

# Coaxial Bandpass Filter

## ZX75BP-1500+

50Ω 1350 to 1650 MHz



CASE STYLE: KE1467

### The Big Deal

- Fast roll-off on the upper sideband
- Good Matching and low loss in the pass band
- Connectorized package

### Product Overview

ZX75BP-1500+ is a wideband bandpass filter in a rugged connectorized package covering 1350 to 1650 MHz. This is designed for asymmetric rejection applications such as super-heterodyne receivers. By having asymmetric band, faster roll-off at upper side band is achieved in a comparatively smaller package and lower pass band insertion loss. It has repeatable performance across lots and consistent performance across temperature

### Key Features

Feature	Advantages
Fast roll-off on the upper side band	Wide bandwidth filter with fast-roll off on the upper side band, which increases selectivity on the adjacent channel.
Good matching and low loss in pass band	This filter has good matching and low loss in the pass band
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.
High power handling	This model uses high Q capacitors and high current handling inductors which is well suited for high power applications.

#### 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.  
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### Features

- Fast roll-off on the upper side band
- Good matching in the pass band
- Connectorized package

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Connectors	Model	Price	Qty.
SMA-MF	ZX75BP-1500-S+	\$59.95 ea.	(1-9)

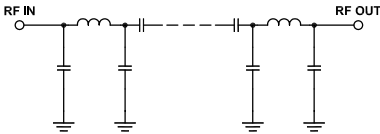
### Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Center Frequency	-	-	1500	-	MHz	
	Insertion Loss	F1-F2	1350-1650	-	0.7	2.0	dB
	VSWR	F1-F2	1350-1650	-	1.2	1.78	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 85	20	30	-	dB
	VSWR	DC-F3	DC - 85	-	20	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	2030-2800	20	29	-	dB
	VSWR	F4-F5	2030-2800	-	20	-	:1

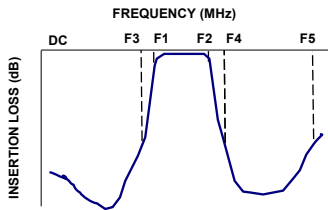
### Applications

- Aviation and Aeronautical
- Digital audio broadcasting
- Maritime
- Mobile satellite
- Radio astronomy
- Wireless medical telemetry

### Functional Schematic



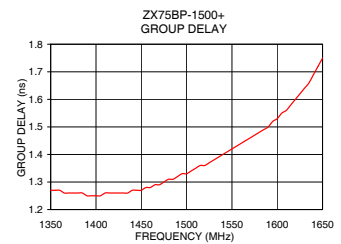
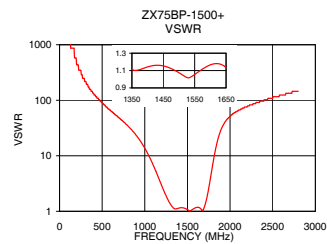
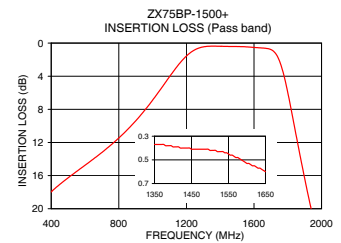
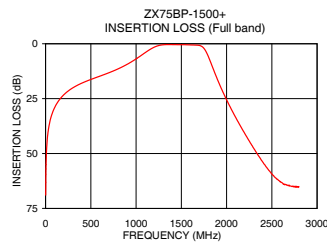
### Typical Frequency Response



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	68.96	1737.18	1350	1.27
5	55.03	1737.18	1380	1.26
85	30.47	1737.18	1400	1.25
290	20.37	248.17	1420	1.26
500	16.27	91.43	1440	1.27
975	7.56	15.81	150	0.66
1120	3.51	5.72	1460	1.28
1200	1.57	2.86	1480	1.31
1350	0.37	1.11	1490	1.32
1500	0.42	1.07	1500	1.33
1650	0.60	1.13	1520	1.36
1770	3.36	3.92	1530	1.38
1810	6.98	9.08	1540	1.40
1880	14.32	25.56	1560	1.44
1940	20.20	40.41	1580	1.48
2030	28.02	56.04	1600	1.53
2065	30.83	62.05	1610	1.56
2200	40.82	75.53	1620	1.60
2550	61.35	115.81	1630	1.64
2800	65.21	144.77	1650	1.75

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



**Notes**

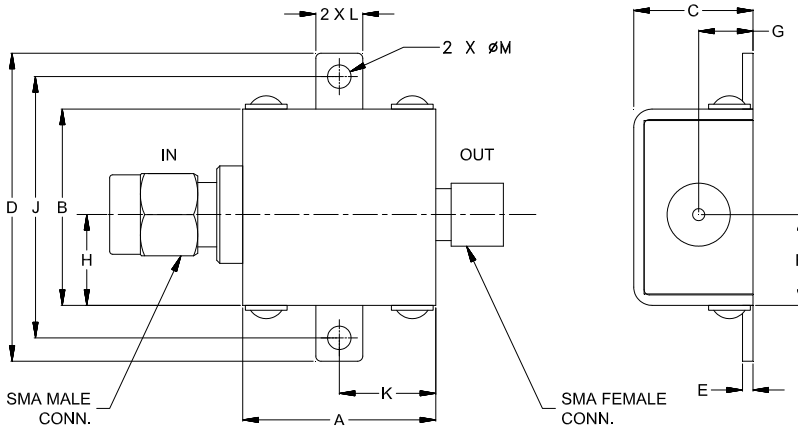
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## Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

## Outline Drawing



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

A	B	C	D	E	F	G
.74	.75	.46	1.18	.04	.349	.21
18.80	19.05	11.68	29.97	1.02	8.86	5.33
H	J	K	L	M	Wt.	
.349	1.00	.37	.18	.09	grams	
8.86	25.40	9.40	4.57	2.29	24.4	

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