

Coaxial Bandpass Filter

ZBPF-75-S+

50Ω 0.063 to 0.087 MHz



Generic photo used for illustration purposes only

CASE STYLE: CC1397

The Big Deal

- Very low frequency band pass filter (KHz Range) of fractional bandwidth 32%.
- Good ultimate rejection of 30dB Typical from 50 – 800MHz
- Compact connectorized package for this frequency range

Product Overview

ZBPF-75-S+ is a 50Ω bandpass filter into a rugged shielded case of (2.0" x 2.0" x 0.75") size. The passband range for this is 63 KHz to 87 KHz. The model has good passband IL, roll-off and ultimate rejection. This will find its application in wire line broadband access.

Key Features

Feature	Advantages
Good passband insertion loss and roll-off	Low insertion loss will be used in designs optimized for high performance applications. Good roll-off will attenuate frequencies closer to the passband with good rejection value of >20dB.
Good ultimate rejection	This enables the filters to attenuate spurious signals and reject harmonics for broad band frequency.
Connectorized package	The connectorized packages are easily to interface with other devices and well suited for test set-ups.

Notes

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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.
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Connectors Model
SMA-FEMALE ZBPF-75-S+

Features

- Low frequency passband 63 to 87KHz
- Wide stopband Rejection
- Rugged shielded case

Applications

- Fiber optics network
- Wire line broadband access
- Harmonic and sub-harmonic Rejection
- Transmitters / Receivers
- Lab Use

Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Center Frequency	—	—	0.075	—	MHz	
	Insertion Loss	F1-F2	0.063-0.087	—	2.4	4.0	dB
	VSWR	F1-F2	0.063-0.087	—	2.0	2.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC-0.045	20	37	—	dB
	VSWR	DC-F3	DC-0.045	—	4.2	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	0.125-800	20	31	—	dB
	VSWR	F4-F5	0.125-800	—	13	—	:1

Maximum Ratings

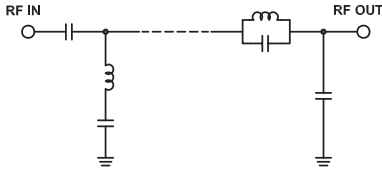
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	+5dBm max.

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

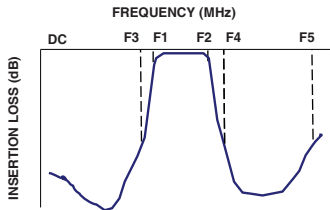
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
0.030	74.40	19.11	0.063	35498.20
0.040	62.40	17.75	0.064	33868.40
0.045	52.06	14.74	0.065	32469.60
0.048	28.16	9.90	0.066	31281.20
0.051	13.79	4.50	0.067	30233.50
0.054	6.14	2.09	0.068	29330.10
0.056	3.86	1.52	0.069	28543.10
0.059	2.56	1.36	0.070	27868.90
0.063	1.96	1.35	0.072	26790.40
0.075	1.47	1.37	0.074	26018.30
0.087	1.99	1.96	0.075	25732.40
0.095	3.59	2.82	0.076	25495.80
0.098	6.29	5.51	0.078	25167.10
0.106	16.44	24.83	0.079	25067.40
0.120	34.11	78.97	0.080	25006.90
0.125	40.56	102.19	0.081	24979.00
0.150	79.89	217.15	0.082	25015.30
50.000	53.97	289.53	0.083	25122.40
500.000	36.46	102.19	0.085	25663.50
800.000	31.49	86.86	0.087	26970.10

Functional Schematic

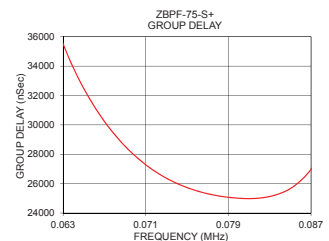
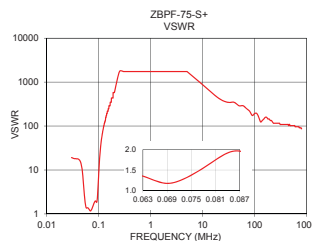
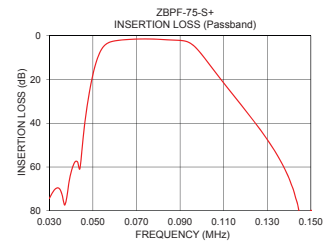
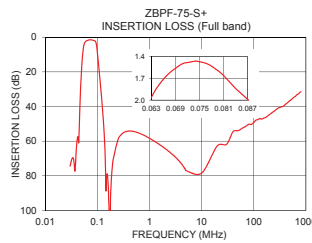


Typical Frequency Response



+RoHS Compliant

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



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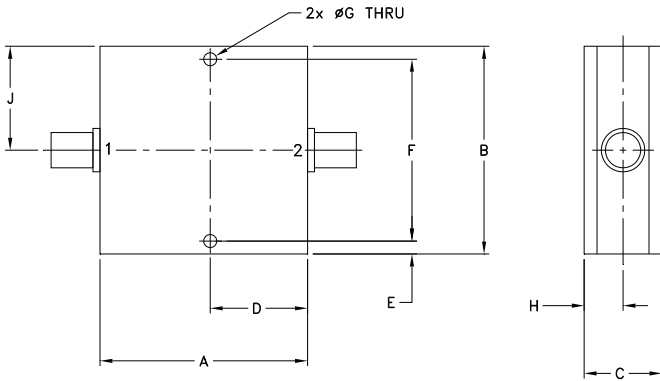
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Coaxial Connections

PORT - 1	SMA female
PORT - 2	SMA female

Outline Drawing



Outline Dimensions (inch)

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

Note: Please refer to case style drawing for details

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