Coaxial

Low Pass Filter

BLP-10.7+

50Ω DC to 11 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF55

Connectors	Model
BNC	BLP-10.7+

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

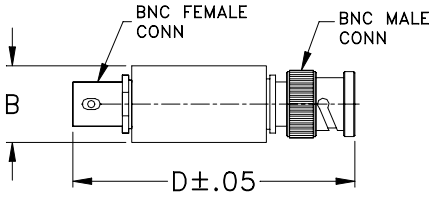
Applications

- test equipment
- lab use
- video equipment

+RoHS Compliant

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

Outline Drawing



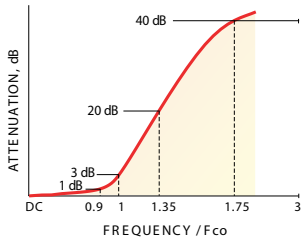
Outline Dimensions (inch/mm)

B	D	wt
.57	2.59	grams
14.47	65.79	40.0

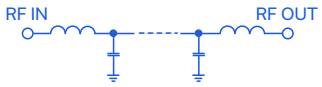
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
				Passband Typ.	Stopband Typ.
(loss < 1 dB)	(loss 3 dB)	(loss > 20 dB)	(loss > 40 dB)		
DC-11	14	19-24	24-200	1.7	18

typical frequency response



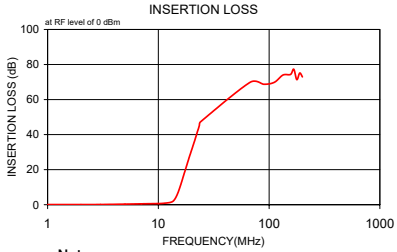
electrical schematic



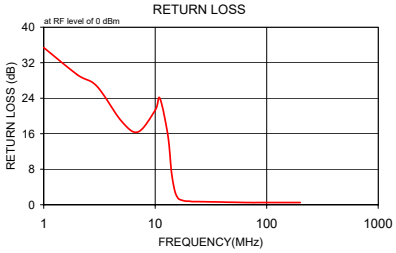
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) x̄	Insertion Loss (dB) σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
1.00	0.07	0.1	35.4	1.00	58.80
2.00	0.09	0.1	29.3	2.00	59.10
3.00	0.12	0.1	26.7	3.00	59.27
5.00	0.32	0.1	18.8	5.00	60.97
7.00	0.47	0.1	16.4	7.00	63.36
10.00	0.65	0.1	21.3	10.00	74.88
11.00	0.75	0.1	24.0	11.00	81.22
13.00	1.40	0.2	15.6	12.00	91.07
14.00	2.93	0.6	7.4	13.00	107.18
15.00	6.69	1.2	3.1	13.50	117.87
16.00	11.80	1.5	1.5	14.00	126.32
17.00	17.23	1.5	1.1	15.00	118.46
17.50	19.81	1.6	1.0	15.50	101.87
18.00	22.31	1.6	0.9	16.00	88.38
19.00	27.01	1.7	0.8	16.50	69.67
20.00	31.35	1.7	0.8	17.00	58.26
21.50	37.46	1.8	0.7	17.50	48.58
22.50	41.58	2.0	0.7	18.00	41.98
23.00	43.42	2.0	0.7	19.00	32.50
23.50	45.39	2.3	0.7	20.00	26.26
24.00	47.26	2.3	0.7	21.00	22.78
67.50	69.85	8.9	0.5	21.50	15.91
89.50	68.74	2.9	0.5	22.00	16.35
111.50	69.81	2.2	0.5	22.50	13.87
133.50	73.98	3.2	0.5	23.00	13.79
156.00	74.31	4.9	0.5	23.50	9.85
167.00	77.32	6.1	0.5	24.00	9.53
178.00	71.38	2.8	0.5	67.50	9.31
189.00	75.13	2.8	0.5	78.50	8.98
200.00	72.96	2.1	0.5	89.50	8.70

