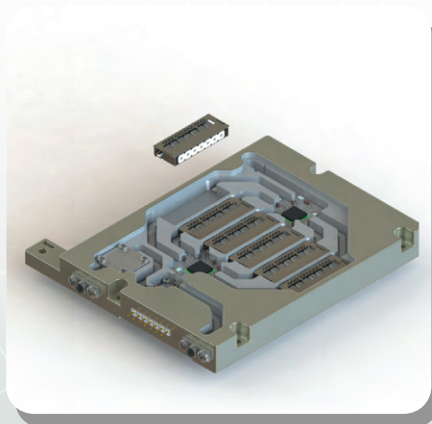
Hermetic packaging is available.

Types of packages offered by Q Microwave include:

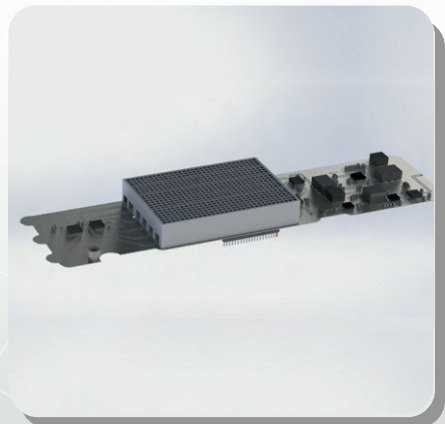
- CoPlanar MicroStrip
- Formed Lead Configuration
- Wire Bondable / MicroStrip
- PWB SMT
- SMA
- GPP0
- And more!



Microstrip / Wirebondable



Multiple Filters integrated into a single package for EMI protection



Six unique filters easy Surface Mount re-flow and fold up housing

Discover Your Ideal Filter Solution with Q Microwave

Collaborate with Q Microwave's experienced team for efficient filter prototyping and benefit from 8-12 week lead times for prototypes utilizing our in-house standard packaging.

Our process incorporates automated testing and ESS screening, catering to both high and low volume production requirements.



Contact Q Microwave today to discuss your technical needs and start developing the ideal filter solution for your project.

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Website: www.qmicrowave.com