Coaxial **.ow Pass Filter**

50Ω DC to 900 MHz

ZX75LP-900-S+

The Big Deal

- High rejection
- Low Insertion loss, 0.9 dB typical in passband
- Fast roll-off
- Good VSWR
- Connectorized package



Generic photo used for illustration purposes only CASE STYLE: KE1467

Product Overview

ZX75LP-900-S+ is a 50Ω low pass filter built in a connectorized package. Covering DC-900 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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Coaxial **Low Pass Filter**

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Features

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

Applications

- Satellite
- Wireless communications
- Receivers / Transmitters

ZX75LP-900-S+



Generic photo used for illustration purposes only

CASE STYLE: KE1467 Connectors Model ZX75LP-900-S+ SMA-M\F

Electrical Specifications at 25°C

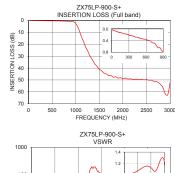
| | Parameter | | F# | Frequency (MHz) | Min. | Тур. | Max. | Unit |
|---|-----------|----------------|-------|-----------------|------|------|------|------|
| Γ | | Insertion Loss | DC-F1 | DC-900 | — | 0.9 | 2.0 | dB |
| | Pass Band | Freq. Cut-Off | F2 | 1000 | — | 3.0 | — | dB |
| | | VSWR | DC-F1 | DC-900 | _ | 1.3 | 1.8 | :1 |
| Γ | Stop Band | Rejection Loss | F3-F4 | 1300-2900 | 20 | 30 | _ | dB |
| | | VSWR | F3-F4 | 1300-2900 | _ | 16 | _ | :1 |

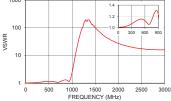
| Maximum Ratings | | | | |
|-----------------------|----------------|--|--|--|
| Operating Temperature | -40°C to 85°C | | | |
| Storage Temperature | -55°C to 100°C | | | |
| RF Power Input | 0.5W max. | | | |

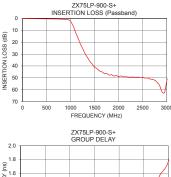
Permanent damage may occur if any of these limits are exceeded.

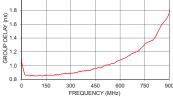
Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) | Frequency (MHz) | Group Delay (nsec) |
|--------------------|------------------------|--------------|--------------------|-----------------------|
| 1 | 0.02 | 1.01 | 1 | 1.05 |
| 20 | 0.04 | 1.01 | 10 | 0.96 |
| 80 | 0.08 | 1.01 | 25 | 0.86 |
| 200 | 0.16 | 1.03 | 60 | 0.86 |
| 490 | 0.32 | 1.15 | 140 | 0.86 |
| 810 | 0.64 | 1.26 | 220 | 0.87 |
| 900 | 0.81 | 1.24 | 285 | 0.88 |
| 930 | 0.91 | 1.13 | 350 | 0.91 |
| 950 | 1.06 | 1.22 | 425 | 0.94 |
| 980 | 1.62 | 1.73 | 500 | 0.99 |
| 1000 | 2.48 | 2.40 | 550 | 1.03 |
| 1200 | 21.30 | 82.73 | 580 | 1.06 |
| 1300 | 29.68 | 193.02 | 600 | 1.08 |
| 1400 | 36.32 | 157.93 | 640 | 1.12 |
| 1500 | 41.09 | 102.19 | 700 | 1.20 |
| 1600 | 44.20 | 69.49 | 750 | 1.31 |
| 1800 | 47.72 | 39.49 | 800 | 1.37 |
| 2000 | 48.94 | 27.16 | 850 | 1.58 |
| 2500 | 49.52 | 17.39 | 880 | 1.67 |
| 2900 | 61.93 | 15.81 | 900 | 1.77 |









GROUP [

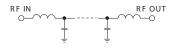
Notes
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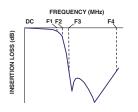
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Functional Schematic



Typical Frequency Response



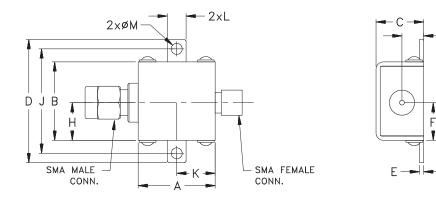


ZX75LP-900-S+

Coaxial Connections

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

Outline Drawing



Outline Dimensions (inch)

| 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

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