

Low Pass Filter

BLP-750+

50Ω DC to 700 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

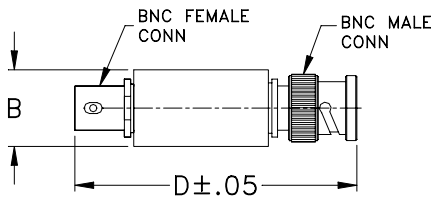
CASE STYLE: FF55

Connectors	Model
BNC	BLP-750+

+RoHS Compliant

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

Outline Drawing



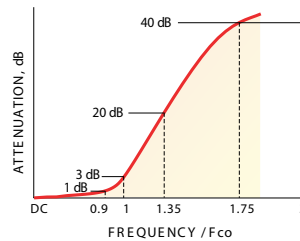
Outline Dimensions (inch/mm)

B	D	wt
.57	2.59	grams
14.47	65.79	40.0

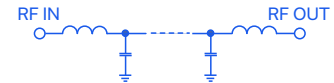
Low Pass Filter Electrical Specifications

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-700	770	1000-1300	1300-2000	1.7	18

typical frequency response

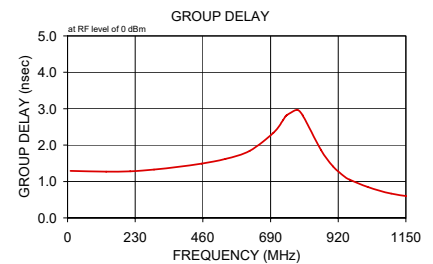
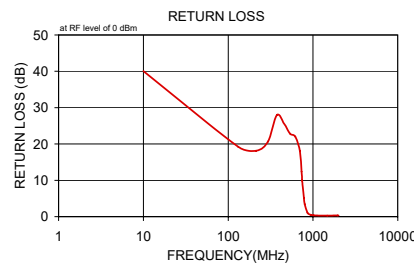
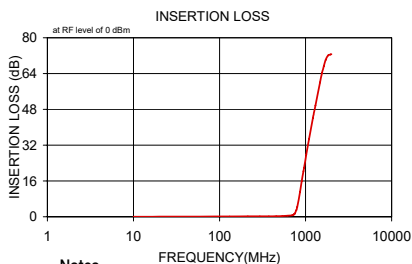


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ		
10.00	0.02	0.00	10.00	1.29
131.00	0.15	0.01	131.00	1.27
213.00	0.20	0.01	213.00	1.28
294.00	0.21	0.01	294.00	1.33
375.00	0.23	0.01	375.00	1.40
456.00	0.28	0.01	456.00	1.49
537.00	0.35	0.01	537.00	1.62
619.00	0.43	0.01	619.00	1.84
700.00	0.64	0.04	700.00	2.34
732.00	0.99	0.17	732.00	2.68
741.00	1.18	0.24	741.00	2.79
746.00	1.31	0.28	746.00	2.83
781.00	2.95	0.71	781.00	2.97
799.00	4.36	0.93	799.00	2.82
862.00	11.17	1.19	862.00	1.86
903.00	15.89	1.11	903.00	1.41
944.00	20.34	1.01	944.00	1.12
959.00	21.89	0.97	959.00	1.05
1020.00	27.86	0.85	1020.00	0.85
1100.00	34.87	0.76	1100.00	0.67
1220.00	44.18	0.74	1220.00	0.53
1300.00	49.74	0.87	1300.00	0.48
1470.00	60.03	1.66	1470.00	0.54
1550.00	64.14	2.28	1550.00	0.27
1630.00	67.42	2.85	1630.00	0.35
1710.00	70.05	3.30	1710.00	0.17
1750.00	71.00	3.31	1750.00	0.49
1830.00	72.16	3.29	1830.00	0.79
1950.00	72.55	2.75	1950.00	1.22
2000.00	72.63	2.29	2000.00	0.33



