

Coaxial Bandpass Filter

ZX75BP-1500-S+

50Ω 1350 to 1650 MHz

The Big Deal

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



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CASE STYLE: KE1467

Product Overview

ZX75BP-1500-S+ 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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Bandpass Filter

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Connectors	Model
SMA-MF	ZX75BP-1500-S+

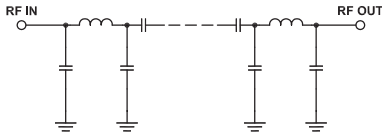
Features

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

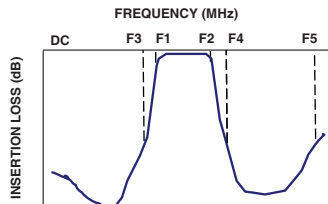
Applications

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

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	-	-	1500	-	MHz
	Insertion Loss	F1-F2	-	0.7	2.0	dB
	VSWR	F1-F2	-	1.2	1.78	:1
Stop Band, Lower	Insertion Loss	DC-F3	20	30	-	dB
	VSWR	DC-F3	-	20	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	20	29	-	dB
	VSWR	F4-F5	-	20	-	:1

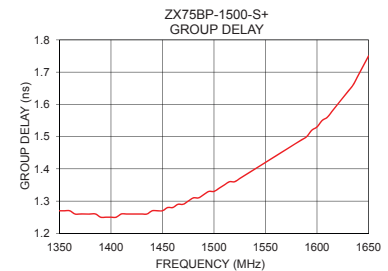
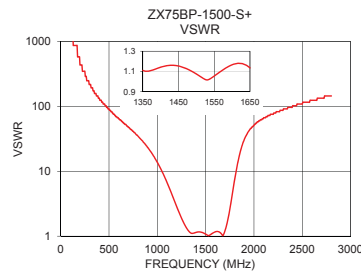
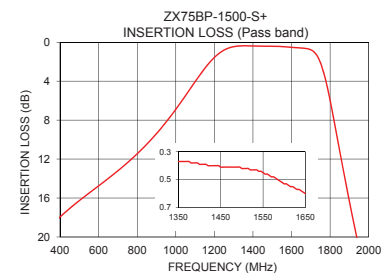
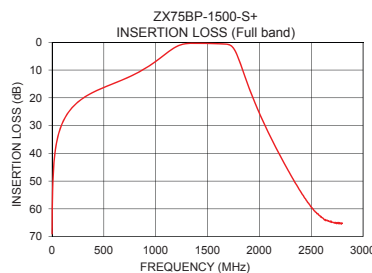
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	6.3 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	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
2500	61.35	115.81	1630	1.64
2800	65.21	144.77	1650	1.75



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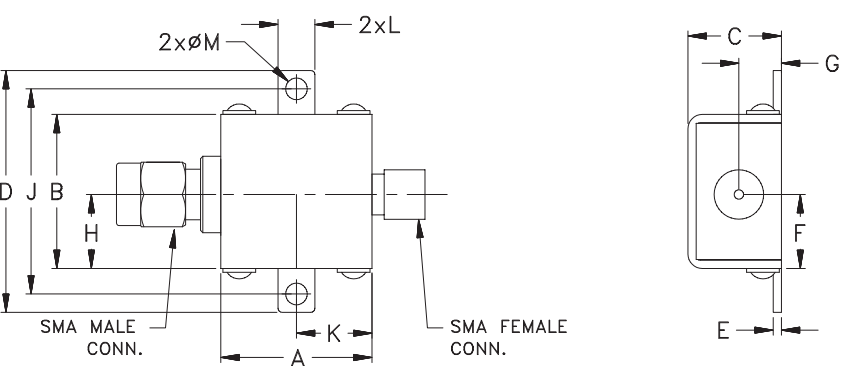
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Coaxial Connections

INPUT	SMA-MALE
OUTPUT	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 to case style drawing for details

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