

Coaxial

Low Pass Filter

50Ω DC to 140 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

NLP-150+


Generic photo used for illustration purposes only

CASE STYLE: FF57

Connectors Model

N-Type NLP-150+

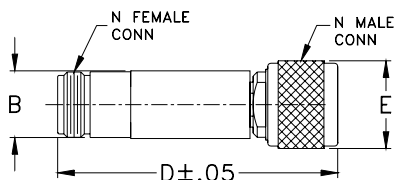
+RoHS Compliant

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-140	155	210-300	300-600	1.7	18

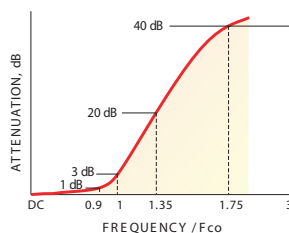
Outline Drawing



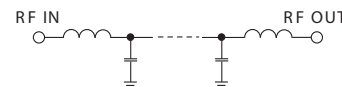
Outline Dimensions (inch)

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

typical frequency response

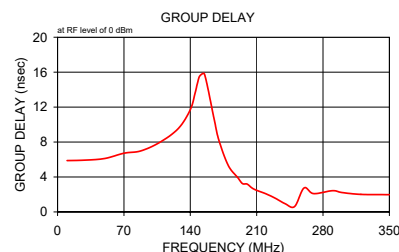
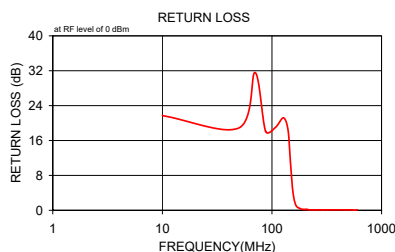
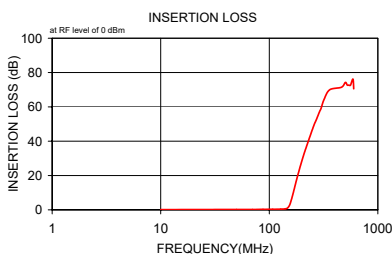


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ			
10.00	0.12	0.1	21.7	10.00	5.875
50.00	0.20	0.0	18.9	30.00	5.932
70.00	0.19	0.1	31.6	50.00	6.124
87.50	0.30	0.1	18.1	70.00	6.723
107.50	0.34	0.1	19.0	87.50	6.973
127.50	0.43	0.1	21.2	107.50	7.940
140.00	0.59	0.1	18.5	127.50	9.564
147.50	1.11	0.1	11.0	140.00	11.710
155.00	3.27	0.2	4.3	145.00	13.582
165.00	9.15	0.4	1.2	147.50	14.703
180.00	18.50	0.6	0.4	150.00	15.571
195.03	26.35	0.7	0.2	155.00	15.775
200.03	28.70	0.7	0.2	165.00	10.701
205.00	30.89	0.7	0.2	170.00	8.263
210.03	33.01	0.8	0.2	180.00	5.337
220.04	36.90	0.8	0.1	190.00	3.934
240.04	43.83	0.9	0.1	195.00	3.242
260.05	49.92	1.3	0.1	200.00	3.185
270.05	52.20	1.9	0.1	205.00	2.751
290.06	57.13	1.7	0.1	210.00	2.474
300.00	59.12	2.5	0.1	220.00	2.061
320.00	64.42	3.7	0.1	230.00	1.548
360.00	69.97	6.8	0.1	240.00	0.945
462.50	71.43	5.2	0.1	250.00	0.617
502.50	74.26	2.1	0.1	260.00	2.736
522.50	72.73	2.6	0.1	270.00	2.100
540.00	72.69	4.1	0.1	290.00	2.428
560.00	72.65	5.6	0.0	300.00	2.217
590.00	76.20	9.3	0.1	320.00	2.006
600.00	70.55	3.8	0.1	350.00	1.977



Notes

A. 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.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp
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 REV. C
 M151107
 NLP-150+
 200515