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



Coaxial Low Pass Filter

BLP-750+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	0.02	40.04	10.0	1.290
50.0	0.07	25.84	50.0	1.240
91.0	0.11	21.43	91.0	1.260
131.0	0.15	19.25	131.0	1.270
172.0	0.18	18.23	172.0	1.270
213.0	0.20	18.12	213.0	1.280
253.0	0.21	18.90	253.0	1.300
294.0	0.21	20.66	294.0	1.330
375.0	0.23	27.94	375.0	1.400
416.0	0.25	28.88	416.0	1.440
456.0	0.28	25.61	456.0	1.490
497.0	0.31	23.58	497.0	1.550
537.0	0.35	22.80	537.0	1.620
578.0	0.39	22.40	578.0	1.710
619.0	0.43	22.02	619.0	1.840
659.0	0.50	21.19	659.0	2.020
700.0	0.64	18.02	700.0	2.340
724.0	0.86	13.88	724.0	2.600
732.0	0.99	12.40	732.0	2.680
741.0	1.18	10.79	741.0	2.790
747.0	1.34	9.76	747.0	2.850
781.0	2.95	5.08	781.0	2.970
791.0	3.69	4.10	791.0	2.910
799.0	4.36	3.45	799.0	2.820
822.0	6.63	2.13	822.0	2.480
862.0	11.17	1.07	862.0	1.860
903.0	15.89	0.66	903.0	1.410
944.0	20.34	0.50	944.0	1.120
949.0	20.86	0.49	949.0	1.090
959.0	21.89	0.46	959.0	1.050
984.0	24.41	0.42	984.0	0.970
1020.0	27.86	0.37	1020.0	0.850
1060.0	31.45	0.34	1060.0	0.750
1100.0	34.87	0.32	1100.0	0.670
1140.0	38.13	0.30	1140.0	0.620
1170.0	40.46	0.30	1170.0	0.580
1180.0	41.20	0.30	1180.0	0.570
1220.0	44.18	0.29	1220.0	0.530
1260.0	47.02	0.28	1260.0	0.510
1300.0	49.74	0.28	1300.0	0.480
1350.0	53.00	0.28	1350.0	0.490
1390.0	55.49	0.28	1390.0	0.450
1430.0	57.82	0.28	1430.0	0.440
1470.0	60.03	0.28	1470.0	0.540
1510.0	62.18	0.29	1510.0	0.440
1550.0	64.14	0.29	1550.0	0.270
1590.0	65.89	0.29	1590.0	0.380
1630.0	67.42	0.30	1630.0	0.350
1670.0	68.53	0.30	1670.0	0.490
1710.0	70.05	0.30	1710.0	0.170
1750.0	71.00	0.31	1750.0	0.490
1790.0	71.54	0.31	1790.0	0.170
1830.0	72.16	0.31	1830.0	0.790
1950.0	72.55	0.33	1950.0	1.220
2000.0	72.63	0.33	2000.0	0.330

REV. X1
BLP-750+
080713
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IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant

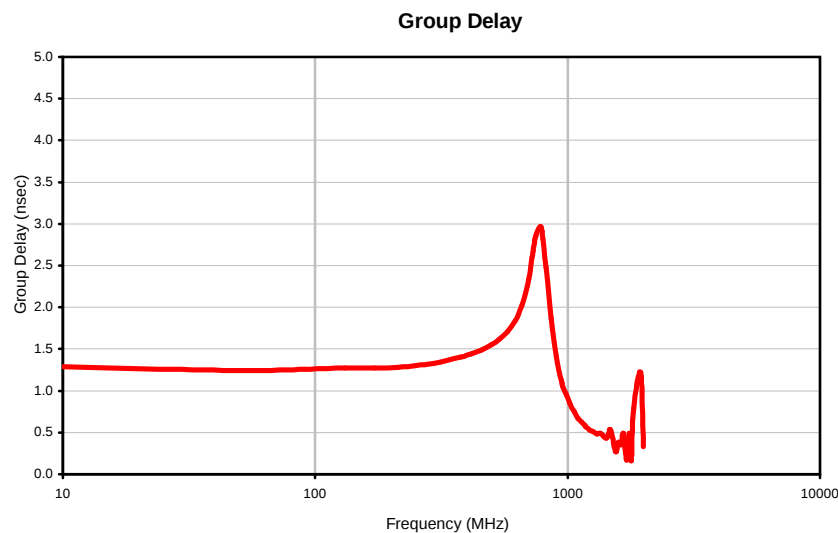
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Typical Performance Curves



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BLP-750+
080713
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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:

1. 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