

Coaxial

High Pass Filter

50Ω 290 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-300+



Generic photo used for illustration purposes only

CASE STYLE: FF57

Connectors Model
N-Type NHP-300+

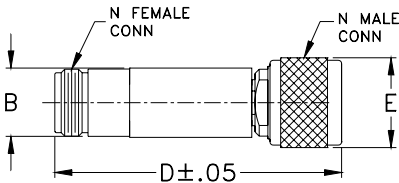
+RoHS Compliant

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 > 20 dB)	(loss < 3 dB)	(loss < 1.5 dB)
DC-145	145-190	245	290-3000
			17
			1.7

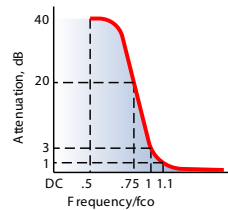
Outline Drawing



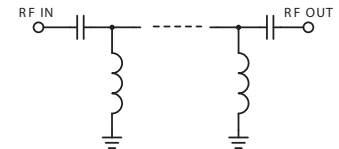
Outline Dimensions (inch/mm)

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

typical frequency response

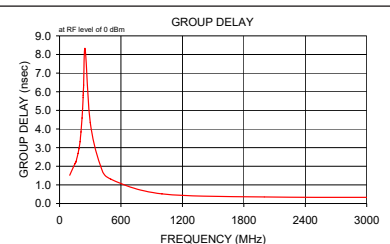
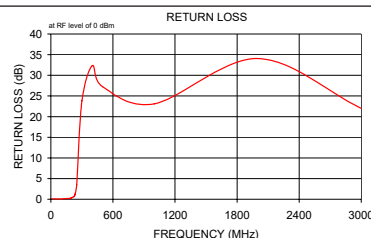
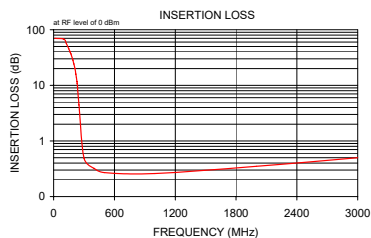


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
$\bar{x}$	σ			
10.00	70.05	4.53	100.00	1.52
100.00	67.77	0.48	125.00	1.84
125.00	56.38	0.52	150.00	2.14
150.00	45.47	0.61	159.00	2.24
159.00	41.59	0.66	160.00	2.25
160.00	41.15	0.66	161.00	2.24
162.00	40.29	0.67	162.00	2.25
163.00	39.86	0.67	163.00	2.28
164.00	39.43	0.67	164.00	2.29
170.00	36.88	0.71	170.00	2.45
180.00	32.65	0.77	180.00	2.69
190.00	28.46	0.84	190.00	2.94
200.00	24.28	0.90	200.00	3.32
210.00	20.10	0.98	210.00	3.84
220.00	15.91	1.05	220.00	4.59
225.00	13.82	1.08	225.00	5.09
230.00	11.75	1.10	230.00	5.69
231.00	11.35	1.11	231.00	5.81
232.00	10.94	1.11	232.00	5.94
233.00	10.53	1.11	233.00	6.08
234.00	10.13	1.10	234.00	6.22
235.00	9.74	1.10	235.00	6.36
236.00	9.34	1.10	236.00	6.50
250.00	4.46	0.85	250.00	8.29
300.00	0.49	0.02	300.00	4.35
400.00	0.32	0.03	400.00	2.02
500.00	0.27	0.03	500.00	1.31
1000.00	0.26	0.01	1000.00	0.52
2000.00	0.35	0.01	2000.00	0.35
3000.00	0.50	0.01	3000.00	0.33



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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 M151107
 NHP-300+
 200515

