

Coaxial

Bandpass Filter

ZX75BP-1135-S+

50Ω 900 to 1370 MHz

The Big Deal

- Low insertion loss of typical 0.6 dB
- Good matching and good out of band rejection
- Connectorized package
- High power handling, 10 W



Generic photo used for illustration purposes only
CASE STYLE: HY1239

Product Overview

ZX75BP-1135-S+ is a low loss band pass filter in a rugged connectorized package covering 900-1370 MHz. The high power handling capability of this filter finds it application in high power transmitters. The filter also offers lower passband insertion loss and good stopband rejection until 5600 MHz. In addition, 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

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- 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

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- Good matching and good out of band rejection
- Connectorized package

CASE STYLE: HY1239
Connectors Model
SMA-FF ZX75BP-1135-S+

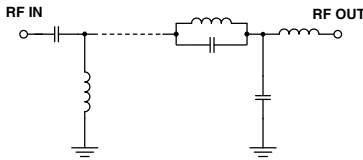
Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	1135	-	MHz
	Insertion Loss	F1-F2	900 - 1370	0.6	1.2	dB
	VSWR	F1-F2	900 - 1370	1.35	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 500	40	45	dB
	VSWR	DC-F3	DC - 500	-	28	:1
Stop Band, Upper	Insertion Loss	F4-F5	2000 - 2800	40	50	dB
	VSWR	F5-F6	2800 - 5600	-	40	dB
	VSWR	F4-F6	2000 - 5600	-	28	:1

Applications

- Defence / Military
- L-Band applications
- Radio astronomy
- Wireless medical telemetry

Functional Schematic



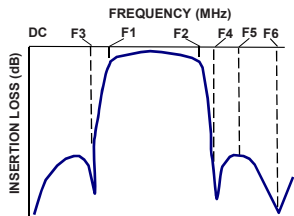
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	10 W max. @ 25°C

RF power derate linearly to 5 W @ 85°C
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

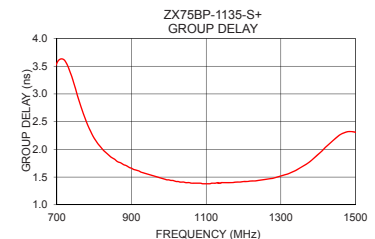
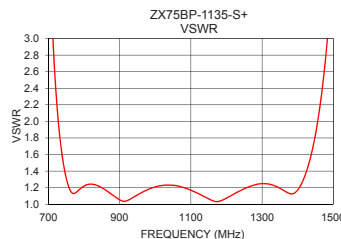
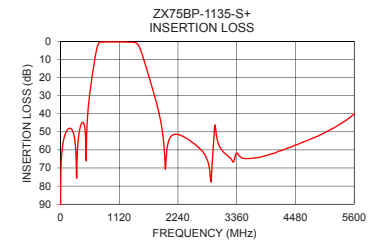
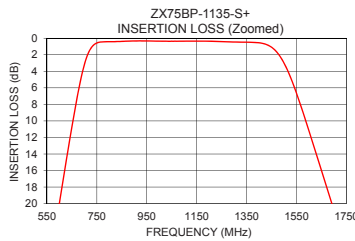
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	90.92	434.30	900	1.66
105	50.27	1737.18	930	1.58
380	47.04	347.44	960	1.52
500	50.91	157.93	990	1.46
550	30.79	115.81	1020	1.42
595	20.96	72.39	1050	1.40
700	3.19	4.43	1080	1.39
900	0.33	1.05	1110	1.38
1135	0.35	1.10	1135	1.39
1370	0.50	1.14	1170	1.40
1500	3.02	3.94	1200	1.42
1700	20.85	30.49	1230	1.43
1800	30.82	37.77	1260	1.46
2000	70.72	52.65	1290	1.50
2500	55.52	78.97	1320	1.56
2800	65.71	69.49	1330	1.59
3000	55.68	59.91	1340	1.62
4000	62.36	45.72	1350	1.66
5000	51.08	38.61	1360	1.70
5600	40.11	44.55	1370	1.74

Typical Frequency Response



+RoHS Compliant

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



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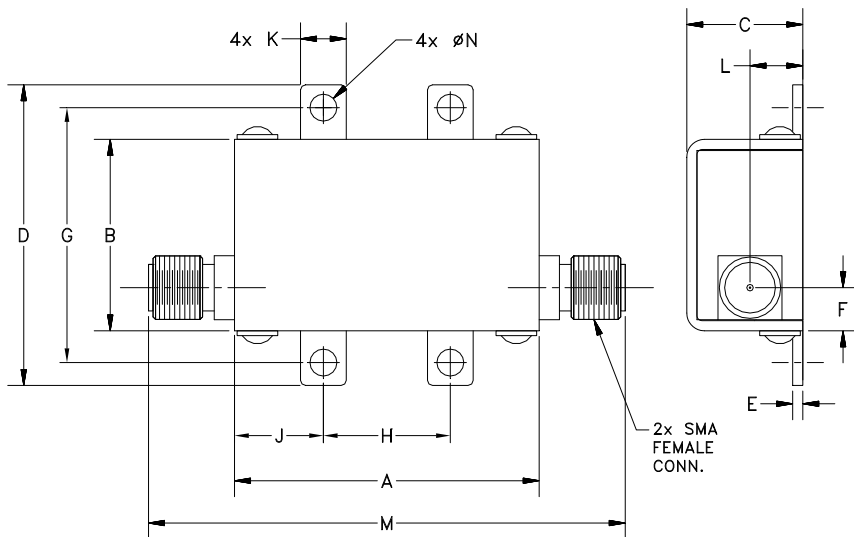
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Coaxial Connections

PORT - 1	SMA-FEMALE
PORT - 2	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

Note: Please refer to case style drawing for details

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