

Coaxial Low Pass Filter

50Ω DC to 48 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

BLP-50+



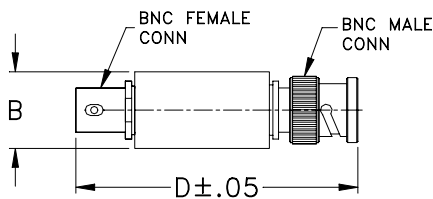
Generic photo used for illustration purposes only

CASE STYLE: FF55
Connectors Model
BNC BLP-50+

+RoHS Compliant

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

Outline Drawing



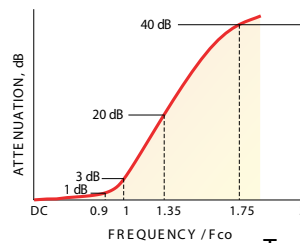
Outline Dimensions (inch/mm)

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

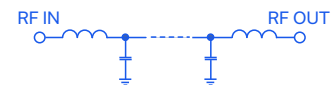
Low Pass Filter Electrical Specifications

| PASSBAND (MHz) | fco (MHz) Nom. | STOPBAND (MHz) | | VSWR (:1) | |
|----------------|----------------|----------------|----------------|---------------|---------------|
| | | (loss > 20 dB) | (loss > 40 dB) | Passband Typ. | Stopband Typ. |
| DC-48 | 55 | 70-90 | 90-200 | 1.7 | 18 |

typical frequency response

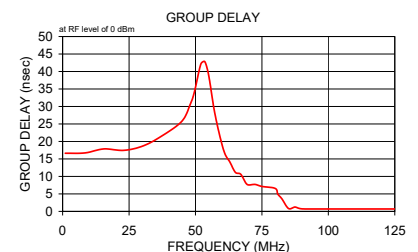
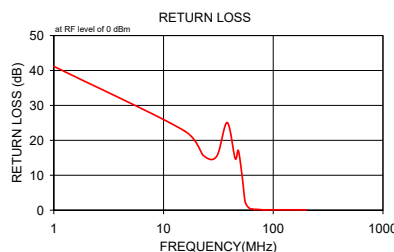
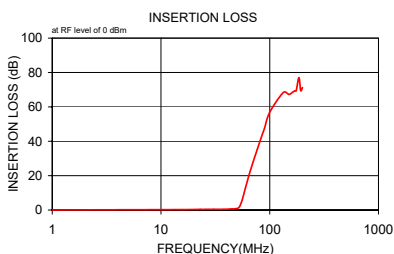


electrical schematic



Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
| | \bar{x} | σ | | | |
| 1.00 | 0.05 | 0.00 | 41.20 | 1.00 | 16.62 |
| 15.50 | 0.23 | 0.10 | 22.70 | 8.50 | 16.73 |
| 23.00 | 0.37 | 0.10 | 15.70 | 15.50 | 17.87 |
| 30.50 | 0.43 | 0.10 | 15.40 | 23.00 | 17.45 |
| 38.00 | 0.40 | 0.10 | 25.10 | 30.50 | 18.79 |
| 45.00 | 0.65 | 0.10 | 14.80 | 38.00 | 21.89 |
| 48.00 | 0.70 | 0.10 | 17.10 | 45.00 | 25.87 |
| 52.00 | 1.46 | 0.20 | 9.90 | 48.00 | 30.56 |
| 55.00 | 4.65 | 0.30 | 3.00 | 49.50 | 33.92 |
| 57.00 | 7.96 | 0.40 | 1.50 | 52.00 | 42.09 |
| 61.00 | 14.84 | 0.50 | 0.50 | 53.50 | 42.83 |
| 65.00 | 20.96 | 6.00 | 0.30 | 55.00 | 38.77 |
| 67.00 | 23.73 | 0.60 | 0.20 | 57.00 | 29.20 |
| 69.00 | 26.33 | 0.70 | 0.20 | 59.00 | 22.03 |
| 70.00 | 27.59 | 0.70 | 0.20 | 61.00 | 16.66 |
| 72.50 | 30.55 | 0.80 | 0.20 | 63.00 | 14.04 |
| 80.00 | 38.67 | 1.20 | 0.10 | 65.00 | 11.17 |
| 82.50 | 41.07 | 1.40 | 0.10 | 67.00 | 10.62 |
| 85.00 | 43.54 | 1.60 | 0.10 | 69.00 | 8.06 |
| 87.50 | 45.78 | 1.80 | 0.10 | 70.00 | 7.57 |
| 90.00 | 47.97 | 2.20 | 0.10 | 72.50 | 7.70 |
| 100.00 | 56.91 | 4.10 | 0.10 | 75.00 | 7.14 |
| 133.50 | 68.38 | 5.20 | 0.10 | 80.00 | 6.57 |
| 150.00 | 67.23 | 4.20 | 0.10 | 81.00 | 4.93 |
| 163.00 | 68.62 | 4.60 | 0.10 | 82.50 | 3.61 |
| 170.50 | 69.35 | 3.30 | 0.10 | 85.00 | 0.84 |
| 175.00 | 69.36 | 5.80 | 0.10 | 87.50 | 1.23 |
| 185.50 | 77.07 | 8.80 | 0.10 | 90.00 | 0.73 |
| 192.50 | 69.51 | 5.20 | 0.10 | 100.00 | 0.70 |
| 200.00 | 71.27 | 9.70 | 0.10 | 125.00 | 0.69 |



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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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