

# Coaxial Low Pass Filter

## NLP-300+ NLP-300

50Ω DC to 270 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

- rugged shielded case
- other NLP models available with wide selection of cut-off frequencies

### Applications

- lab use
- test equipment
- video equipment



CASE STYLE: FF57

Connectors	Model
N-Type	NLP-300+

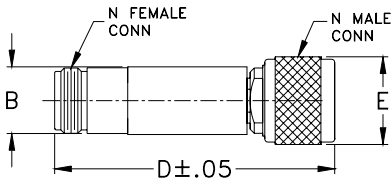
**+RoHS Compliant**

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)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-270	297	410-550	550-1200	1.7	18

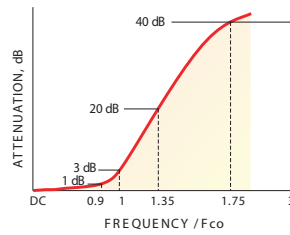
### Outline Drawing



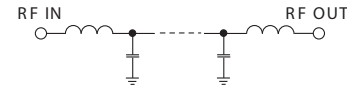
### Outline Dimensions (inch/mm)

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

### typical frequency response

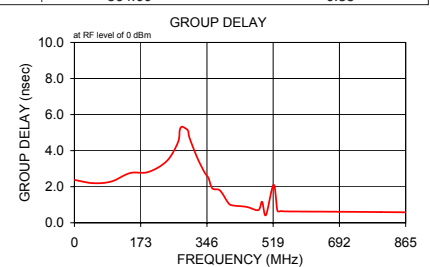
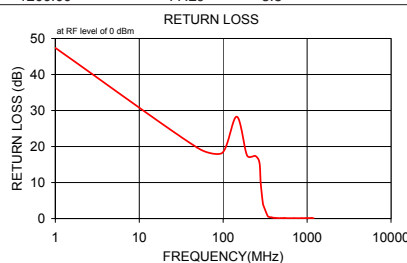


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
1.00	0.02	0.1	47.4	1.00	2.37
49.00	0.13	0.1	19.7	49.00	2.20
97.00	0.17	0.1	18.2	97.00	2.29
145.00	0.15	0.1	28.3	145.00	2.76
193.00	0.28	0.1	17.5	193.00	2.82
241.00	0.36	0.1	17.4	241.00	3.42
270.00	0.53	0.1	15.6	270.00	4.45
280.00	1.00	0.1	9.8	275.00	5.14
297.00	2.83	0.2	4.3	280.00	5.33
300.00	3.29	0.2	3.8	290.00	5.24
340.00	11.27	0.3	0.7	297.00	5.08
360.00	15.31	0.3	0.4	300.00	4.75
380.00	19.09	0.4	0.3	320.00	3.64
400.00	22.62	0.4	0.2	340.00	2.79
410.00	24.31	0.4	0.2	350.00	2.49
450.00	30.64	0.6	0.1	360.00	1.91
490.00	36.51	0.9	0.1	380.00	1.79
520.00	40.88	1.2	0.1	400.00	1.15
530.00	42.34	1.3	0.1	410.00	0.98
540.00	43.72	1.3	0.1	450.00	0.88
550.00	45.07	1.5	0.1	480.00	0.70
700.00	66.82	5.7	0.1	490.00	1.16
864.00	71.78	6.6	0.1	500.00	0.43
960.00	76.06	6.9	0.1	520.00	2.11
1056.00	70.05	3.2	0.1	530.00	0.67
1110.00	73.87	7.7	0.1	540.00	0.65
1120.00	72.31	5.1	0.1	550.00	0.63
1140.00	76.33	5.1	0.1	700.00	0.61
1150.00	72.33	3.5	0.1	800.00	0.59
1200.00	77.29	5.8	0.1	864.00	0.58



### Notes

- 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.
- 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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