

Coaxial Low Pass Filter

ZX75LP-120-S+

50Ω

DC to 120 MHz

The Big Deal

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



Generic photo used for illustration purposes only

CASE STYLE: KE1467

Product Overview

ZX75LP-120-S+ is a 50Ω low pass filter built in connectorized package. Covering DC-120 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 and harmonics. 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	Model
SMA-MF	ZX75LP-120-S+

Features

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

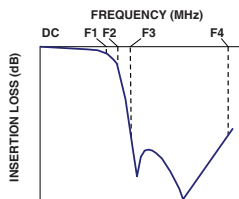
Applications

- 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-120	—	1.3	2.2 dB
	Freq. Cut-Off	F2	130	—	3.0	dB
	VSWR	DC-F1	DC-120	—	1.2	1.5 :1
Stop Band	Rejection Loss	F3-F4	175-2000	20	31	dB
	VSWR	F3-F4	175-2000	—	25	— :1

Maximum Ratings

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

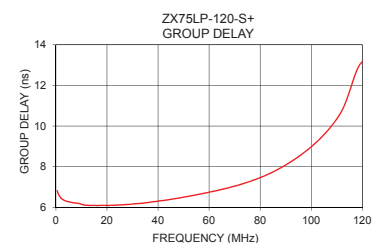
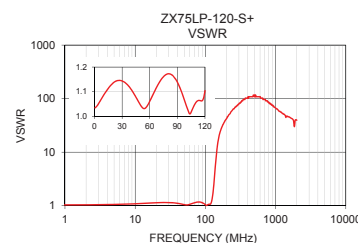
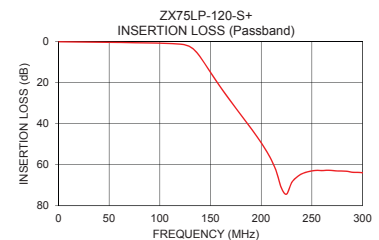
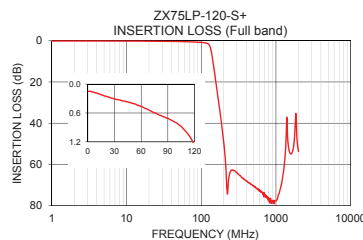
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.15	1.04	1	6.64
10	0.19	1.08	10	6.15
60	0.46	1.06	20	6.09
120	1.28	1.07	30	6.16
130	2.60	2.02	40	6.30
135	4.57	3.55	50	6.50
140	7.62	6.42	60	6.74
145	11.26	10.50	65	6.88
155	18.74	19.54	70	7.04
165	25.80	27.16	75	7.23
175	32.48	33.42	80	7.46
190	42.31	41.37	85	7.74
250	63.02	66.82	95	8.49
500	70.44	124.09	90	8.08
750	75.37	115.81	100	8.98
1000	77.70	102.19	105	9.58
1100	74.25	96.51	110	10.35
1200	68.64	91.43	115	11.70
1500	53.31	78.97	117	12.46
2000	53.68	69.49	120	13.17

+RoHS Compliant

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



Notes

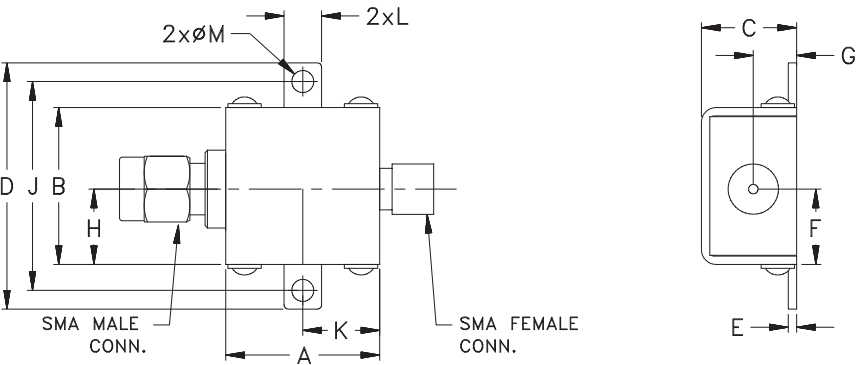
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Coaxial Connections

INPUT	SMA-Male
OUTPUT	SMA-Female

Outline Drawing



Outline Dimensions (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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