

# Coaxial Low Pass Filter

NON-CATALOG

NBLP-156+  
NBLP-156

50Ω Flat Time Delay DC to 94 MHz

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

## Features

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

## Applications

- linear modulation techniques
- voice transmission applications
- digital communications



CASE STYLE: FF57

Connectors	Model	Price	Qty.
N-Type	NBLP-156(+)	Contact Sales Dept.	

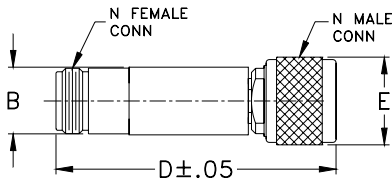
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

## Low Pass Filter Electrical Specifications

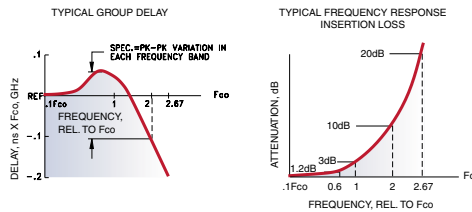
PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)		GROUP DELAY VARIATION (nsec)		
		(loss > 10 dB)	(loss > 20 dB)	DC-0.2f <sub>co</sub>	DC-0.6f <sub>co</sub>	DC-f <sub>co</sub>	DC-2f <sub>co</sub>	DC-2.67f <sub>co</sub>
(loss < 1.2 dB) Min.	(loss 3 dB)	(loss > 10 dB)	(loss > 20 dB)	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$
DC-94	156	312-416	416	1.3:1	1.1:1	0.3	1.1	1.5

## Outline Drawing

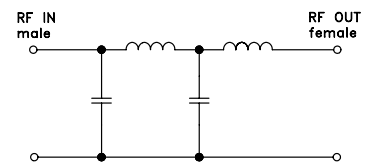


## Outline Dimensions (inch/mm)

B	D	E	wt
.67	2.90	.82	grams
17.02	73.66	20.83	90.0

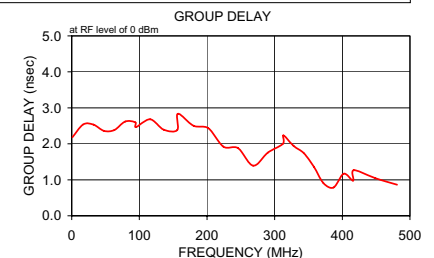
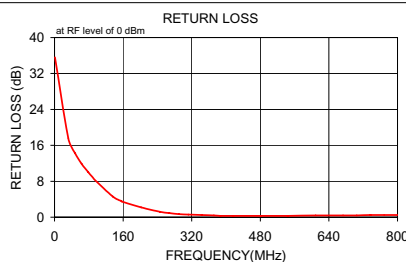
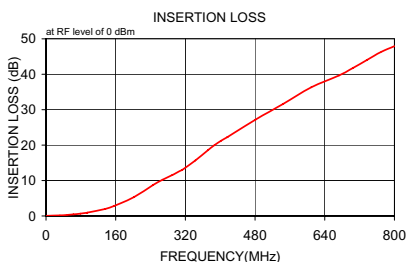


## Electrical Schematic



## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{X}$	$\sigma$			
1.0	0.05	0.1	35.6	1.0	2.185
32.0	0.17	0.1	17.6	17.0	2.540
48.0	0.30	0.1	14.2	32.0	2.534
63.0	0.46	0.1	11.9	48.0	2.358
79.0	0.68	0.1	10.0	63.0	2.382
94.0	0.92	0.1	8.3	79.0	2.619
95.0	0.93	0.1	8.2	94.0	2.595
136.0	1.98	0.1	4.6	95.0	2.467
156.0	2.79	0.2	3.6	116.0	2.682
157.0	2.85	0.2	3.5	136.0	2.392
202.0	5.33	0.2	2.2	156.0	2.383
246.0	8.75	0.3	1.2	157.0	2.835
268.0	10.25	0.3	0.9	180.0	2.501
290.0	11.57	0.3	0.7	202.0	2.433
312.0	12.97	0.3	0.6	224.0	1.923
313.0	13.03	0.3	0.6	246.0	1.878
343.0	15.67	0.3	0.5	268.0	1.392
372.0	18.60	0.3	0.4	290.0	1.756
387.0	20.01	0.3	0.3	312.0	2.001
402.0	21.23	0.3	0.3	313.0	2.235
416.0	22.25	0.3	0.3	328.0	1.944
417.0	22.32	0.3	0.3	343.0	1.740
481.0	27.17	0.5	0.3	358.0	1.360
545.0	31.67	0.7	0.3	372.0	0.911
609.0	36.32	1.0	0.4	387.0	0.786
673.0	39.65	1.2	0.4	402.0	1.170
705.0	41.78	1.2	0.4	416.0	0.978
737.0	44.07	1.6	0.5	417.0	1.269
769.0	46.28	1.6	0.5	449.0	1.042
800.0	47.95	1.8	0.5	481.0	0.864



**Mini-Circuits**  
ISO 9001 ISO 14001 CERTIFIED

ALL NEW  
minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

RF/IF MICROWAVE COMPONENTS

REV. A  
M98898  
NBLP-156  
070419