

# Coaxial Low Pass Filter

## BLP-21.4+

50Ω DC to 22 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



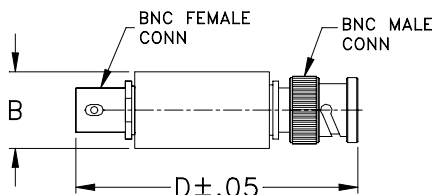
Generic photo used for illustration purposes only

|             |           |
|-------------|-----------|
| CASE STYLE: | FF55      |
| Connectors  | Model     |
| BNC         | BLP-21.4+ |

### +RoHS Compliant

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

### Outline Drawing



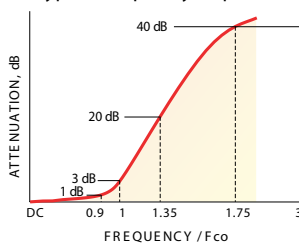
### Outline Dimensions (inch/mm)

|       |       |       |
|-------|-------|-------|
| 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-22          | 24.5           | 32-41          | 41-200         | 1.7           | 18            |

### typical frequency response

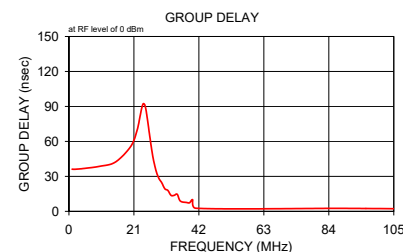
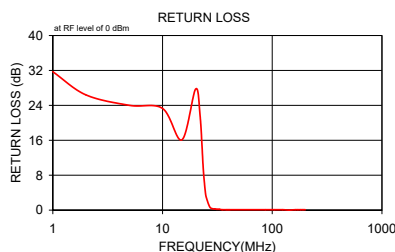


### electrical schematic



### Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) |          | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
|                 | $\bar{x}$           | $\sigma$ |                  |                 |                    |
| 1.00            | 0.10                | 0.1      | 31.7             | 1.00            | 36.16              |
| 2.00            | 0.12                | 0.0      | 26.4             | 2.00            | 36.11              |
| 5.00            | 0.21                | 0.1      | 24.0             | 5.00            | 36.80              |
| 10.00           | 0.29                | 0.1      | 23.3             | 10.00           | 38.69              |
| 15.00           | 0.45                | 0.1      | 16.1             | 15.00           | 42.25              |
| 20.00           | 0.45                | 0.1      | 27.7             | 20.00           | 55.73              |
| 22.00           | 0.60                | 0.1      | 21.6             | 22.00           | 69.40              |
| 23.50           | 1.46                | 0.4      | 9.6              | 23.00           | 81.70              |
| 24.50           | 3.45                | 1.0      | 4.4              | 23.50           | 88.29              |
| 25.00           | 4.95                | 1.2      | 3.0              | 24.00           | 92.34              |
| 27.00           | 12.37               | 1.5      | 0.7              | 24.50           | 91.46              |
| 29.00           | 19.53               | 1.4      | 0.3              | 25.00           | 85.66              |
| 30.00           | 22.77               | 1.4      | 0.3              | 26.00           | 66.76              |
| 31.00           | 25.77               | 1.3      | 0.2              | 27.00           | 48.88              |
| 32.00           | 28.62               | 1.3      | 0.2              | 28.00           | 36.30              |
| 33.00           | 31.31               | 1.3      | 0.2              | 29.00           | 28.75              |
| 35.00           | 36.30               | 1.2      | 0.1              | 30.00           | 24.49              |
| 38.00           | 42.86               | 1.3      | 0.1              | 31.00           | 19.40              |
| 39.00           | 45.08               | 1.1      | 0.1              | 32.00           | 17.88              |
| 40.00           | 46.77               | 1.0      | 0.1              | 33.00           | 13.73              |
| 41.00           | 48.73               | 1.0      | 0.1              | 34.00           | 13.70              |
| 86.50           | 76.16               | 2.0      | 0.1              | 35.00           | 14.63              |
| 105.00          | 77.54               | 4.3      | 0.1              | 36.00           | 8.86               |
| 124.00          | 75.42               | 0.6      | 0.1              | 38.00           | 7.64               |
| 143.00          | 75.51               | 1.8      | 0.0              | 39.00           | 7.39               |
| 162.00          | 74.57               | 3.5      | 0.1              | 40.00           | 9.97               |
| 171.50          | 75.79               | 4.4      | 0.1              | 41.00           | 2.67               |
| 181.00          | 81.15               | 8.2      | 0.1              | 86.50           | 2.56               |
| 190.50          | 76.97               | 3.2      | 0.1              | 96.00           | 2.44               |
| 200.00          | 72.23               | 2.4      | 0.1              | 105.00          | 2.28               |



### Notes

- 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.
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