

Coaxial Low Pass Filter

ZX75LP-105+

50Ω DC to 105 MHz

The Big Deal

- High rejection
- Low Insertion loss, 1.3 dB typical in passband
- Fast roll-off
- Good VSWR
- Connectorized package



CASE STYLE: KE1467

Product Overview

ZX75LP-105+ is a 50Ω low pass filter built in a connectorized package. Covering DC-105 MHz bandwidth, these units offer good matching within the passband and high rejection in stopband. This will find its applications in receivers and transmitters to suppress spurious emission. This can also be used in wide-band down converters and baseband circuitry. It has repeatable performance across production lots and consistent performance across temperature.

Key Features

Feature	Advantages
Low passband insertion loss	Suitable for high performance application
Fast roll-off	Provides very good adjacent band rejection
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups
Good VSWR	Provides good interface when used with other devices.

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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Connectors SMA-MF Model ZX75LP-105-S+

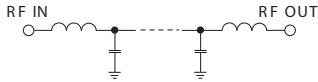
Features

- High rejection
- Low Insertion loss
- Fast roll-off
- Good VSWR
- Connectorized package

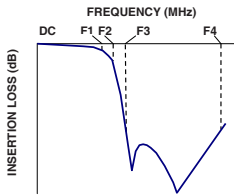
Applications

- Baseband
- Harmonic rejection
- Wideband down converter
- Satellite
- Wireless communications
- Receivers / Transmitters

Functional Schematic



Typical Frequency Response



Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC -105	—	1.3	2.0	dB
	Freq. Cut-Off	F2	115	—	3.0	—	dB
	VSWR	DC-F1	DC -105	—	1.2	1.6	:1
Stop Band	Rejection Loss	F3-F4	150 -1000	20	33	—	dB
	VSWR	F3-F4	150 -1000	—	26	—	:1

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

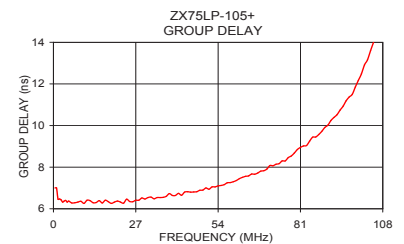
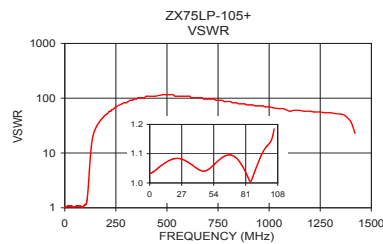
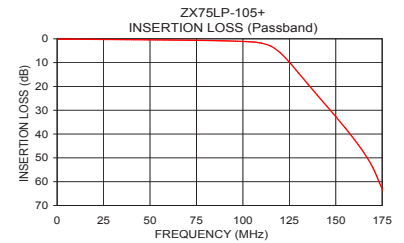
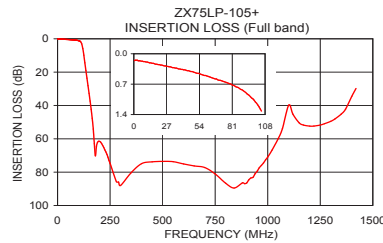
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.15	1.03	1	7.00
20	0.25	1.08	10	6.26
74	0.64	1.08	20	6.32
105	1.32	1.18	30	6.47
115	3.07	2.38	40	6.64
120	5.80	4.56	50	7.00
125	9.83	8.51	55	7.12
130	14.39	13.39	60	7.36
140	23.61	21.73	65	7.67
150	32.69	27.59	70	7.91
180	70.23	41.37	75	8.30
200	61.56	49.64	80	8.85
250	74.74	69.49	93	10.52
300	88.00	82.73	85	9.44
400	74.90	108.58	90	10.02
500	73.56	115.81	95	10.93
600	75.10	108.58	98	11.50
700	77.23	96.51	100	12.17
800	86.64	86.86	102	12.91
1000	70.95	69.49	105	14.01

+RoHS Compliant

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



Notes

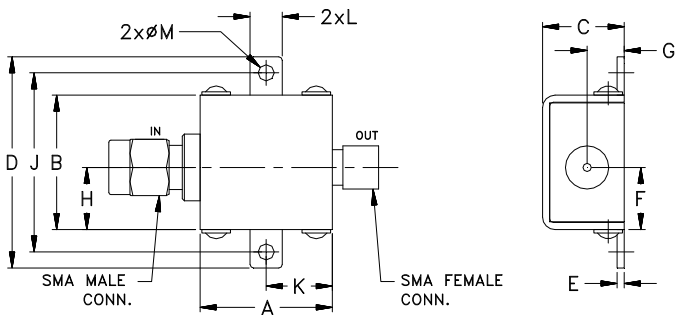
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Coaxial Connections

INPUT	SMA-Male
OUTPUT	SMA-Female

Outline Drawing



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

A	B	C	D	E	F	G
0.74	.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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