

Bandpass Filter

Filters

- Excellent Electrical Performance
- Narrow or Wide Passbands
- Extended Stopband Performance
- Ultra Small Size
- Various Connector Types Available



DESCRIPTION The Microphase Bandpass Filters offer five different design types which have a range of capabilities and options. These filters have a passband frequency of 500 MHz to 40 GHz and bandwidths of up to one octave. They maintain rejection levels to 90 dB, VSWR from 1.2:1 to 2.0:1 and an Insertion Loss as low as 0.35 dB.

ADVANTAGES The main advantages of the Microphase designed and engineered Bandpass Filters are their narrow to wide passbands (up to one octave), featuring low Insertion Loss and VSWR, and sharp selectivity. You get excellent electrical performance, mechanical reliability and environmental stability. These compact units can be adapted for custom packaging. Lightweight and very rugged, all of our products are 100% tested, and readily available. These components can be designed to your specifications.

DESIGN TYPES

- Interdigital
- Comblin
- Cavity
- Suspended Substrate
- Dielectric Resonator

SPECIFICATIONS

Passband Frequency Range	500 MHz to 40 GHz
Bandwidths	Up to one octave
Rejection Levels	to 90 dB
VSWR	From 1.2:1 to 2.0:1
Insertion Loss	As low as 0.35 dB

These units can be designed to your specification. Please contact Microphase for your special design requirements.

Bandpass Filter

BSCP Miniature Supra Comb

Filters

Superb Electrical Performance

Very Small Size

Low Insertion Loss and Low VSWR

Extended Stopband Rejections



Typical Specifications for a 5 Pole Filter

Center Frequency	2.10 GHz
3 dB Bandwidth	245 MHz
Passband VSWR	1.3:1
Insertion Loss	1.2 dB
Rejection 50 dB min.	DC to 1.76 GHz and 2.39 GHz to 30.0 GHz
Size (excluding pins)	1.25" L x 0.28" W x 0.28" H

SPECIFICATIONS

Frequency Range	1.5 to 10.0 GHz
3 dB Bandwidth	5% to 25%
Number of Sections	2 to 10
Rejection Stopband	to 30.0 GHz
Size (excluding pins)	0.28" W x 0.28" H x L*

* Depends on bandwidth and number of sections

DESCRIPTION The Microphase BSCP Supra Comb Bandpass Filter is a breakthrough in filter technology. This miniature device will pass a specified frequency band, while rejecting all frequencies above and below. The BSCP has uses in all types of military applications, including: EW, radar, airborne navigation and communications systems.

ADVANTAGES The main advantages of the Microphase designed and engineered BSCP Supra Comb Bandpass Filter are its extremely small size and excellent electrical performance with extended stopband rejections in a stand-alone Bandpass Filter. Another feature of these filters is that the out-of-band rejection in most cases is maintained to 30 GHz, without supplemental lowpass filtering. Other important advantages are its excellent frequency and temperature stability, low Insertion Loss and VSWR and sharp selectivity. You get excellent electrical performance, environmental stability and mechanical reliability, and this unit can be adapted for custom configurations. Compact and very rugged, all of our products are 100% tested, and readily available. This component can be designed to your specification.

These units can be designed to your specification. Please contact Microphase for your special design requirements.