

# Coaxial Low Pass Filter

## BLP-300+

50Ω DC to 270 MHz

### Maximum Ratings

Operating Temperature -55°C to 100°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.

### Features

- rugged shielded case
- other standard and custom BLP models available with wide selection of fco

### Applications

- test equipment
- lab use
- video equipment



Generic photo used for illustration purposes only

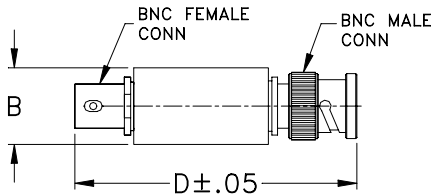
CASE STYLE: FF55

| Connectors | Model    |
|------------|----------|
| BNC        | BLP-300+ |

### +RoHS Compliant

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

### Outline Drawing



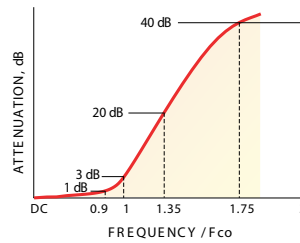
### Outline Dimensions (inch/mm)

| B     | D     | wt    |
|-------|-------|-------|
| .57   | 2.59  | grams |
| 14.47 | 65.79 | 40.0  |

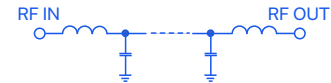
### Low Pass Filter Electrical Specifications

| PASSBAND (MHz) | fco (MHz) Nom. | STOPBAND (MHz) |                | VSWR (:1)     |               |
|----------------|----------------|----------------|----------------|---------------|---------------|
|                |                | (loss > 20 dB) | (loss > 40 dB) | Passband Typ. | Stopband Typ. |
| DC-270         | 297            | 410-550        | 550-1200       | 1.7           | 18            |

### typical frequency response

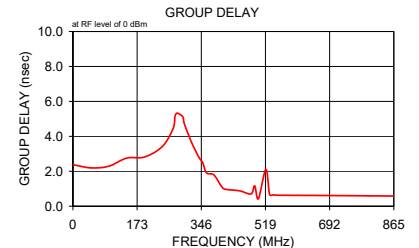
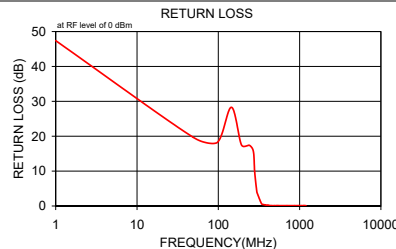
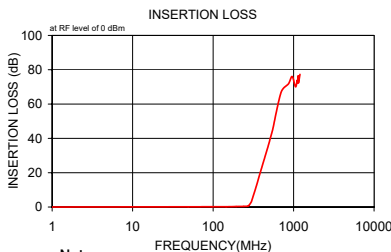


### electrical schematic



### Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) |          | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
|                 | $\bar{x}$           | $\sigma$ |                  |                 |                    |
| 1.00            | 0.02                | 0.1      | 47.4             | 1.00            | 2.37               |
| 49.00           | 0.13                | 0.1      | 19.7             | 49.00           | 2.20               |
| 97.00           | 0.17                | 0.1      | 18.2             | 97.00           | 2.29               |
| 145.00          | 0.15                | 0.1      | 28.3             | 145.00          | 2.76               |
| 193.00          | 0.28                | 0.1      | 17.5             | 193.00          | 2.82               |
| 241.00          | 0.36                | 0.1      | 17.4             | 241.00          | 3.42               |
| 270.00          | 0.53                | 0.1      | 15.6             | 270.00          | 4.45               |
| 280.00          | 1.00                | 0.1      | 9.8              | 275.00          | 5.14               |
| 297.00          | 2.83                | 0.2      | 4.3              | 280.00          | 5.33               |
| 300.00          | 3.29                | 0.2      | 3.8              | 290.00          | 5.24               |
| 340.00          | 11.27               | 0.3      | 0.7              | 297.00          | 5.08               |
| 360.00          | 15.31               | 0.3      | 0.4              | 300.00          | 4.75               |
| 380.00          | 19.09               | 0.4      | 0.3              | 320.00          | 3.64               |
| 400.00          | 22.62               | 0.4      | 0.2              | 340.00          | 2.79               |
| 410.00          | 24.31               | 0.4      | 0.2              | 350.00          | 2.49               |
| 450.00          | 30.64               | 0.6      | 0.1              | 360.00          | 1.91               |
| 490.00          | 36.51               | 0.9      | 0.1              | 380.00          | 1.79               |
| 520.00          | 40.88               | 1.2      | 0.1              | 400.00          | 1.15               |
| 530.00          | 42.34               | 1.3      | 0.1              | 410.00          | 0.98               |
| 540.00          | 43.72               | 1.3      | 0.1              | 450.00          | 0.88               |
| 550.00          | 45.07               | 1.5      | 0.1              | 480.00          | 0.70               |
| 700.00          | 66.82               | 5.7      | 0.1              | 490.00          | 1.16               |
| 864.00          | 71.78               | 6.6      | 0.1              | 500.00          | 0.43               |
| 960.00          | 76.06               | 6.9      | 0.1              | 520.00          | 2.11               |
| 1056.00         | 70.05               | 3.2      | 0.1              | 530.00          | 0.67               |
| 1110.00         | 73.87               | 7.7      | 0.1              | 540.00          | 0.65               |
| 1120.00         | 72.31               | 5.1      | 0.1              | 550.00          | 0.63               |
| 1140.00         | 76.33               | 5.1      | 0.1              | 700.00          | 0.61               |
| 1150.00         | 72.33               | 3.5      | 0.1              | 800.00          | 0.59               |
| 1200.00         | 77.29               | 5.8      | 0.1              | 864.00          | 0.58               |



### Notes

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