

Low Pass Filter

50Ω DC to 720 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-800+



Generic photo used for illustration purposes only

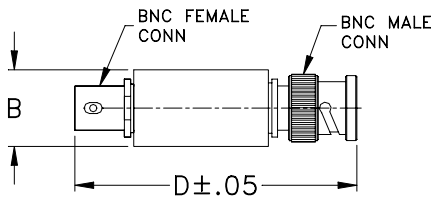
CASE STYLE: FF55

Connectors	Model
BNC	BLP-800+

+RoHS Compliant

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

Outline Drawing



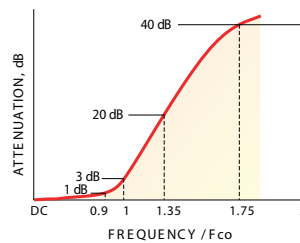
Outline Dimensions (inch/mm)

B	D	wt
.57	2.59	grams
14.47	65.79	40.0

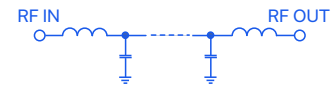
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
(loss < 1 dB)	(loss 3 dB)	(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-720	800	1080-1400	1400-2000	1.7	18

typical frequency response

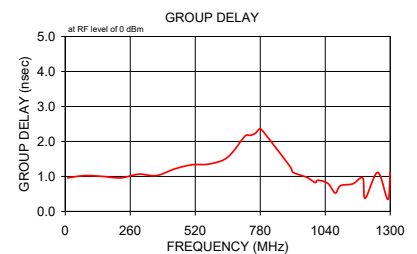
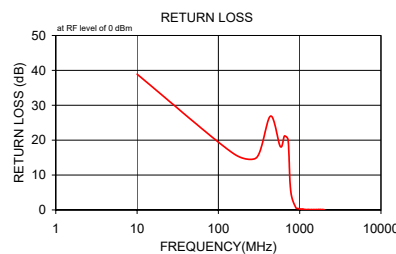
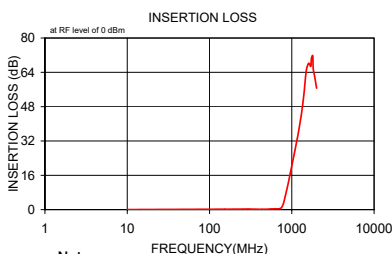


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ		
10.00	0.04	0.1	10.0	0.96
152.50	0.20	0.1	80.0	1.03
295.00	0.26	0.1	152.5	1.00
437.50	0.18	0.1	222.5	0.96
577.50	0.32	0.1	295.0	1.07
650.00	0.35	0.1	365.0	1.03
720.00	0.48	0.1	437.5	1.22
760.00	1.36	0.2	507.5	1.33
800.00	3.45	0.3	577.5	1.36
900.00	11.91	0.5	650.0	1.55
950.00	16.24	0.5	720.0	2.16
1000.00	20.40	0.6	740.0	2.17
1010.00	21.22	0.6	760.0	2.23
1050.00	24.40	0.7	780.0	2.36
1080.00	26.70	0.7	800.0	2.21
1100.00	28.21	0.7	900.0	1.27
1190.00	34.98	1.0	910.0	1.12
1250.00	39.81	1.3	950.0	1.02
1290.00	43.03	1.5	970.0	0.96
1300.00	43.66	1.4	1000.0	0.83
1400.00	53.30	3.1	1010.0	0.89
1500.00	64.81	3.4	1050.0	0.80
1600.00	68.20	6.6	1080.0	0.53
1700.00	66.77	2.9	1100.0	0.73
1720.00	68.97	6.7	1150.0	0.79
1735.00	70.75	8.2	1190.0	0.96
1800.00	71.72	6.9	1200.0	0.38
1820.00	65.74	5.8	1250.0	1.12
1900.00	61.76	6.1	1290.0	0.35
2000.00	56.62	3.2	1300.0	1.12



Notes

- A. 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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. 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



Coaxial Low Pass Filter

BLP-800+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	0.04	38.90	10.0	0.960
152.5	0.20	16.20	80.0	1.030
295.0	0.26	15.00	152.5	1.000
437.5	0.18	26.90	222.5	0.960
577.5	0.32	18.20	295.0	1.070
650.0	0.35	21.20	365.0	1.030
720.0	0.48	20.10	437.5	1.220
760.0	1.36	8.00	507.5	1.330
800.0	3.45	3.70	577.5	1.360
900.0	11.91	0.60	650.0	1.550
950.0	16.24	0.40	720.0	2.160
1000.0	20.40	0.30	740.0	2.170
1010.0	21.22	0.20	760.0	2.230
1050.0	24.40	0.20	780.0	2.360
1080.0	26.70	0.20	800.0	2.210
1100.0	28.21	0.20	900.0	1.270
1190.0	34.98	0.10	910.0	1.120
1250.0	39.81	0.10	950.0	1.020
1290.0	43.03	0.10	970.0	0.960
1300.0	43.66	0.10	1000.0	0.830
1400.0	53.30	0.10	1010.0	0.890
1500.0	64.81	0.10	1050.0	0.800
1600.0	68.20	0.10	1080.0	0.530
1700.0	66.77	0.10	1100.0	0.730
1720.0	68.97	0.10	1150.0	0.790
1735.0	70.75	0.10	1190.0	0.960
1800.0	71.72	0.10	1200.0	0.380
1820.0	65.74	0.10	1250.0	1.120
1900.0	61.76	0.10	1290.0	0.350
2000.0	56.62	0.10	1300.0	1.120

