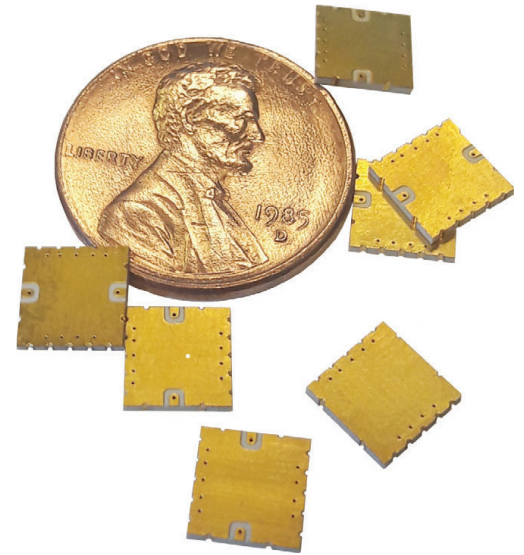


Benchmark Lark Technology offers customizable millimeter wave stripline broadband bandpass filters ranging from 5 GHz to 40GHz. This series uses low-loss substrate options like Liquid Crystal Polymer (LCP), PTFE, and rigid thermoset materials to offer excellent electrical and mechanical properties such as stable dielectric constant and low dissipation factor, with some materials having excellent properties up to 110 GHz. In addition, low moisture absorption and low coefficient of thermal expansion of these materials allow these filters to operate with very high reliability. These SWaP-enabling filters are ideal for applications where size-reduction is critical, such as Ka/Ku band aerospace/satcom/defense and mmWave infrastructure.



Features:

- Small size and light weight
- Easily stacked and surface mounted
- Radiation-tolerant
- Low dissipation factor and low moisture absorption

Specifications

- Topology: Interdigital
- Frequency Range: 5GHz to 40 GHz*
- Impedance: 50 Ohms
- Number of sections: 5 to 11
- % BW: 10% - 25%
- Connectors: SMT
- Substrate: LCP (Er=2.9 and Loss Tangent = 0.002)
- Size: Depends on number of poles and frequency of operation

We are continuously improving the performance of our filters. Please feel free to contact our Engineering Department for more information about this series or the new series (mmW-FH) that we are currently developing for millimeter wave 5G bands.

The filter shown in the picture is a good example of our capabilities. This is a 9 poles SMT BP filter, centered at 8.7 GHz, BW of 2.12 GHz (24 %), and return loss greater than 10 dB. This filter offers a spurious rejection of more than 35 dB. Size (L x W x H): 0.25" x 0.25" x 0.033".

