Coaxial

Low Pass Filter

ZX75LP-70-S+

50Ω DC to 70 MHz

CASE STYLE: KE1467

The Big Deal

- High rejection
- Low Insertion loss, 1.5 dB typical in passband
- Fast roll-off
- Good VSWR
- Connectorized package

Product Overview

ZX75LP-70-S+ is a 50Ω low pass filter built in a connectorized package. Covering DC-70 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.

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Connectors	Model
SMA-M\F	ZX75LP-70-S+

Features

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

Applications

- Satellite
- Wireless communications
- Receivers / Transmitters

Electrical Specifications at 25°C

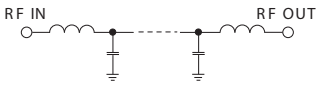
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-70	—	1.5	2.2	dB
	Freq. Cut-Off	F2	78	—	3.0	—	dB
	VSWR	DC-F1	DC-70	—	1.2	1.6	:1
Stop Band	Rejection Loss	F3-F4	105-4000	20	35	—	dB
	VSWR	F3-F4	105-4000	—	20	—	:1

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.

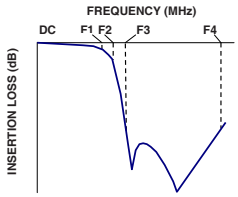
Functional Schematic



Typical Performance Data at 25°C

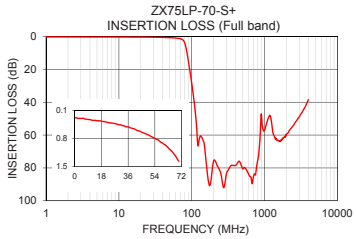
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.28	1.07	1	8.87
30	0.46	1.09	5	8.91
50	0.72	1.05	10	8.88
70	1.36	1.06	15	8.89
78	2.84	1.89	18	8.97
80	3.90	2.57	20	9.09
85	8.63	6.13	22	9.14
90	15.05	11.61	25	9.29
95	21.77	16.72	30	9.57
100	28.48	20.95	35	9.88
105	35.43	24.14	40	10.29
200	75.62	69.49	45	10.81
250	83.16	91.43	50	11.49
500	80.48	144.77	55	12.35
750	84.20	133.63	60	13.63
1000	57.24	115.81	62	14.24
1500	63.00	91.43	64	14.96
2000	59.48	75.53	66	15.77
3000	48.86	62.05	68	16.75
4000	38.49	36.97	70	17.99

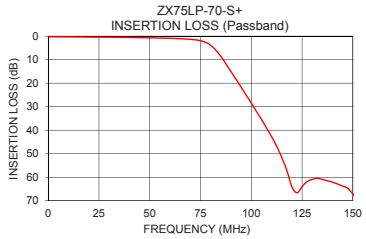
Typical Frequency Response

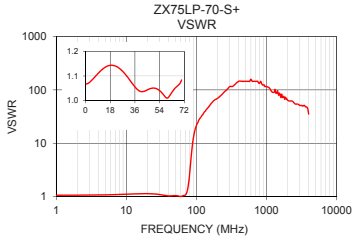


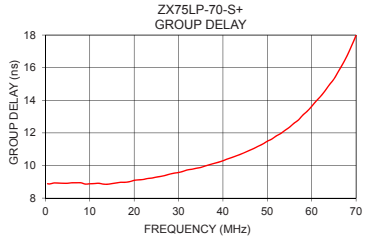
+RoHS Compliant

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





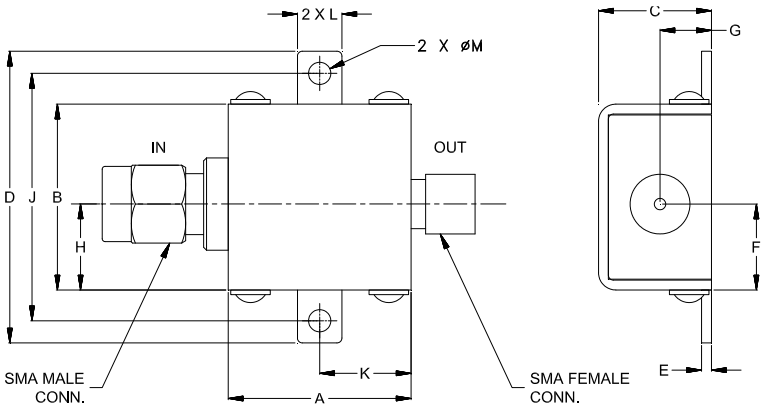




Coaxial Connections

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**	**.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