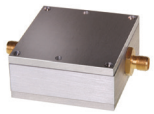
Coaxial

Bandpass Filter

ZAFBP-2793+

50Ω 2600 to 3000 MHz



CASE STYLE: CC1397

The Big Deal

- High Rejection, 50 dB typical
- Flat Group delay, 1.2 ns typical
- High power, 12.5 W
- Good VSWR, 1.5:1 typical

Product Overview

ZABPF-2793+ is a 50Ω filter built into a rugged shielded case (size: 2.00" x 2.00" x 0.75") case. Covering a bandwidth of 2600 MHz to 3000 MHz, this filter offers good matching in the passband and high rejection in the stopband. Power handling capacity is as high as 12.5W at 25°C.

Key Features

Feature	Advantages
High rejection (50 dB typical on lower side band and > 35 dB rejection till 6000 MHz on upper side band)	This enables the filter to attenuate sub harmonics and spurious signals.
Flat group delay characteristics (1.2 ns typical)	The model has a group delay flatness of 1.2 ns which helps in reducing the signal distortion.
High power (12.5W)	Suitable for base station and long-haul applications and test labs.
Good VSWR (1.5:1 typical over passband)	This provides good matching when used with other devices.

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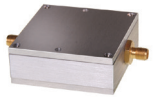


CASE STYLE: CC1397

Connectors	Model
SMA-FEMALE	ZAFBP-2793-S+

Features

- High rejection, 50 dB typical
- Flat group delay over passband, 1.2 ns typical
- Good VSWR, 1.5:1 typical in passband
- Rugged shielded case

Applications

- Harmonic rejection
- Transmitters / receivers
- Lab use

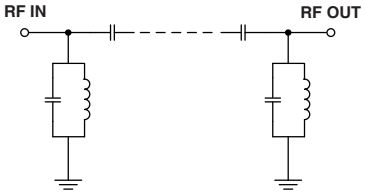
Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	—	2793	—	MHz
	Insertion Loss	F1-F2	2600 - 3000	—	4.0	6.0	dB
	VSWR	F1-F2	2600 - 3000	—	1.5	1.8	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 2300	20	29	—	dB
	VSWR	DC-F3	DC - 2300	—	31	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	3200 - 7400	20	30	—	dB
	VSWR	F4-F5	3200 - 7400	—	11	—	:1

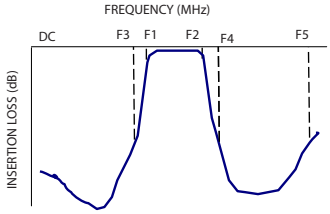
Maximum Ratings	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	12.5W max. at 25°C

* Derate linearly to 4.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Functional Schematic



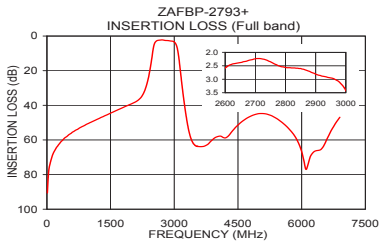
Typical Frequency Response

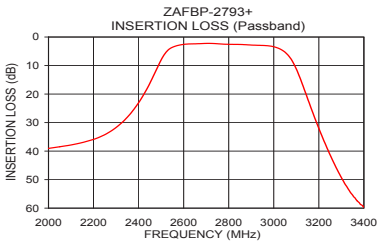


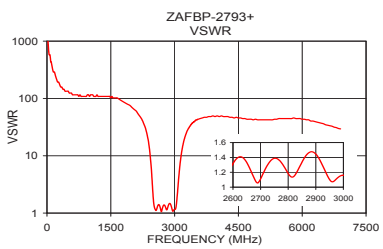
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

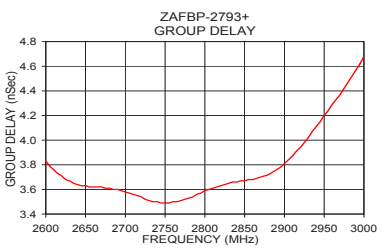
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
10.0	89.54	1737.18	2600.0	3.83
1000.0	49.69	108.58	2620.0	3.71
1800.0	40.64	86.86	2640.0	3.64
2300.0	29.58	32.79	2660.0	3.62
2440.0	13.42	7.83	2680.0	3.61
2490.0	5.91	2.25	2700.0	3.58
2550.0	3.01	1.14	2720.0	3.54
2600.0	2.58	1.32	2740.0	3.50
2793.0	2.70	1.23	2780.0	3.53
2950.0	3.24	1.10	2793.0	3.57
3000.0	4.46	1.16	2800.0	3.59
3065.0	10.30	2.13	2820.0	3.63
3110.0	19.18	5.30	2840.0	3.66
3160.0	29.93	10.89	2860.0	3.68
3200.0	37.78	15.96	2880.0	3.72
3280.0	50.76	25.56	2900.0	3.81
3500.0	60.74	41.37	2920.0	3.94
5500.0	50.51	44.55	2960.0	4.29
6000.0	71.49	43.44	2980.0	4.47
7400.0	31.82	22.00	3000.0	4.68







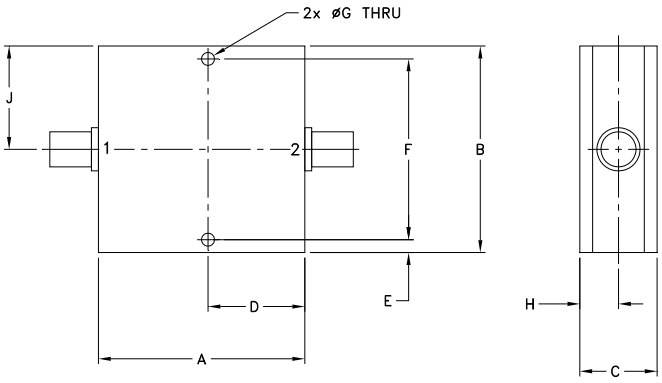


Notes
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

Coaxial Connections

INPUT	1 (SMA female)
OUTPUT	2 (SMA female)

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F
2.00	2.00	.75	.938	.13	1.750
50.80	50.80	19.05	23.83	3.30	44.45

G	H	J	wt
.125	.38	1.00	grams
3.18	9.65	25.40	100.0