

# Coaxial Bandpass Filter

## ZX75-12+

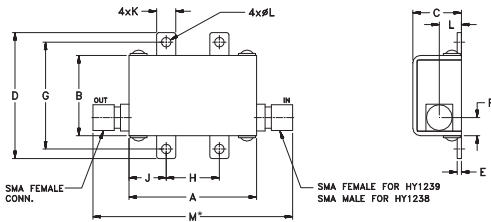
50Ω 9 to 15 MHz

### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.25 W at 25°C

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

### Outline Drawing (HY1239)



### Outline Dimensions (inch/mm)

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

**Note:**

\* M dimension is 2.05 inch (52.07 mm) for HY1238 Case Style.

### Features

- High Rejection
- Sharp Insertion Loss roll off
- Shielded case

### Applications

- High rejection applications
- Image rejection
- IF signal processing
- Receivers / Transmitters
- Test Lab



MALE FEMALE SMA shown

SMA Connectors	Model	Case
INPUT FEMALE	OUTPUT FEMALE	ZX75-12-S+ HY1239
MALE	FEMALE	ZX75-12M-S+ HY1238

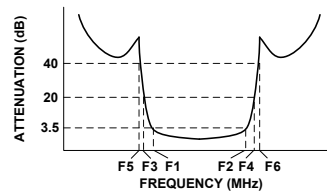
### +RoHS Compliant

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

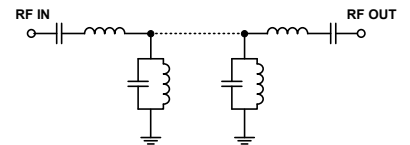
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3.5dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 40dB		Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
12	9 - 15	7.5	18	7	20 - 3000	1.5	2.2	30

### Typical Frequency Response

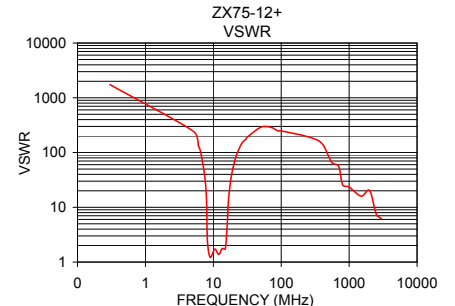
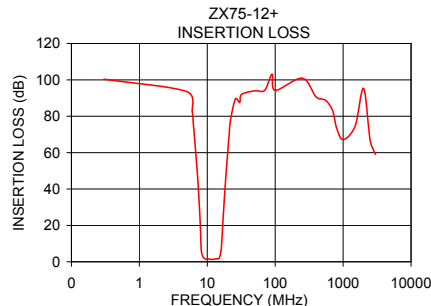


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.3	100.39	1737.18
7.0	53.30	62.05
7.5	36.73	35.46
8.0	14.55	9.74
8.2	5.51	2.37
8.5	3.45	2.36
9.0	1.85	1.22
11.0	1.31	1.40
12.0	1.26	1.37
13.0	1.59	1.77
15.0	2.09	1.75
15.7	4.10	2.81
16.0	6.58	4.66
16.6	15.51	11.77
18.0	37.07	30.49
20.0	60.12	59.91
100.0	94.22	248.17
1000.0	67.12	23.49
3000.0	59.03	6.19



**Notes**

- 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.
- 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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