

Coaxial

High Pass Filter

50Ω 910 to 3000 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 standard and custom NHP models available with wide selection of fco

Applications

- lab use
- transmitters/receivers
- radio communications

NHP-900+



Generic photo used for illustration purposes only

CASE STYLE: FF57

Connectors Model
N-Type NHP-900+

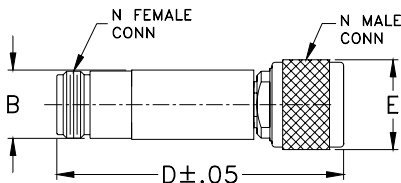
+RoHS Compliant

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

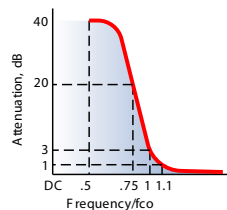
High Pass Filter Electrical Specifications

STOPBAND (MHz)	fco (MHz) Nom.	PASSBAND (MHz)	VSWR (:1)
(loss > 40 dB)	(loss 3 dB)	(loss < 1 dB)	Stopband Typ. Passband Typ.
DC-520	520-660	820	910-3000
			17 1.8

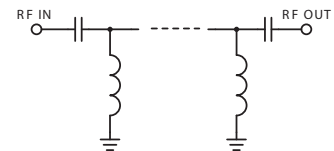
Outline Drawing



typical frequency response



electrical schematic

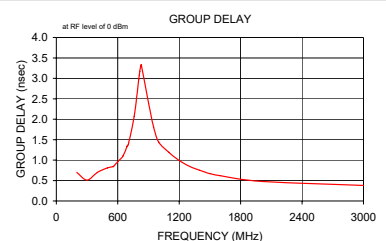
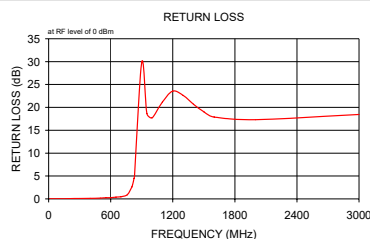
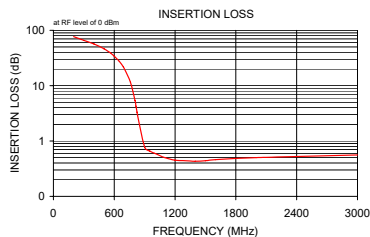


Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
$\bar{x}$	σ			
10.00	72.21	5.66	200.00	0.70
100.00	89.68	6.07	300.00	0.51
200.00	76.93	0.41	400.00	0.70
300.00	65.78	0.70	500.00	0.81
400.00	56.60	0.75	555.00	0.84
500.00	46.37	0.63	560.00	0.85
555.00	39.93	0.58	600.00	0.96
560.00	39.31	0.58	650.00	1.10
600.00	34.17	0.57	690.00	1.33
650.00	27.47	0.60	695.00	1.36
690.00	21.80	0.63	700.00	1.36
700.00	20.35	0.64	705.00	1.41
760.00	11.49	0.69	760.00	2.07
805.00	5.35	0.58	805.00	2.98
810.00	4.78	0.55	810.00	3.08
815.00	4.25	0.52	815.00	3.17
820.00	3.76	0.49	820.00	3.24
825.00	3.31	0.45	825.00	3.30
830.00	2.90	0.41	830.00	3.33
900.00	0.77	0.03	900.00	2.40
950.00	0.66	0.04	950.00	1.81
1000.00	0.60	0.04	1000.00	1.44
1100.00	0.50	0.02	1100.00	1.19
1200.00	0.45	0.01	1200.00	0.99
1300.00	0.44	0.01	1300.00	0.85
1400.00	0.43	0.02	1400.00	0.75
1500.00	0.44	0.02	1500.00	0.67
1600.00	0.46	0.02	1600.00	0.62
2000.00	0.50	0.02	2000.00	0.48
3000.00	0.56	0.01	3000.00	0.38

Outline Dimensions (inch)

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



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.
- 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. E
 M151107
 NHP-900+
 200515

Coaxial High Pass Filter

NHP-900+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	72.21	0.04	200.0	0.700
100.0	89.68	0.04	300.0	0.510
200.0	76.93	0.06	400.0	0.700
300.0	65.78	0.08	500.0	0.810
400.0	56.60	0.12	555.0	0.840
500.0	46.37	0.18	560.0	0.850
555.0	39.93	0.25	600.0	0.960
560.0	39.31	0.25	650.0	1.100
600.0	34.17	0.27	690.0	1.330
650.0	27.47	0.37	695.0	1.360
690.0	21.80	0.44	700.0	1.360
695.0	21.08	0.46	705.0	1.410
700.0	20.35	0.48	710.0	1.460
705.0	19.64	0.44	760.0	2.070
710.0	18.91	0.47	765.0	2.150
760.0	11.49	0.92	770.0	2.250
765.0	10.76	1.02	775.0	2.340
770.0	10.03	1.12	805.0	2.980
775.0	9.31	1.25	810.0	3.080
805.0	5.35	2.60	815.0	3.170
810.0	4.78	2.97	820.0	3.240
815.0	4.25	3.41	825.0	3.300
820.0	3.76	3.91	830.0	3.330
830.0	2.90	5.14	835.0	3.350
840.0	2.23	6.73	840.0	3.340
845.0	1.96	7.67	845.0	3.310
850.0	1.72	8.71	850.0	3.260
855.0	1.53	9.88	855.0	3.190
860.0	1.36	11.17	860.0	3.110
865.0	1.23	12.62	865.0	3.030
870.0	1.11	14.24	870.0	2.940
875.0	1.02	16.08	875.0	2.840
880.0	0.95	18.18	880.0	2.750
885.0	0.89	20.65	885.0	2.650
900.0	0.77	29.93	900.0	2.400
950.0	0.66	18.67	950.0	1.810
1000.0	0.60	17.72	1000.0	1.440
1050.0	0.54	19.19	1050.0	1.330
1100.0	0.50	21.19	1100.0	1.190
1150.0	0.47	22.82	1150.0	1.080
1200.0	0.45	23.54	1200.0	0.990
1250.0	0.45	23.39	1250.0	0.910
1300.0	0.44	22.60	1300.0	0.850
1350.0	0.43	21.70	1350.0	0.790
1400.0	0.43	20.69	1400.0	0.750
1450.0	0.43	19.80	1450.0	0.700
1500.0	0.44	19.04	1500.0	0.670
1550.0	0.45	18.36	1550.0	0.640
1600.0	0.46	17.89	1600.0	0.620
2000.0	0.50	17.31	2000.0	0.480
2500.0	0.49	19.55	2500.0	0.410
3000.0	0.56	18.45	3000.0	0.380

