

Coaxial Bandpass Filter

ZX75BP-B70-S+

50Ω 52 to 88 MHz



CASE STYLE: HY1239

The Big Deal

- Low insertion loss of typical 1dB
- Good Matching and good out of band rejection
- Connectorized package

Product Overview

ZX75BP-B70-S+ is a low loss bandpass filter in a rugged connectorized package covering 52 to 88 MHz. This offers lower pass band insertion loss and good rejection. It has repeatable performance across lots and consistent performance across temperature.

Key Features

Feature	Advantages
Low insertion loss	Lower insertion loss result in better SNR in receiver front end and better power delivery to antenna in transmitter.
Good matching and good out of band rejection	This filter has good matching, which enables maximum power transform and better out of band rejection results in wide spur free band.
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.

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



Bandpass Filter

ZX75BP-B70-S+

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CASE STYLE: HY1239
 Connectors Model
SMA-F ZX75BP-B70-S+

Features

- Low insertion loss of 1 dB typical
- Good matching and good out of band rejection.
- Connectorized package

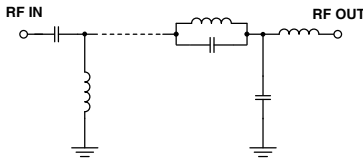
Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Center Frequency	-	-	70	-	MHz	
	Insertion Loss	F1-F2	52-88	1.0	1.6	dB	
	VSWR	F1-F2	52-88	-	1.24	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	1-11	50	60	dB	
		F3-F4	11-29	25	27	dB	
	VSWR	DC-F4	1 - 29	-	20	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	118-200	20	29	dB	
		F6-F7	200-2500	40	50	dB	
	VSWR	F7-F8	2500-4000	25	37	dB	
		F5-F8	118-4000	-	20	-	:1

Applications

- Wire-line broad band access
- IF signal processing
- Fixed satellite
- VHF Television

Functional Schematic



Maximum Ratings

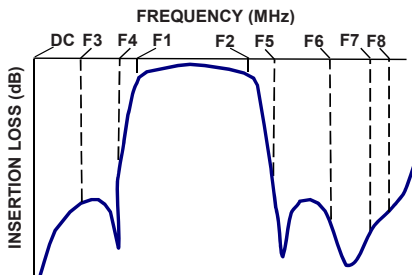
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1 W Max.

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

Typical Performance Data at 25°C

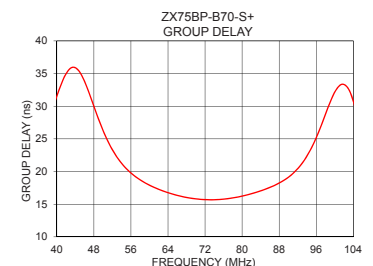
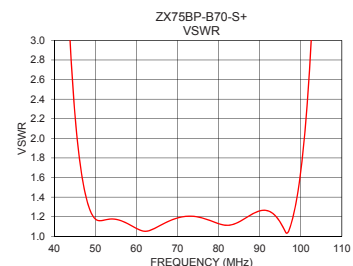
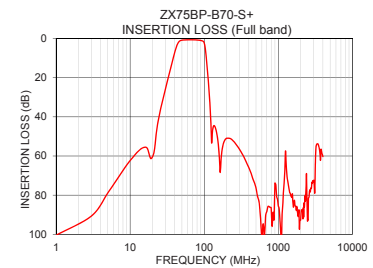
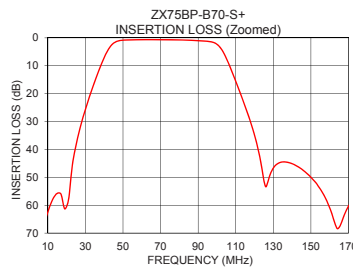
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	100.51	98591.26	52.0	23.32
11	60.48	2753.10	54.0	21.25
27	32.73	167.96	56.0	19.78
29	27.84	126.10	58.0	18.72
31	23.46	88.40	60.0	17.91
33	19.41	60.24	62.0	17.28
38	10.23	17.33	64.0	16.76
43	3.32	3.77	66.0	16.35
52	0.76	1.16	68.0	16.03
70	0.67	1.19	70.0	15.82
88	0.93	1.22	72.0	15.70
102	3.68	2.62	74.0	15.69
105	7.33	5.47	76.0	15.78
110	15.57	13.02	78.0	15.97
113	20.87	17.14	80.0	16.25
118	30.42	22.05	82.0	16.61
200	50.95	37.08	84.0	17.04
1500	80.79	47.35	86.0	17.57
2500	92.52	20.01	87.0	17.87
4000	60.26	16.31	88.0	18.24

Typical Frequency Response



+RoHS Compliant

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



Notes

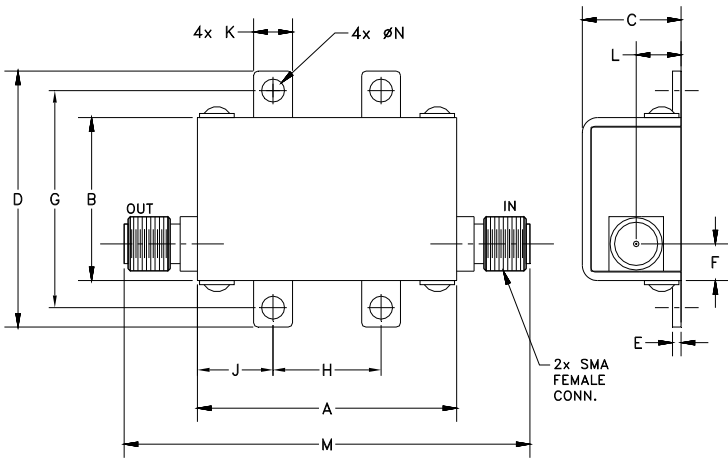
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Coaxial Connections

INPUT	SMA-FEMALE
OUTPUT	SMA-FEMALE

Outline Drawing



Outline Dimensions ($\frac{\text{inch}}{\text{mm}}$)

A	B	C	D	E	F	G
1.20	.75	.46	1.18	.04	.17	1.00
30.48	19.05	11.68	29.97	1.02	4.32	25.40
H	J	K	L	M	N	Wt.
.50	.35	.18	.21	1.88	.106	grams
12.70	8.89	4.57	5.28	47.75	2.69	35.0

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