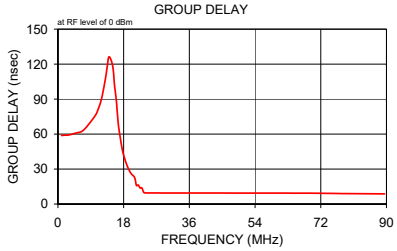
INSERTION LOSS



RETURN LOSS



GROUP DELAY



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.
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Coaxial Low Pass Filter BLP-10.7+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
1.0	0.07	35.40
2.0	0.09	29.30
3.0	0.12	26.70
5.0	0.32	18.80
7.0	0.47	16.40
10.0	0.65	21.30
11.0	0.75	24.00
13.0	1.40	15.60
14.0	2.93	7.40
15.0	6.69	3.10
16.0	11.80	1.50
17.0	17.23	1.10
17.5	19.81	1.00
18.0	22.31	0.90
19.0	27.01	0.80
20.0	31.35	0.80
21.5	37.46	0.70
22.5	41.58	0.70
23.0	43.42	0.70
23.5	45.39	0.70
24.0	47.26	0.70
67.5	69.85	0.50
89.5	68.74	0.50
111.5	69.81	0.50
133.5	73.98	0.50
156.0	74.31	0.50
167.0	77.32	0.50
178.0	71.38	0.50
189.0	75.13	0.50
200.0	72.96	0.50

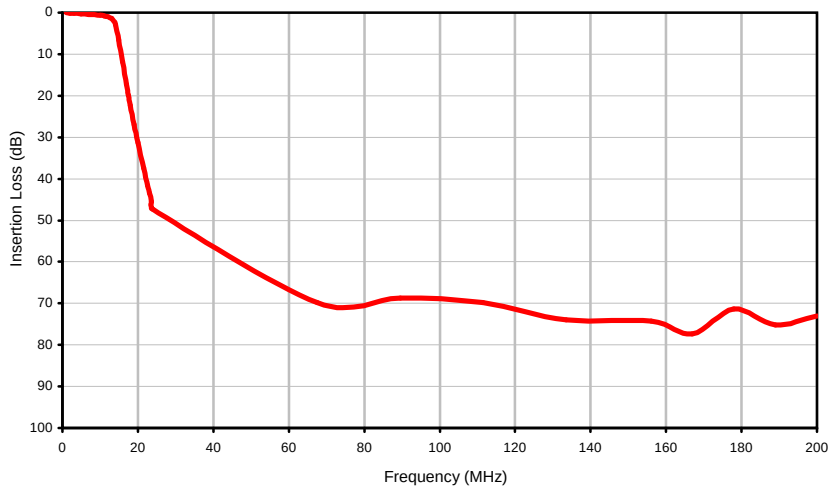
FREQUENCY (MHz)	GROUP DELAY (nsec)
1.0	58.800
2.0	59.100
3.0	59.270
5.0	60.970
7.0	63.360
10.0	74.880
11.0	81.220
12.0	91.070
13.0	107.180
13.5	117.870
14.0	126.320
15.0	118.460
15.5	101.870
16.0	88.380
16.5	69.670
17.0	58.260
17.5	48.580
18.0	41.980
19.0	32.500
20.0	26.260
21.0	22.780
21.5	15.910
22.0	16.350
22.5	13.870
23.0	13.790
23.5	9.850
24.0	9.530
67.5	9.310
78.5	8.980
89.5	8.700

