Coaxial

Low Pass Filter

BBLP-39+

50Ω Flat Time Delay DC to 23 MHz

CASE STYLE: FF55

Connectors	Model	Price	Qty.
BNC	BBLP-39+	$36.95 ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

- flat group delay for low pulse distortion
- rugged shielded case
- other BBLP models available with wide selection of cut-off frequencies

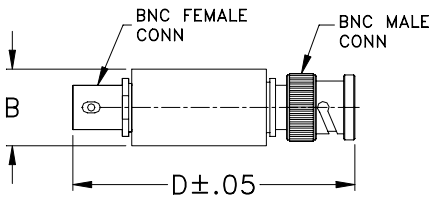
Applications

- linear modulation techniques
- voice transmission applications
- digital communications

Low Pass Filter Electrical Specifications

PASSBAND (MHz) (loss <1.2 dB) Min.	fco, (MHz) Nom. (loss 3 dB)	STOPBAND (MHz) (loss > 10 dB)	STOPBAND (MHz) (loss > 20 dB)	VSWR (:1) DC-0.2fco	VSWR (:1) DC-0.6fco	GROUP DELAY VARIATION (nsec) DC-fco	GROUP DELAY VARIATION (nsec) DC-2fco	GROUP DELAY VARIATION (nsec) DC-2.67fco
				x̄	x̄	x̄	x̄	x̄
DC-23	39	78-117	117	1.3:1	2.3:1	0.7	4.0	5.0

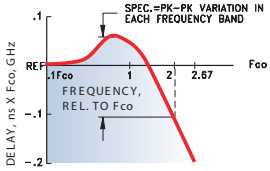
Outline Drawing



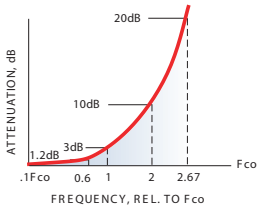
Outline Dimensions (inch / mm)

B	D	wt
.54	2.59	grams
13.72	65.79	40.0

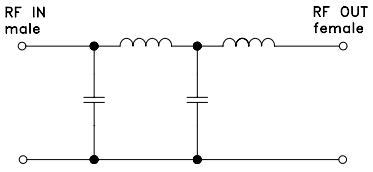
TYPICAL GROUP DELAY



TYPICAL FREQUENCY RESPONSE INSERTION LOSS



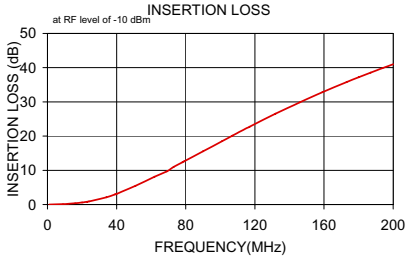
electrical schematic



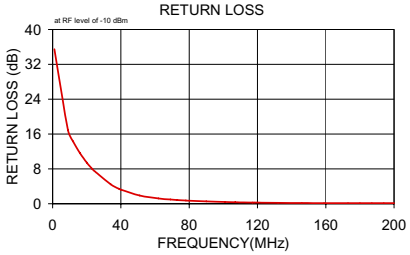
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) x̄	Insertion Loss (dB) σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
1.0	0.02	0.00	35.5	1.0	8.012
9.0	0.14	0.00	17.0	5.0	8.243
12.0	0.23	0.01	14.3	9.0	7.823
16.0	0.38	0.01	11.6	12.0	8.199
20.0	0.60	0.02	9.4	16.0	8.305
23.0	0.82	0.02	8.1	20.0	8.466
24.0	0.91	0.02	7.7	23.0	8.623
34.0	2.11	0.03	4.5	24.0	8.392
39.0	2.95	0.04	3.4	29.0	8.899
40.0	3.14	0.04	3.2	34.0	8.378
51.0	5.48	0.06	1.9	39.0	8.392
62.0	8.15	0.07	1.2	40.0	8.247
69.0	9.69	0.08	1.0	46.0	7.722
73.0	11.00	0.09	0.8	51.0	7.336
78.0	12.33	0.10	0.7	57.0	6.804
79.0	12.60	0.10	0.7	62.0	6.487
90.0	15.56	0.13	0.5	68.0	6.306
101.0	18.53	0.15	0.4	73.0	5.277
107.0	20.14	0.16	0.3	78.0	5.124
112.0	21.46	0.16	0.3	79.0	5.489
117.0	22.76	0.17	0.3	85.0	5.101
118.0	23.02	0.17	0.3	90.0	4.784
132.0	26.55	0.17	0.2	96.0	4.054
146.0	29.88	0.17	0.2	101.0	3.996
159.0	32.80	0.17	0.1	107.0	3.275
173.0	35.76	0.16	0.1	112.0	3.856
180.0	37.17	0.15	0.1	117.0	2.547
187.0	38.55	0.16	0.1	118.0	2.738
194.0	39.89	0.15	0.1	125.0	2.216
200.0	41.00	0.16	0.1	132.0	2.576

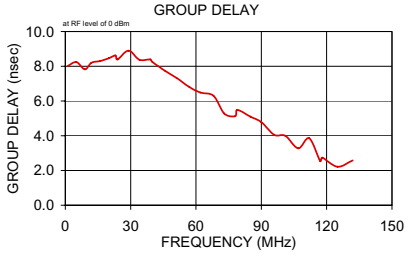
INSERTION LOSS



RETURN LOSS



GROUP DELAY



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