REV. X1
BLP-800+
070603
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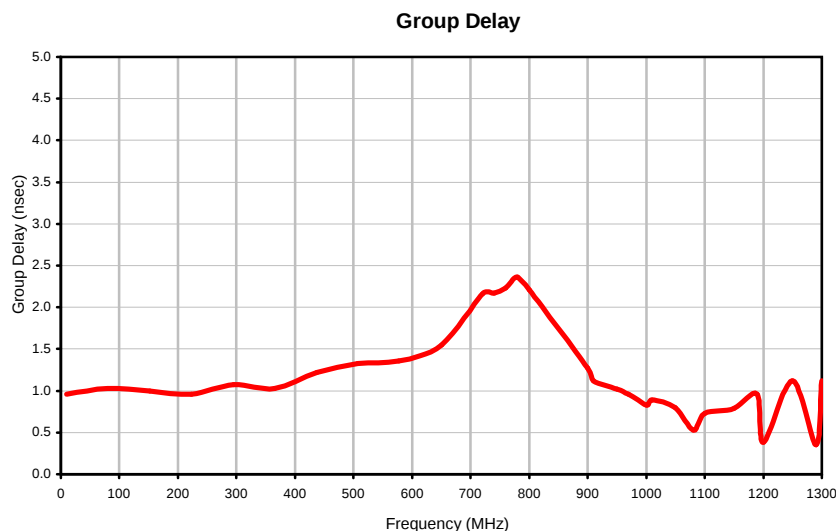
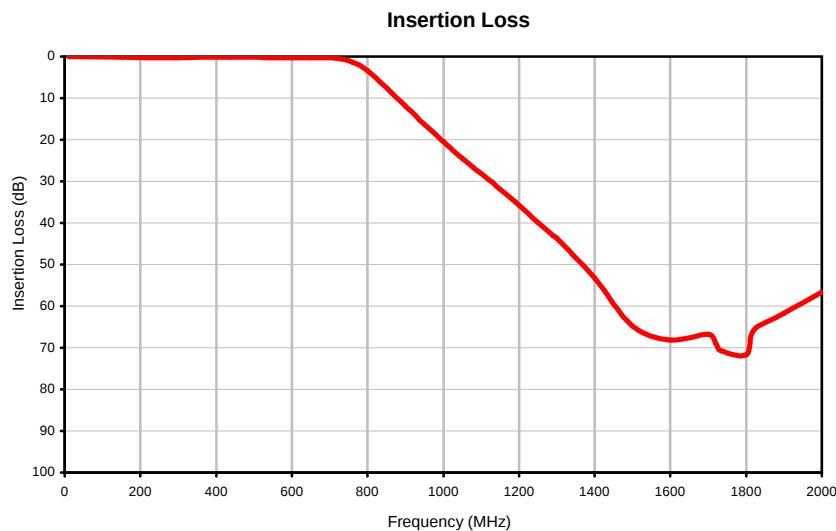
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Coaxial Low Pass Filter

BLP-800+

Typical Performance Curves



REV. X1
BLP-800+
070603
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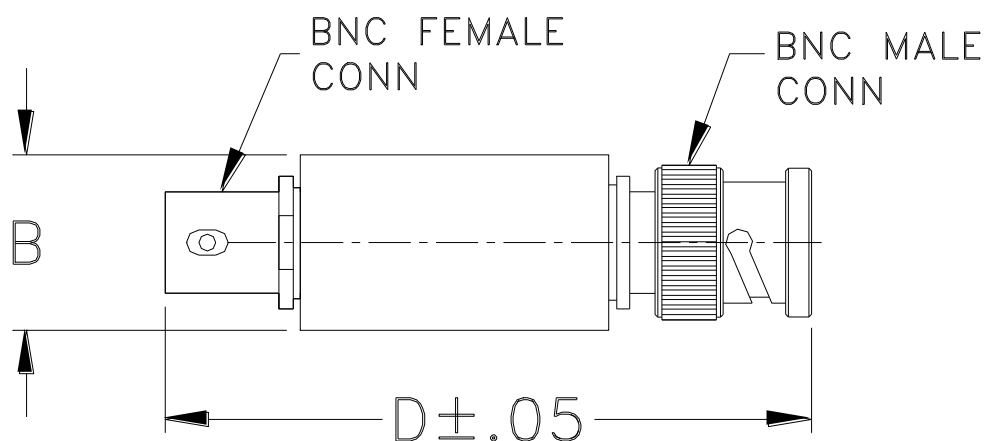


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Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF55	--	.57 (14.47)	--	2.59 (65.79)	--	40.0

Dimensions are in inches (mm). Tolerances: 2Pl. +.03/-.04; 3Pl. ± .015

Note:

- Case material: Stainless steel.



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I