

# Coaxial Low Pass Filter

NBLP-300+  
NBLP-300

50Ω Flat Time Delay DC to 180 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

- 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-300(+)	\$39.95 ea.	(1-9)

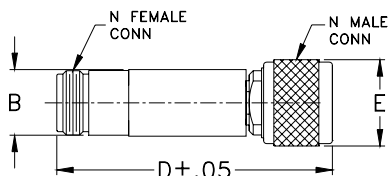
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

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

## Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco, MHz Nom.	STOPBAND (MHz)		VSWR (:1)		GROUP DELAY VARIATION (nsec)		
		(loss > 10 dB)	(loss > 20 dB)	DC-0.2fco	DC-0.6fco	DC-fco	DC-2fco	DC-2.67fco
(loss < 1.2 dB) Min.	(loss 3 dB)			$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$
DC-180	300	600-801	801	1.25:1	2.2:1	0.2	0.6	0.8

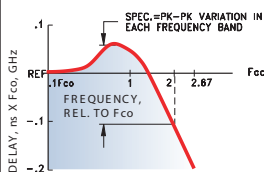
## Outline Drawing



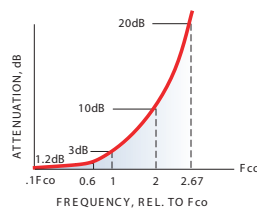
## Outline Dimensions (inch/mm)

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

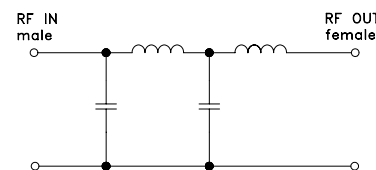
TYPICAL GROUP DELAY



TYPICAL FREQUENCY RESPONSE INSERTION LOSS

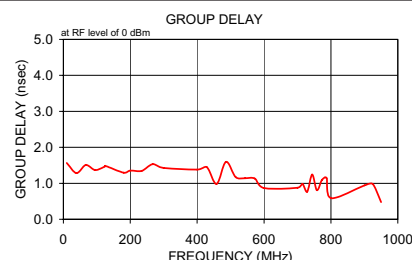
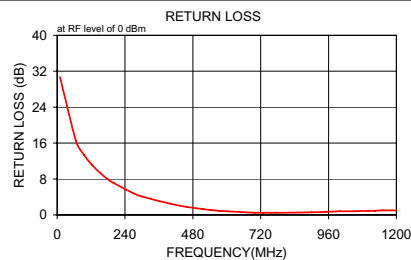


electrical schematic



## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{X}$	$\sigma$			
10.0	0.16	0.2	30.7	10.0	1.563
67.0	0.27	0.2	16.4	39.0	1.282
95.0	0.37	0.1	13.4	67.0	1.509
124.0	0.53	0.1	11.1	95.0	1.368
152.0	0.73	0.1	9.4	124.0	1.468
180.0	0.99	0.1	7.9	125.0	1.487
200.0	1.24	0.1	7.1	180.0	1.297
267.0	2.35	0.2	4.9	200.0	1.351
300.0	3.06	0.2	4.1	234.0	1.343
400.0	5.85	0.2	2.5	267.0	1.534
458.0	7.82	0.2	1.8	300.0	1.427
515.0	9.91	0.3	1.3	400.0	1.383
543.0	11.02	0.4	1.1	429.0	1.448
572.0	12.18	0.4	0.9	458.0	0.984
600.0	13.35	0.5	0.8	486.0	1.599
700.0	17.70	0.5	0.5	515.0	1.173
729.0	18.96	0.6	0.5	543.0	1.140
758.0	20.25	0.6	0.5	572.0	1.134
773.0	20.92	0.6	0.5	600.0	0.869
787.0	21.51	0.6	0.5	700.0	0.878
801.0	22.10	0.6	0.5	715.0	0.983
900.0	26.28	0.7	0.6	729.0	0.767
950.0	28.25	0.7	0.7	744.0	1.244
1000.0	30.16	0.8	0.8	758.0	0.807
1050.0	32.02	0.9	0.8	773.0	1.089
1100.0	33.74	0.9	0.9	787.0	1.144
1125.0	34.62	1.1	0.9	801.0	0.587
1150.0	35.50	1.2	1.0	900.0	0.940
1175.0	36.29	1.2	1.0	925.0	0.980



**Mini-Circuits®**

ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

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