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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	0.06	27.96	10.0	5.720
50.0	0.22	20.10	50.0	5.670
100.0	0.43	15.82	100.0	6.540
105.0	0.46	15.29	105.0	6.680
110.0	0.49	15.21	110.0	6.890
115.0	0.47	15.51	115.0	7.100
120.0	0.49	16.13	120.0	7.370
125.0	0.47	16.85	125.0	7.750
130.0	0.49	17.59	130.0	8.130
135.0	0.52	17.86	135.0	8.630
140.0	0.57	17.24	140.0	9.250
145.0	0.65	15.42	145.0	10.020
149.0	0.80	13.21	149.0	10.840
150.0	0.86	12.60	150.0	11.060
155.0	1.28	9.30	155.0	12.120
160.0	2.11	6.23	160.0	12.800
165.0	3.52	3.91	165.0	12.580
170.0	5.56	2.38	170.0	11.320
175.0	7.98	1.49	175.0	9.580
180.0	10.60	1.02	180.0	7.920
195.0	18.24	0.52	195.0	4.710
199.0	20.11	0.46	199.0	4.220
200.0	20.57	0.46	200.0	4.090
225.0	30.80	0.30	225.0	2.390
250.0	39.21	0.25	250.0	1.660
251.0	39.49	0.25	251.0	1.600
252.0	39.81	0.25	252.0	1.640
253.0	40.11	0.26	253.0	1.670
1000.0	81.91	0.17	1000.0	0.330
1500.0	73.33	0.24	1500.0	0.820
2000.0	64.06	0.30	2000.0	0.230
2500.0	50.22	0.29	2500.0	0.500
3000.0	31.02	0.37	3000.0	3.600

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070603
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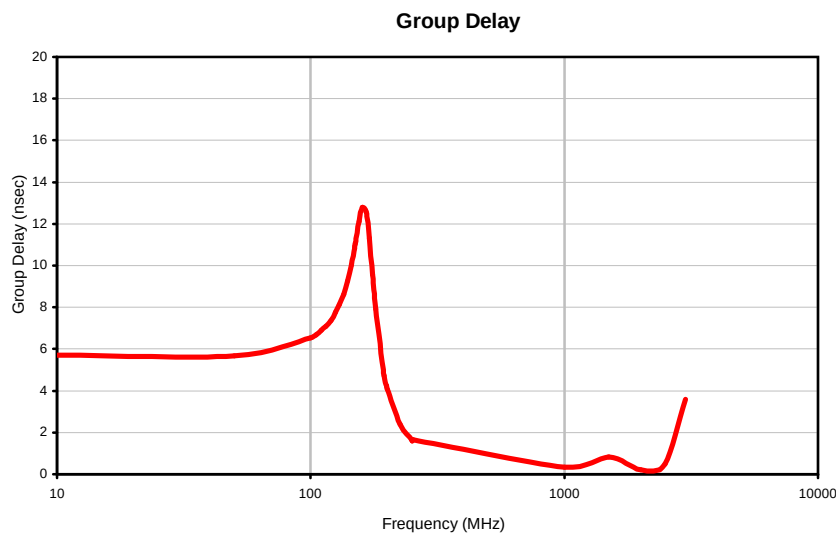
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NLP-150+

Typical Performance Curves



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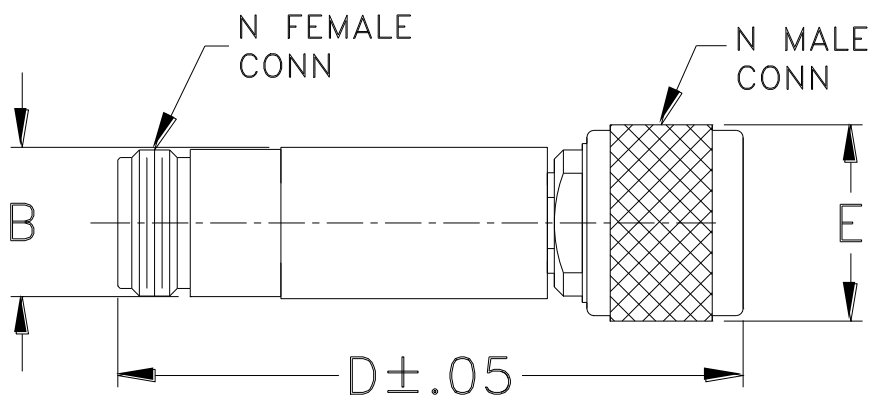


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Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF57	--	.70 (17.78)	--	2.90 (73.66)	.82 (20.83)	90.0

Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .015

Note:

1. Case material: Stainless steel.



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I