

# Low Pass Filter

NBLP-1870

50Ω Flat Time Delay DC to 850 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



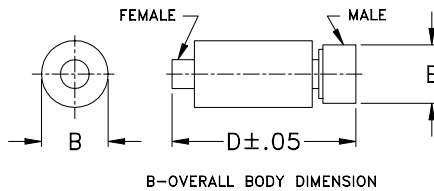
CASE STYLE: FF57

Connectors	Model	Price	Qty.
N-Type	NBLP-1870	\$39.95 ea.	(1-9)

## Low Pass Filter Electrical Specifications

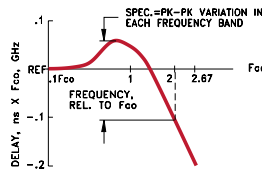
PASSBAND (MHz)	fco, MHz Nom.	STOPBAND (MHz)		VSWR (:1)		GROUP DELAY VARIATION (nsec)		
		(loss < 1.2 dB) Min.	(loss > 10 dB) (loss > 20 dB)	DC-0.2fco $\bar{X}$	DC-0.6fco $\bar{X}$	DC-fco $\bar{X}$	DC-2fco $\bar{X}$	DC-2.67fco $\bar{X}$
DC-850	1870		3740-5000 5000	1.45:1	2.9:1	0.05	0.1	0.15

## Outline Drawing

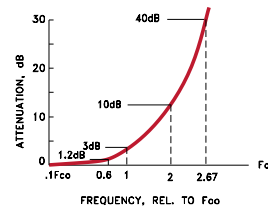


B—OVERALL BODY DIMENSION

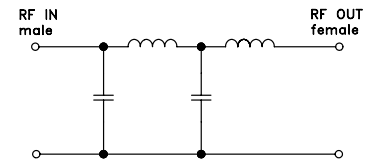
TYPICAL GROUP DELAY



TYPICAL FREQUENCY RESPONSE INSERTION LOSS



electrical schematic



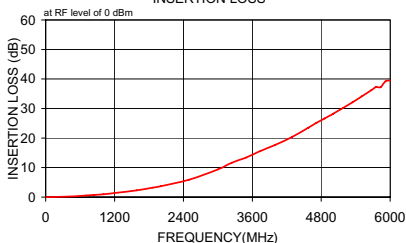
## Outline Dimensions (inch/mm)

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

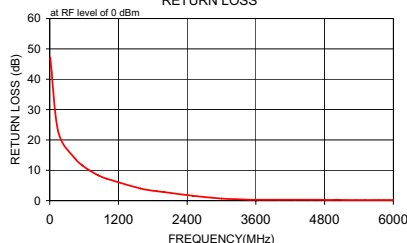
## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{X}$	$\sigma$			
10.0	0.01	0.1	47.2	10.0	0.347
152.3	0.05	0.1	22.6	152.3	0.346
433.0	0.22	0.1	14.1	290.8	0.345
571.6	0.36	0.1	11.6	433.0	0.344
710.1	0.53	0.1	9.8	571.6	0.344
850.0	0.73	0.1	8.3	710.1	0.343
1002.1	0.96	0.1	7.2	850.0	0.342
1582.4	2.28	0.1	4.0	1002.1	0.343
1870.0	3.21	0.1	3.1	1290.4	0.346
2001.7	3.65	0.1	2.8	1582.4	0.348
2499.6	5.91	0.3	1.6	1870.0	0.345
2997.5	9.36	0.7	0.7	2001.7	0.350
3244.6	11.63	1.0	0.5	2248.8	0.355
3491.7	13.38	1.1	0.3	2499.6	0.347
3740.0	15.60	1.2	0.3	2746.7	0.345
4000.8	17.72	1.2	0.3	2997.5	0.309
4289.1	20.35	1.2	0.3	3244.6	0.308
4573.6	23.49	1.3	0.3	3491.7	0.291
4715.9	25.12	1.3	0.3	3740.0	0.282
4858.2	26.62	1.4	0.2	4000.8	0.287
5000.0	28.10	1.4	0.3	4143.1	0.295
5011.7	28.25	1.4	0.3	4289.1	0.281
5176.4	30.15	1.5	0.2	4431.4	0.262
5341.1	32.09	1.8	0.2	4573.6	0.254
5505.8	34.13	2.6	0.2	4715.9	0.254
5670.6	36.22	4.0	0.2	4858.2	0.249
5752.9	37.22	5.2	0.2	5000.0	0.238
5835.3	37.22	6.7	0.2	5011.7	0.245
5917.6	39.23	8.2	0.2	5094.0	0.258
6000.0	39.53	8.0	0.2	5176.4	0.243

INSERTION LOSS



RETURN LOSS



GROUP DELAY

