

Coaxial Low Pass Filter

ZX75LP-1050-S+

50Ω 50 to 1050 MHz

The Big Deal

- Excellent passband flatness, 0.4 dB typ.
- Fast roll-off, high rejection
- Good VSWR
- Connectorized package



CASE STYLE: HY1238

Product Overview

ZX75LP-1050-S+ is a 50Ω low pass filter built in connectorized package which is easy to interface with other devices and well suited for test setups. Covering 50-1050 MHz bandwidth, this filter is designed to have an excellent flatness in the passband to ensure amplitude variation is low. Apart from the high rejection in stopband, these units offer good return loss which makes signal transmission with less reflection and well-matched with the adjacent component used in the setup.

Key Features

Feature	Advantages
Excellent passband flatness	Flat passband ensures low amplitude variation
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.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



Low Pass Filter

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Connectors SMA-M/F Model ZX75LP-1050-S+

Features

- Excellent passband flatness, 0.4 dB typ.
- Fast roll-off, High rejection
- Good VSWR
- Connectorized package

Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	F1-F2	—	1.7	2.2	dB
	Flatness	F1-F2	—	0.4	0.7	dB
	VSWR	F1-F2	—	1.3	1.8	:1
Stop Band	Insertion Loss	F3-F4	43	50	—	dB

Applications

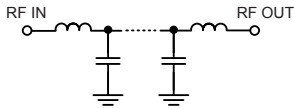
- Satellite
- Mobile satellite
- Receivers / Transmitters
- Amplitude sensitive measurements & applications

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1W max.

Permanent damage may occur if one or combination of these limits are exceeded.

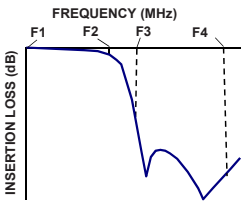
Functional Schematic



Typical Performance Data at 25°C

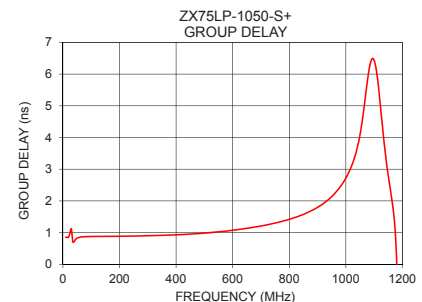
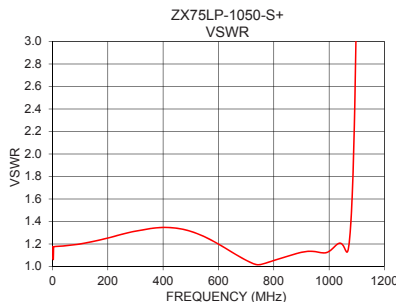
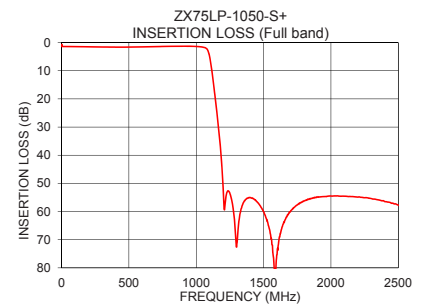
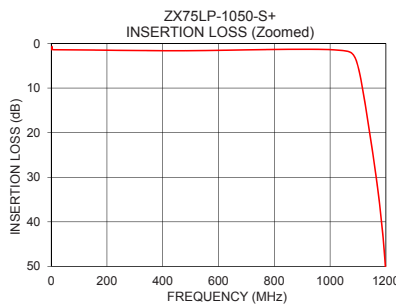
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
10	1.39	1.18	50	0.83
50	1.41	1.18	100	0.88
100	1.44	1.20	150	0.88
500	1.61	1.31	200	0.88
1000	1.38	1.13	250	0.89
1050	1.62	1.19	300	0.90
1090	3.26	2.13	350	0.91
1122	12.19	10.59	400	0.93
1142	20.07	19.15	450	0.95
1166	30.40	27.52	500	0.98
1200	51.90	36.21	550	1.02
1300	72.59	54.14	600	1.07
1400	55.05	67.46	700	1.21
1500	60.07	77.15	800	1.42
1600	75.30	86.72	850	1.58
1700	60.03	95.65	900	1.80
1800	56.27	102.86	950	2.13
2000	54.50	116.85	1000	2.72
2250	55.08	123.60	1030	3.34
2500	57.73	127.44	1050	4.08

Typical Frequency Response



+RoHS Compliant

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



Notes

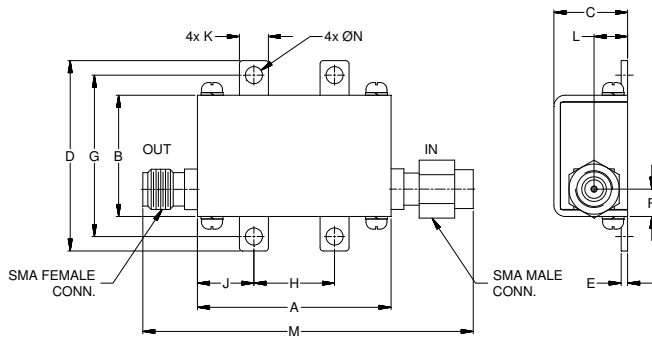
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Coaxial Connections

INPUT	SMA-Male
OUTPUT	SMA-Female

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
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	2.05	.106	grams
12.70	8.89	4.57	5.28	52.07	2.69	35.0

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