



Custom Band Pass Waveguide Filters 40 - 220 GHz

Farran's custom bandpass filter design service and manufacture of waveguide BPF filters for wide range of applications such as 5G and 6G.

The BPF filters are designed as components with precision rectangular waveguide interface in the range from 40 to 220 GHz.

These devices use Farran's proprietary filter design and manufacturing technology to achieve industry leading low pass-band insertion loss and exceptional high out of band rejection. Farran's design and manufacture methodology ensures that each custom device meets customer requirements first time, every time.

With Farran's BPF filter design and manufacture technology you can:

- Obtain a filter that exactly matches your specification in the most cost effective way.
- Achieve low insertion pass-band loss and high out-of-band rejection characteristic.
- Achieve exceptional input and output matching.
- Obtain fractional bandwidth of 3-15% anywhere in 40 – 220 GHz frequency range.
- 7, 9 and 11 order filters available.

“With a limited budget, we needed a band pass filter our 6G transceiver. Farran recommended their service and designed a custom BPF filter that fully met our requirements. A comprehensive set of test results was provided and the performance of the filter exceeded our expectations. We have achieved great performance at a very reasonable cost.”

Head of Research Group, Technical Research Centre, EU



CUSTOMISATION OPTIONS

- Centre frequency and fractional bandwidth
- Filter's order: 7, 9 or 11



APPLICATIONS

- 5G, 6G & WiGig
- Wireless communications
- 70 / 80 / 90 GHz backhaul radio
- Automotive FMCW radar analysis
- Carrier and modulation analysis
- Harmonics and spurious suppression



INTERFACE

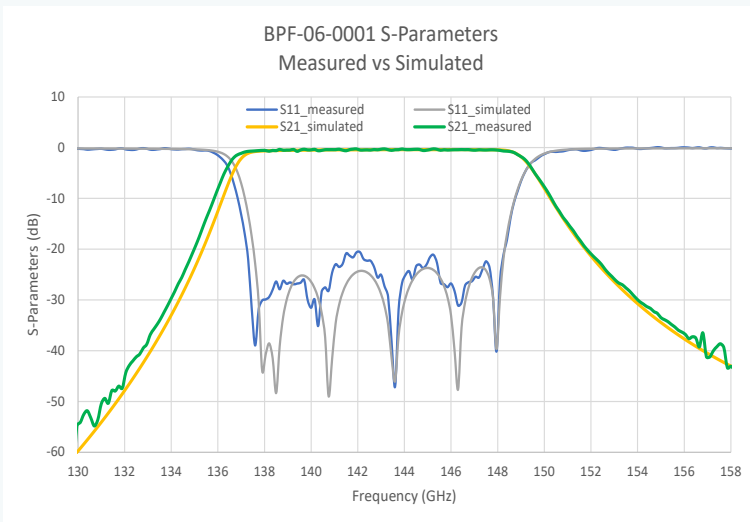
- UG-383/UM - WR-19
- IEEE 1785.2a (UG-385-UM compatible) - WR-15
- IEEE 1785.2a (UG-387-UM compatible) - WR-12 to WR-05



Product Features and Benefits

Farran's BPF Band-Pass Filter design capability allows for manufacturing waveguide band-pass filters in 40 to 220 GHz range. This proprietary technology leverages Farran's unique design technique that allows for manufacturing custom high performance filters in a cost effective way. The process yields excellent agreement between simulations and measurements.

The BPF technology fulfills the requirements for a low loss, high rejection waveguide filters with excellent input and output matching.



Farran's BPF Band-Pass Filter design and manufacture service offers unparalleled value when procuring custom high performance waveguide devices. It ensures the compliance with specification first time, each time.



SERVICES AVAILABLE

- Technical Support
- Installation and Setup
- Maintenance
- Application Support
- Hardware Support

For more information on any of our products or services please visit our website: www.farran.com



TECHNICAL SUPPORT

- Technical support provided directly by our knowledgeable and friendly engineers.
- Support for pre- and post-purchase: system configuration, installation and troubleshooting.



GLOBAL REP NETWORK

- Support queries answered by our responsive Global Rep Network in over 25 countries worldwide.



WARRANTY

- Standard 3 year warranty.
- Up to 5 year warranty optional.

Additional Information

- Custom solutions available.
- Test results provided.
- For a full check of compatibility with your equipment contact Farran Support on: www.farran.com/support

