# Coaxial **Bandpass Filter**

50Ω 2600 to 3000 MHz

# **ZAFBP-2793-S+**



Generic photo used for illustration purposes only 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**

ZAFBP-2793-S+ 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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# Coaxial **Bandpass Filter**

50Ω 2600 to 3000 MHz

• Flat group delay over passband, 1.2 ns typical

# **ZAFBP-2793-S+**



Generic photo used for illustration purposes only CASE STYLE: CC1397 Connectors Model ZAFBP-2793-S+

Max.

Unit

SMA-FEMALE

## · Good VSWR, 1.5:1 typical in passband

· High rejection, 50 dB typical

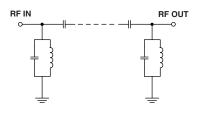
Rugged shielded case

### **Applications**

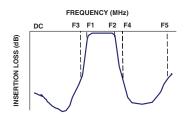
- · Harmonic rejection
- Transmitters / receivers
- · Lab use

**Features** 

### **Functional Schematic**



## **Typical Frequency Response**



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

#### Electrical Specifications at 25°C F# Frequency (MHz) Min. Parameter Тур.

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

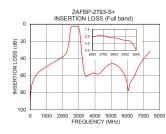
## **Maximum Ratings**

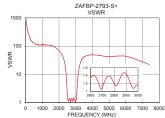
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	12.5W max. at 25°C

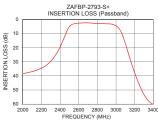
Derate linearly to 4.5W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded

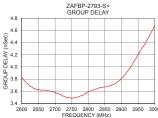
### Typical Performance Data at 25°C

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	









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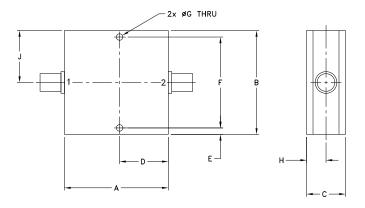
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## **Coaxial Connections**

PORT - 1	SMA-Female
PORT - 2	SMA-Female

### **Outline Drawing**



## Outline Dimensions ( inch )

Α	В	С	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	Н	J			wt	
.125	.38	1.00			grams	
3.18	9.65	25.40			100.0	

Note: Please refer to case style drawing for details

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