

Ceramic

Bandpass Filter

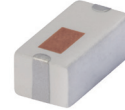
BFCN-3491+

50Ω

2790 to 4370 MHz

The Big Deal

- Small size 3.2mm x 1.6mm
- Pass band (2790-3470 MHz)
- High rejection in upper stopband



CASE STYLE: FV1206-7

Product Overview

The BFCN-3491+ LTCC Band Pass Filter achieves a miniature size and high repeatability of performance. Wrap-around terminations minimize variations in performance due to parasitics. Covering 2790 to 4370 MHz, these units offer excellent rejection over a deep stopband.

Key Features

Feature	Advantages
Small Size (3.20mm x1.6 mm)	Allows for high layout density of circuit boards, while minimizing effects of parasitics.
Rejection peaks close to pass band	Provides good rejection of signals close to the pass band, for improved system performance.
Deep stopband	Upper stopband features transmission zeroes for high rejection.
LTCC construction	Provides a rugged package that is well suited for tough environments including high humidity and high temperature extremes.

Ceramic Bandpass Filter

50Ω 2790 to 4370 MHz

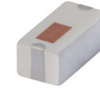
BFCN-3491+

Features

- Small size
- Temperature stable
- Hermetically sealed
- LTCC construction

Applications

- Harmonic Rejection
- Transmitters / Receivers



Generic photo used for illustration purposes only

CASE STYLE: FV1206-7

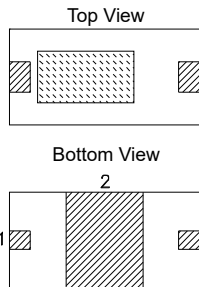
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C
RF Power Input	1W max.

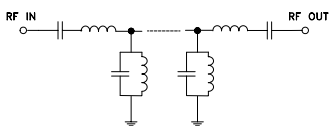
Permanent damage may occur if any of these limits are exceeded.



Pad Connections

Input	1
Output	3
Ground	2

Functional Schematic



Electrical Specifications^{1,2} at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Center Frequency	—	—	3489	—	MHz	
	Insertion Loss	F1-F2	2790-4370	—	1.5	3.0	dB
	Return Loss	F1-F2	2790-4370	—	12	—	dB
Stop Band, Lower	Insertion Loss	DC-F3	DC-2150	18	21	—	dB
Stop Band, Upper	Insertion Loss	F4-F5	5950-7200	20	30	—	dB
		F5-F6	7200-10000	15	20	—	

1. Measured on Mini-Circuits Characterization Test Board TB-812+.

2. This filter is not intended for use as a DC Blocking circuit element. In Application where DC voltage is present at either input or output ports, blocking capacitors are required at the corresponding RF port.

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
600	-42.91	-0.11
1200	-26.66	-0.24
2200	-28.41	-0.73
2600	-2.25	-15.09
3000	-0.97	-17.51
3600	-0.86	-17.76
4400	-1.17	-17.03
4500	-1.37	-14.16
4750	-2.98	-6.20
5250	-14.02	-0.85
6000	-32.75	-0.42
7000	-45.26	-0.40
8000	-25.20	-0.42
9000	-28.29	-0.37
10000	-29.03	-0.33

Specification Definition