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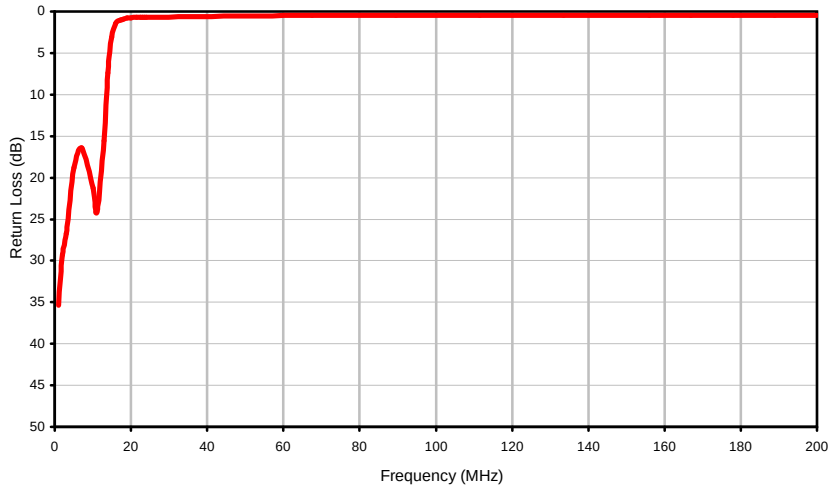
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Typical Performance Curves

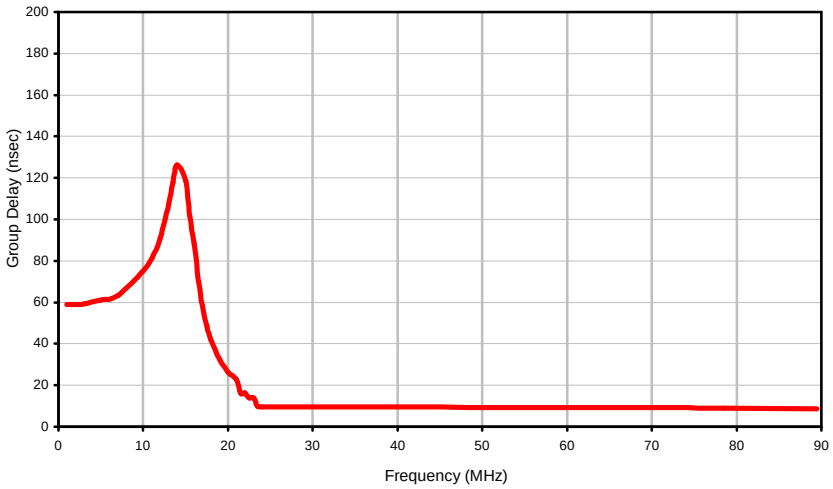
Insertion Loss



Return Loss



Group Delay

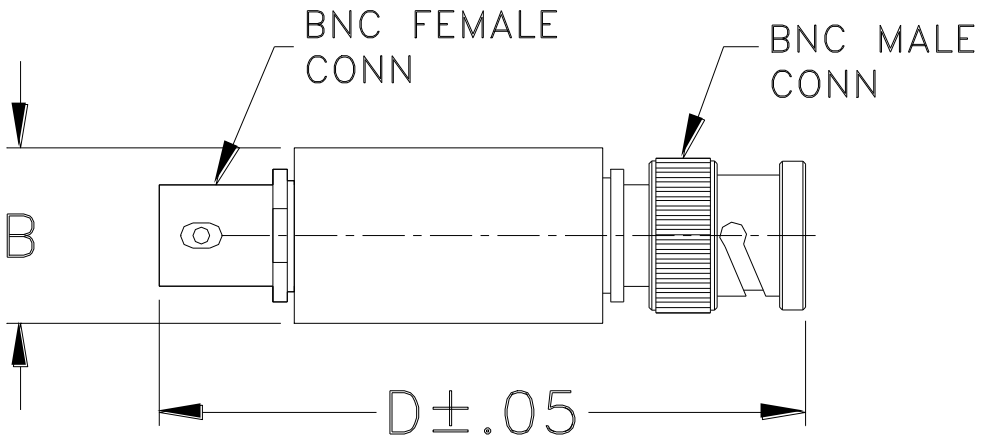


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Case Style FF

FF55

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.

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Environmental Specifications ENV28

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

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