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NHP-900+
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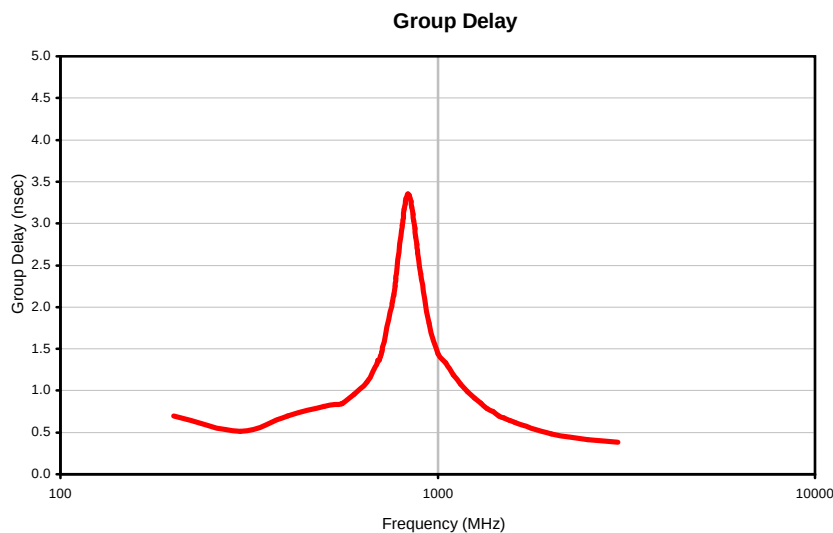
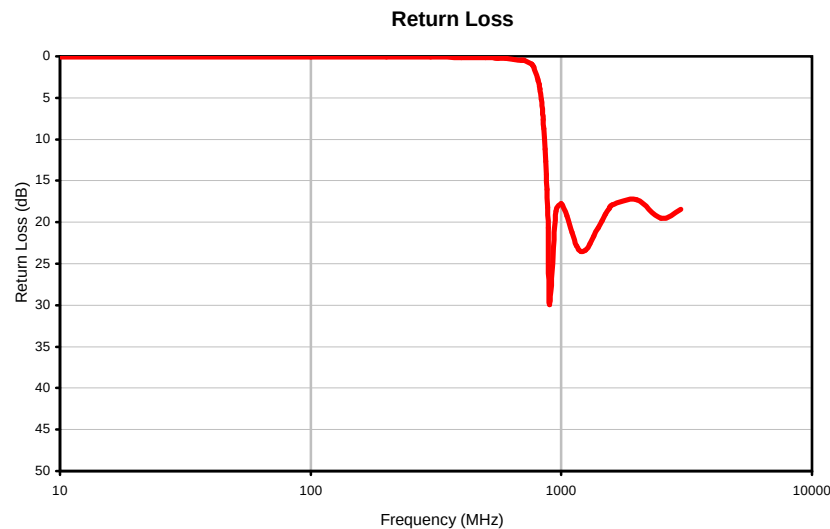
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Typical Performance Curves



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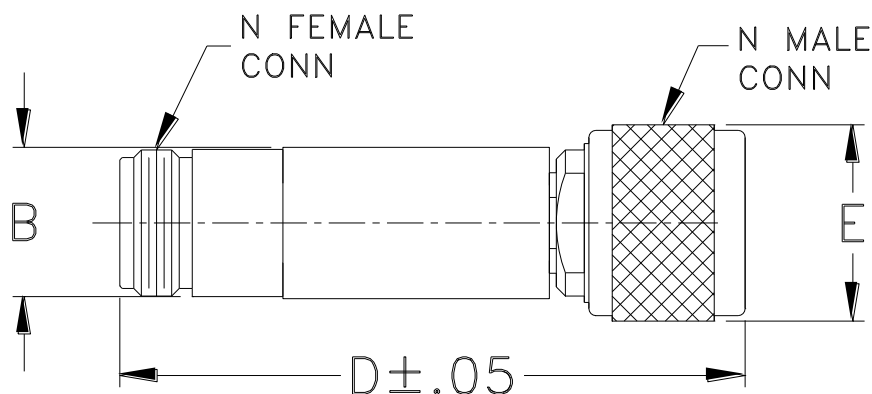


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NHP-900+
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Outline Dimensions



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