# Coaxial **.ow Pass Filter**

50Ω DC to 30 MHz

## **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.



ZX75LP-30-S+

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# Coaxial **Low Pass Filter**

50Ω DC to 30 MHz

#### **Features**

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

### **Applications**

Satellite

**RFIN** 

INSERTION LOSS (dB)

- Wireless communications
- Receivers / Transmitters

**Functional Schematic** 

**Typical Frequency Response** 

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

FREQUENCY (MHz)

RF OUT

# ZX75LP-30-S+



CASE STYLE: KE1467 Model Connectors SMA-M\F ZX75LP-30-S+

#### Electrical Specifications at 25°C

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

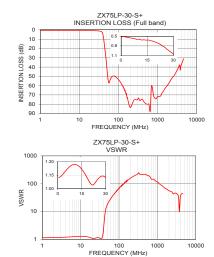
### Typical Performance Data at 25°C

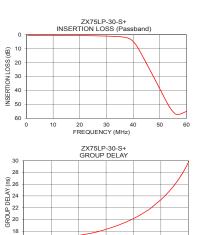
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.51	1.13	1	16.60
5	0.55	1.20	2	16.64
10	0.59	1.27	3	16.67
25	0.84	1.10	4	16.72
30	1.06	1.12	5	16.78
38	2.44	1.46	6	16.85
41	7.20	4.17	8	17.06
44	17.07	9.90	10	17.27
48	31.49	15.67	12	17.60
50	38.85	17.93	14	18.04
100	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

16

0

5





15

FREQUENCY (MHz)

25

30

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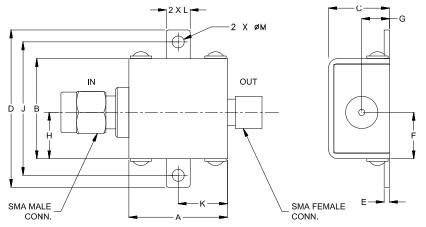
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#### **Coaxial Connections**

	SMA-Male
OUTPUT SMA-Female	/A-Female

#### **Outline Drawing**



### Outline Dimensions ( inch )

Α	В	С	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	
н	J	K	L	M		Wt.	
.349	1.00	.37	.18	.09		grams	
8.86	25.40	9.40	4.57	2.29		24.4	

Notes
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