Coaxial

Bandpass Filter

ZABP-45+

50Ω 30 to 70 MHz



CASE STYLE: UU1842

The Big Deal

- High rejection
- Good VSWR
- Connectorized package

Product Overview

ZABP-45+ is a 50Ω bandpass filter with a rugged connectorized package covering the passband of 30 to 70 MHz. The bandpass filter offers good matching within the passband and provides high rejection. This filter has miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across lots and consistent performance across temperature.

Key Features

Feature	Advantages
High rejection	ZABP-45+ has sharper transition and rejects spurious signals in the stopband.
Good VSWR	This filter maintains typical VSWR over passband frequency range making this filter easier to integrate into receiver and transmitter RF chains with less concerns for in band frequency ripple.
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.

Notes
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Connectors	Model
SMA-M\F	ZABP-45-S+

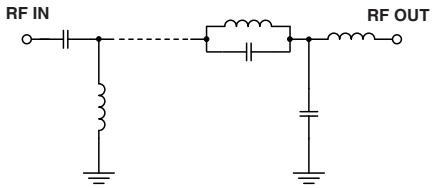
Features

- High rejection
- Good VSWR, 1.3:1 typical@ passband
- Connectorized package

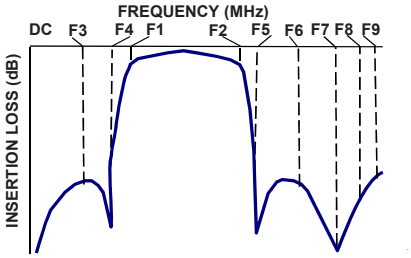
Applications

- Military communications
- Receivers / Transmitters
- Harmonic rejection
- Test equipment

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

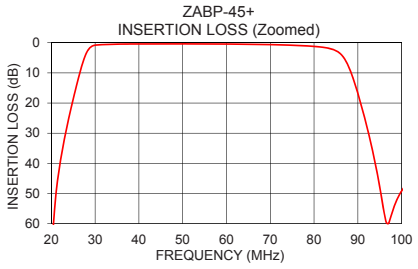
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	45	-	MHz
	Insertion Loss	F1-F2	30 - 70	-	0.8	1.5	dB
	VSWR	F1-F2	30 - 70	-	1.3	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 21	40	49	-	dB
		F3-F4	21 - 23	20	31	-	dB
	VSWR	DC-F4	DC - 23	-	20	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	95 - 120	20	42	-	dB
		F6-F7	120 - 1000	40	48	-	dB
		F7-F8	1000 - 2500	45	55	-	dB
		F8-F9	2500 - 4000	-	35	-	dB
	VSWR	F5-F9	95 - 4000	-	20	-	:1

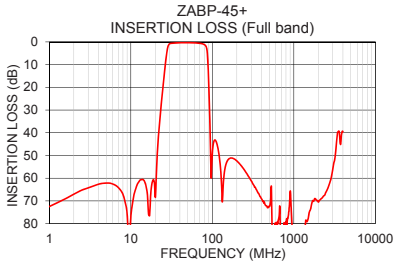
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.

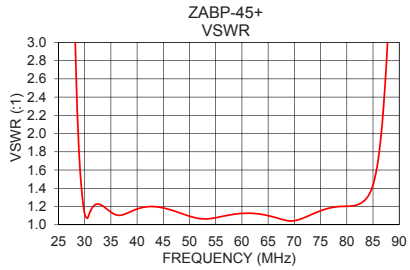
Permanent damage may occur if any of these limits are exceeded.

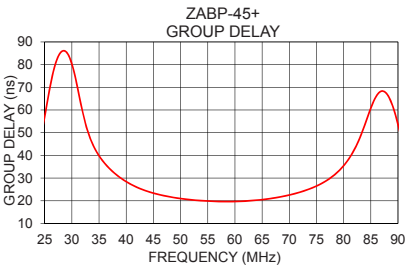
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1	72.45	24654.81	30	80.35
10	77.07	626.40	32	58.84
21	50.93	81.67	34	44.03
23	31.81	54.92	36	36.59
24	24.91	42.71	38	31.83
26	12.77	17.95	40	28.41
28	3.42	3.56	42	25.92
30	0.81	1.12	44	24.09
45	0.38	1.19	45	23.36
70	0.62	1.04	48	21.73
80	1.20	1.20	50	20.99
86	3.62	1.72	52	20.42
90	16.78	6.19	54	20.02
91	21.90	7.82	56	19.76
93	33.47	11.05	58	19.65
95	47.83	14.15	60	19.68
120	48.94	31.66	62	19.88
1000	87.39	16.80	64	20.24
2500	65.86	5.61	66	20.80
4000	39.51	1.32	70	22.53









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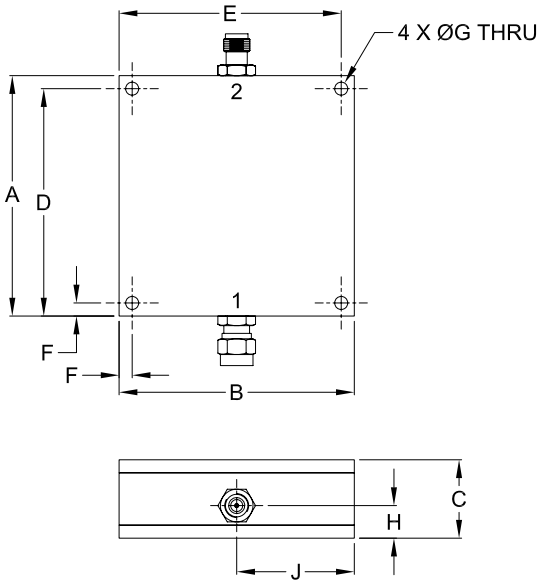
Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E
2.300	**2.250**	**.750**	**2.175**	**2.125**
58.42	57.15	19.05	55.25	53.98

F	G	H	J	wt.
.125	**.125**	**.312**	**1.125**	**grams**
3.18	3.18	7.93	28.58	124

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