*Coaxial*

# Low Pass Filter

## ZX75LP-320+

50Ω DC to 320 MHz

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-320+ is a 50Ω low pass filter built in a connectorized package. Covering DC-320 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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## ZX75LP-320+

50Ω DC to 320 MHz

CASE STYLE: KE1467

| Connectors | Model | Price | Qty. |
|---|---|---|---|
| **SMA-M\F** | ZX75LP-320-S+ | $49.95 ea. | (1-9) |

### Features

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

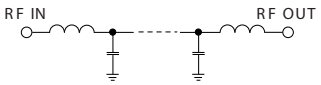
### Applications

- 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-320 | — | 1.0 | 2.0 | dB |
| | Freq. Cut-Off | F2 | 345 | — | 3.0 | — | dB |
| | VSWR | DC-F1 | DC-320 | — | 1.3 | 1.7 | :1 |
| **Stop Band** | Rejection Loss | F3-F4 | 445-1800 | 20 | 31 | — | dB |
| | VSWR | F3-F4 | 445-1800 | — | 40 | — | :1 |

### Functional Schematic



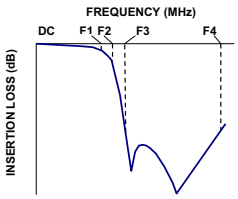

| Maximum Ratings | |
|---|---|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W max. |

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

### Typical Performance Data at 25°C

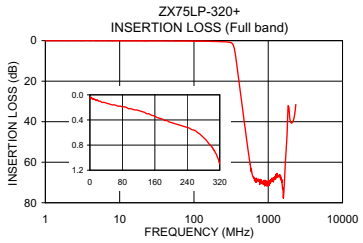
| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) | Frequency (MHz) | Group Delay (nsec) |
|---|---|---|---|---|
| 1 | 0.06 | 1.01 | 1 | 2.22 |
| 50 | 0.15 | 1.04 | 10 | 2.26 |
| 100 | 0.22 | 1.03 | 25 | 2.24 |
| 200 | 0.44 | 1.19 | 50 | 2.25 |
| 320 | 1.10 | 1.31 | 100 | 2.31 |
| 345 | 3.15 | 3.08 | 110 | 2.37 |
| 360 | 6.58 | 6.83 | 120 | 2.40 |
| 380 | 12.72 | 16.26 | 130 | 2.42 |
| 410 | 22.00 | 31.03 | 140 | 2.45 |
| 445 | 31.88 | 41.37 | 175 | 2.61 |
| 500 | 45.94 | 51.10 | 180 | 2.64 |
| 550 | 56.91 | 57.91 | 200 | 2.77 |
| 600 | 64.77 | 62.05 | 220 | 2.98 |
| 650 | 68.16 | 69.49 | 240 | 3.18 |
| 700 | 68.88 | 69.49 | 250 | 3.33 |
| 750 | 68.61 | 72.39 | 260 | 3.48 |
| 800 | 68.75 | 75.53 | 280 | 3.87 |
| 1000 | 69.25 | 75.53 | 300 | 4.46 |
| 1500 | 69.10 | 66.82 | 310 | 4.97 |
| 1800 | 44.70 | 49.64 | 320 | 5.60 |

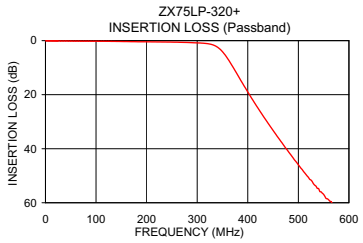
### Typical Frequency Response

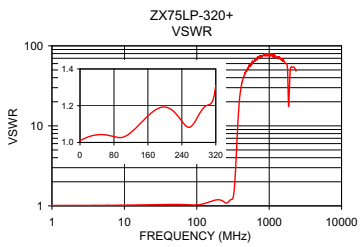


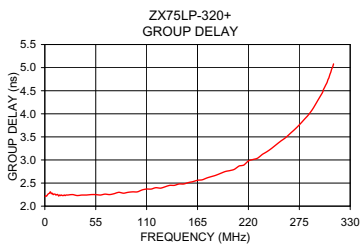

*+ RoHS compliant in accordance with EU Directive (2002/95/EC)*

*The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.*



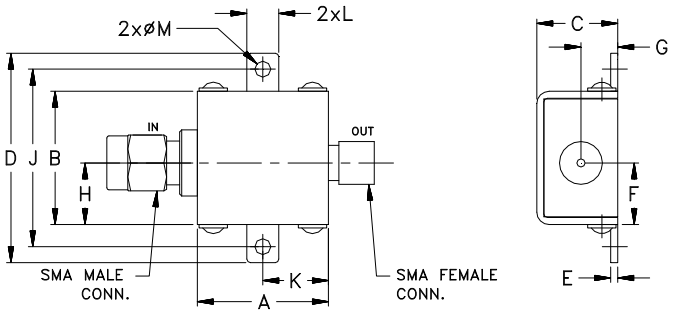




*For detailed performance specs & shopping online see web site*

## Coaxial Connections

| | |
|---|---|
| INPUT | SMA-Male |
| OUTPUT | SMA-Female |

## Outline Drawing




## Outline Dimensions ( inch / mm )

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| 0.74 | .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 |