

## Tubular

Tubular filters use discs as capacitors and either coiled wire or rods as inductors to form the resonant circuits.

The structure is enclosed in a tubular earth plane. By using distributed capacitors and inductors these filters have lower insertion loss than lumped element structures.

- Frequency Range: 20 MHz to 11 GHz
- Bandwidth: 2 % to 50 %
- Stopband: 20 % up to 10 times  $F_c$



## Comblines

Comblines filters use a variety of wavelength capacitively loaded rods as resonators offering a low loss, rugged and compact design.

Giving a large degree of parameter flexibility, Comblines filters can be optimised for size, Insertion loss or Stopband performance. By altering rod sizes from a thirtieth to a quarter of a wavelength a variety of filter requirements can be realised.

- Frequency Range: 400 MHz to 16 GHz
- Bandwidth: 1 % to 40 %
- Stopband: up to 7 times  $F_c$

