

# Coaxial Bandpass Filter

## ZX75BP-204-S+

50Ω 175 to 237 MHz



Generic photo used for illustration purposes only  
CASE STYLE: KE1467

### The Big Deal

- High rejection
- Fast roll-off
- Connectorized package

### Product Overview

ZX75BP-204-S+ is a 50Ω bandpass filter in a connectorized package covering 175 to 237 MHz. This offers good matching within the passband and high rejection in stopband. This will find its applications in transmitters and receivers to suppress spurious emission and harmonics.

### Key Features

Feature	Advantages
High rejection	Attenuates unwanted spurious and harmonics
Fast roll-off	Provides high selectivity
Connectorized package	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](http://www.minicircuits.com/MCLStore/terms.jsp)



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### Features

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### Applications

- TV Broadcasting
- Digital audio broadcasting
- Military radio

### Electrical Specifications at 25°C

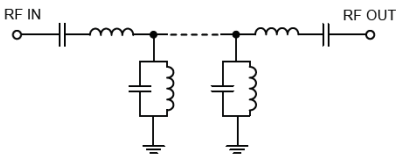
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	F1-F2	175-237	—	2.0	3.2	dB
	VSWR	F1-F2	175-237	—	1.4	2.1	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 90	55	60	—	dB
	VSWR	F3-F4	90-135	20	—	—	dB
		DC-F4	DC - 135	—	20	—	:1
Stop Band, Upper	Insertion Loss	F5-F6	300-360	25	—	—	dB
		F6-F7	360-600	40	—	—	dB
	F7-F8	600-1400	60	—	—	dB	
	F8-F9	1400-2500	40	—	—	dB	
	F9-F10	2500-3500	30	—	—	dB	
	VSWR	F5-F10	300-3500	—	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. @ 25°C

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

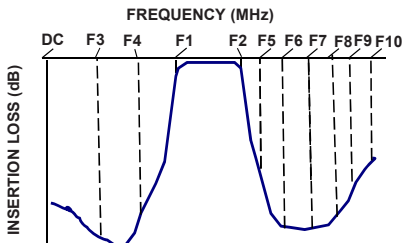
### Functional Schematic



### Typical Performance Data at 25°C

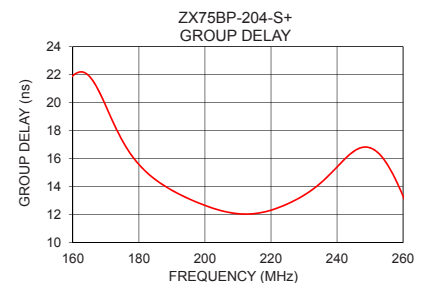
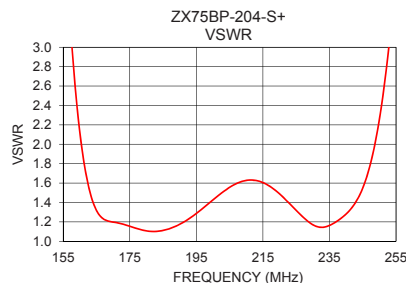
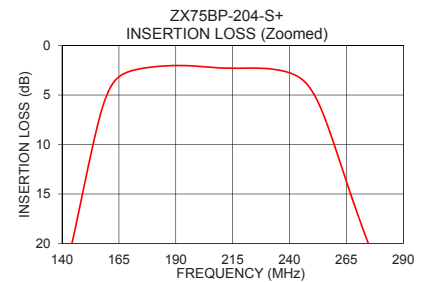
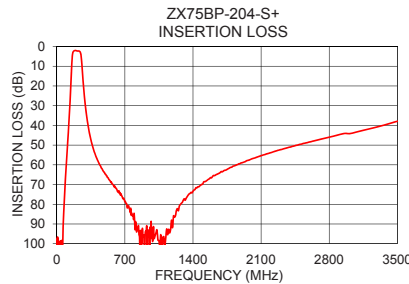
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	101.23	12773.37	175	17.28
90	66.60	270.25	177	16.50
130	33.98	46.09	179	15.86
135	29.38	34.10	181	15.33
145	19.32	15.84	183	14.88
165	3.15	1.32	185	14.50
175	2.32	1.16	187	14.17
204	2.17	1.53	189	13.87
237	2.56	1.20	191	13.61
275	20.23	16.87	204	12.35
295	30.43	31.24	205	12.28
300	32.51	34.77	207	12.17
360	49.08	70.27	209	12.09
600	71.53	113.54	215	12.07
1400	73.44	64.30	217	12.14
2500	49.61	42.15	219	12.25
3100	43.13	39.12	225	12.77
3300	40.71	38.14	227	12.99
3400	39.36	37.10	235	14.25
3500	37.95	34.07	237	14.68

### Typical Frequency Response



### +RoHS Compliant

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



### Notes

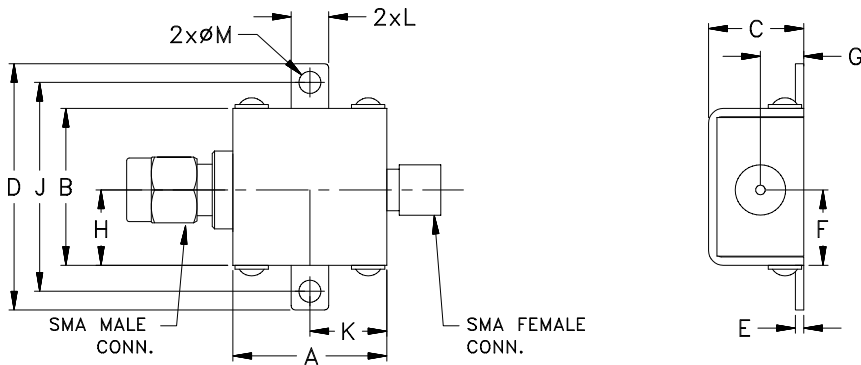
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## Pad Connections

PORT - 1	SMA-MALE
PORT - 2	SMA-FEMALE

## Outline Drawing



## Outline Dimensions ( inch / mm )

A	B	C	D	E	F	G
.74	.75	.46	1.18	.04	.362	.21
18.80	19.05	11.68	29.97	1.02	9.19	5.33
H	J	K	L	M	Wt.	
.362	1.00	.37	.18	.11	grams	
9.19	25.40	9.40	4.57	2.79	24.4	

**Note:** Please refer case style drawing for details.

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