Coaxial

Low Pass Filter

ZX75LP-30-S+

50Ω DC to 30 MHz

Generic photo used for illustration purposes only
CASE STYLE: KE1467

The Big Deal

- High rejection
- Low Insertion loss, 1 dB typical in passband
- Fast roll-off
- Good VSWR
- Connectorized package

Product Overview

ZX75LP-30-S+ is a 50Ω low pass filter built in a connectorized package. Covering DC-30 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-30-S+

Features

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

Applications

- Satellite
- Wireless communications
- Receivers / Transmitters

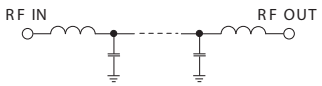
Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-30	—	1.0	2.0	dB
	Freq. Cut-Off	F2	38	—	3.0	—	dB
	VSWR	DC-F1	DC-30	—	1.3	1.7	:1
Stop Band	Rejection Loss	F3-F4	48-3000	20	31	—	dB
	VSWR	F3-F4	48-3000	—	14	—	:1

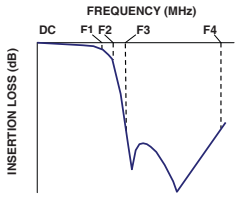
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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

Functional Schematic



Typical Frequency Response

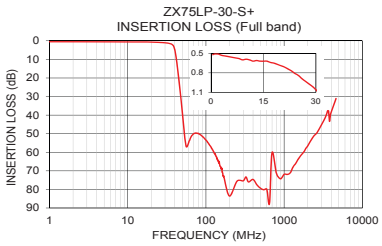


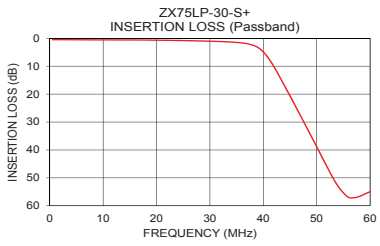
Typical Performance Data at 25°C

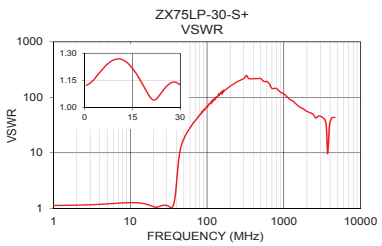
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.51	1.13	1	16.60
5	0.55	1.20	2	16.64
10	0.59	1.27	3	16.67
25	0.84	1.10	4	16.72
30	1.06	1.12	5	16.78
38	2.44	1.46	6	16.85
41	7.20	4.17	8	17.06
44	17.07	9.90	10	17.27
48	31.49	15.67	12	17.60
50	38.85	17.93	14	18.04
100	53.49	69.49	16	18.62
150	66.66	115.81	18	19.30
200	83.58	157.93	20	20.14
250	75.54	193.02	22	21.20
500	79.41	217.15	24	22.59
1000	71.86	115.81	26	24.28
1500	63.96	72.39	27	25.32
2000	56.62	56.04	28	26.53
2600	49.77	42.38	29	27.97
3000	45.21	45.72	30	29.72

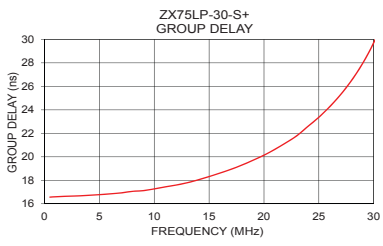
+RoHS Compliant

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









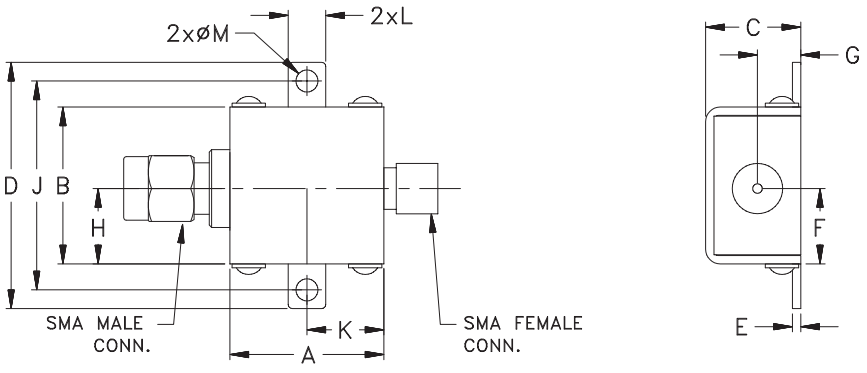
Notes

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

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