

ON YOUR WAVELENGTH



**FILTER & DIPLEXER  
SOLUTIONS  
TO 300GHz**



# ASPEN OFFERS AN EXTENSIVE RANGE OF RF & MICROWAVE FILTERS & DIPLEXERS FROM DC TO 300GHz PLUS.

Lowpass, Bandpass, Highpass, Bandstop & Notch Filters as well as Diplexers, Duplexers, Triplexers, Tuneable Filters & Switched Filter Banks. Typical Technologies include Cavity, Ceramic, Comblines, Crystal, Discrete/Lumped Element, Helical, Interdigital, SAW, Suspended Substrate, Tubular, Waveguide & YIG.

## CAVITY

30MHz to 40GHz.  
0.5 to 66% Bandwidths.  
Q 800 to 4,000.  
High Power.  
Bandpass, Bandstop & Dimpled.  
Helical, Comblines, Interdigital & Waveguide.

## CERAMIC

200MHz to 11GHz.  
0.5 to 30% Bandwidths.  
Q 400 to 600.  
Bandpass & Dimpled.  
SMD, PC Mount & Connectorised.

## COMBLINE

500MHz to 15GHz.  
1 to 50% Bandwidths.  
Q 800 to 3,000.  
Bandpass & Dimpled.

## CRYSTAL

1 to 200MHz.  
High Q over a Narrow Bandwidth.  
10.7MHz, 21.4MHz & 45MHz COTS Parts Available.  
Discrete & Monolithic Crystal Designs.

## DIPLEXERS/DUPLEXERS

500MHz to 20GHz.  
1 to 60% Bandwidths.  
Q 800 to 4,000.  
Connectorised & Waveguide Options.

## DISCRETE/LUMPED ELEMENT

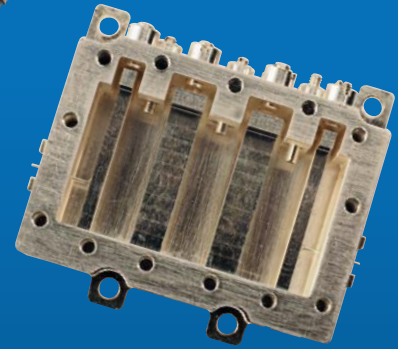
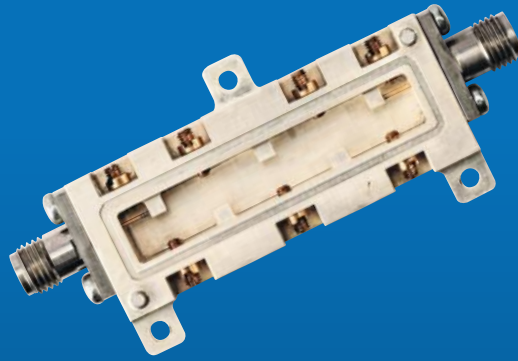
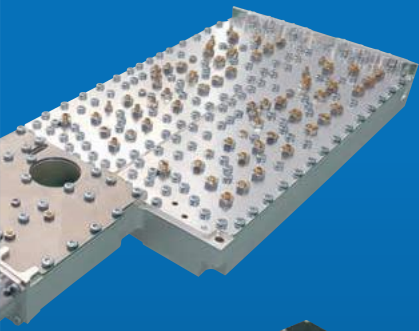
DC to 20GHz.  
Bandwidths: 1 to >100%.  
Bandpass, Lowpass, Highpass & Notch.  
Monotonic & Elliptic Responses.  
SMD, PC Mount Pins, Drop-In or Connectorised.

## INTERDIGITAL

500MHz to 30GHz.  
1 to 80% Bandwidths.  
Q 800 to 3,000.  
Bandpass & Dimpled.







### SWITCHED FILTER BANKS

High Q, Bandpass Filters.  
High Speed, PIN Diode Switched.  
Broadband for ECM & ELINT Applications.



### TUBULAR

DC to 3GHz.  
3 to 40% Bandwidths.  
Lowpass & Bandpass.  
VSWR 1.5:1 Typical.  
2 to 12 Sections.  
Custom Designs Available.



### TUNEABLE (MANUALLY & ELECTRONICALLY)

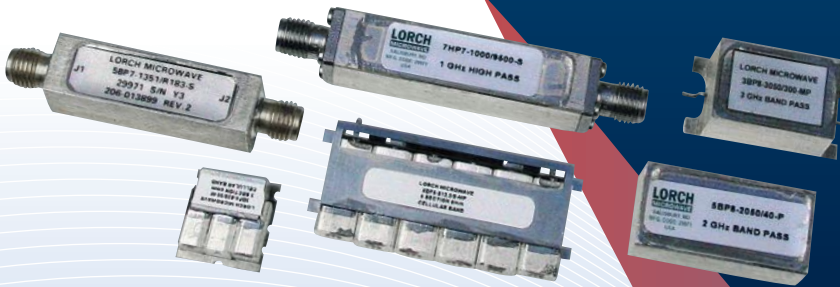
24MHz to 4GHz.  
High Power.  
Direct Readout.  
Octave Tuning.  
Digital & Manual Control Available.

### WAVEGUIDE

1 to 325GHz.  
0.5 to 5% Bandwidths  
Q 1,000 to 20,000.  
Waveguide Flange or Connectorised.  
Lowpass, Highpass, Bandpass, Bandstop & Diplexed.

### YIG FILTERS

500MHz to 50GHz Standard Electromagnetic.  
Miniature from 1 to 8GHz.  
Permanent Magnet from 4 to 16GHz.  
2 to 8 Stage Bandpass & 2 to 16 Stage Band Reject.  
Analog, TTL Digital & Serial Interfaces.  
Bench Test Filters with Manual, Keyboard, USB or Ethernet Tuning.



### INTEGRATED ASSEMBLIES/SYSTEMS

500MHz to 18GHz.  
Multiple Channels.  
Combined Technologies & Functionality.

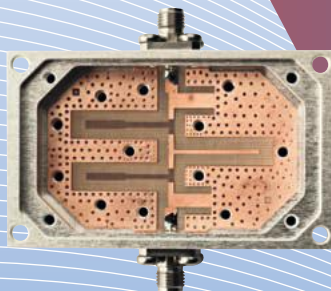


### SAW

30MHz to 2.65GHz.  
Insertion Loss down to 1.5dB.  
Small Size down to 2mm x 1.4mm.

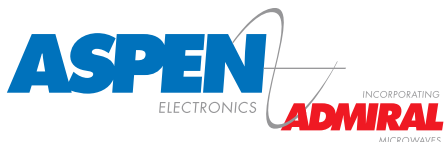
### SUSPENDED SUBSTRATE

500MHz to 50GHz.  
10% to Multi-Octave Bandwidths.  
Q 400 to 600.  
Bandpass, Bandstop, Lowpass, Highpass & Diplexed.



- + COMPONENTS
- + TEST EQUIPMENT
- + DESIGN & MANUFACTURE
- + SERVICE & CALIBRATION

> THE ASPEN ADVANTAGE



ON YOUR WAVELENGTH

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SOLUTIONS**



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