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NHP-300+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	70.05	0.11	100.0	1.520
100.0	67.77	0.08	125.0	1.840
125.0	56.38	0.14	150.0	2.140
150.0	45.47	0.17	159.0	2.240
159.0	41.59	0.17	160.0	2.250
160.0	41.15	0.18	162.0	2.250
162.0	40.29	0.18	163.0	2.280
163.0	39.86	0.18	164.0	2.290
164.0	39.43	0.18	170.0	2.450
170.0	36.88	0.19	180.0	2.690
180.0	32.65	0.21	190.0	2.940
190.0	28.46	0.26	200.0	3.320
200.0	24.28	0.33	205.0	3.560
205.0	22.20	0.38	206.0	3.620
206.0	21.78	0.39	207.0	3.670
207.0	21.35	0.40	208.0	3.720
208.0	20.94	0.41	209.0	3.780
209.0	20.52	0.42	210.0	3.840
210.0	20.10	0.44	211.0	3.900
211.0	19.68	0.44	212.0	3.970
212.0	19.26	0.46	220.0	4.590
220.0	15.91	0.61	225.0	5.090
225.0	13.82	0.75	228.0	5.440
228.0	12.58	0.86	229.0	5.560
229.0	12.16	0.91	230.0	5.690
230.0	11.75	0.96	232.0	5.940
232.0	10.94	1.07	233.0	6.080
233.0	10.53	1.13	234.0	6.220
234.0	10.13	1.20	235.0	6.360
235.0	9.74	1.27	236.0	6.500
236.0	9.34	1.35	250.0	8.290
250.0	4.46	3.58	252.0	8.410
252.0	3.91	4.13	254.0	8.480
254.0	3.41	4.76	256.0	8.490
256.0	2.96	5.48	258.0	8.430
258.0	2.56	6.28	260.0	8.320
260.0	2.21	7.17	262.0	8.160
262.0	1.90	8.15	264.0	7.960
264.0	1.64	9.22	266.0	7.740
266.0	1.43	10.39	268.0	7.490
268.0	1.25	11.65	270.0	7.230
270.0	1.09	13.02	272.0	6.960
274.0	0.87	16.07	274.0	6.700
300.0	0.49	23.84	300.0	4.350
400.0	0.32	32.34	400.0	2.020
500.0	0.27	27.26	500.0	1.310
600.0	0.27	22.13	600.0	0.970
700.0	0.27	20.48	700.0	0.770
800.0	0.27	20.41	800.0	0.650
900.0	0.27	21.41	900.0	0.570
1000.0	0.26	23.11	1000.0	0.520
1500.0	0.29	39.65	1500.0	0.390
2000.0	0.35	34.07	2000.0	0.350
2500.0	0.41	31.42	2500.0	0.340
3000.0	0.50	22.01	3000.0	0.330

REV. X1
NHP-300+
070628
Page 1 of 1



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant

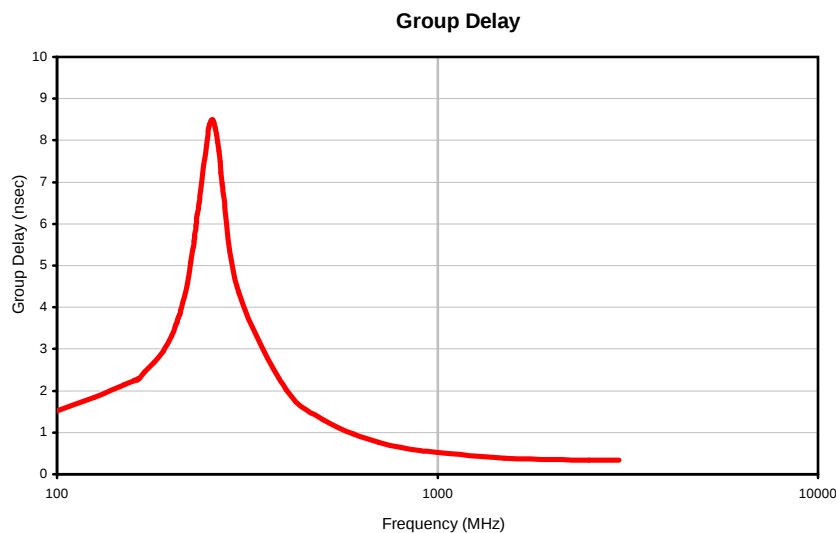
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Typical Performance Curves



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REV. X1
NHP-300+
070628
Page 1 of 1

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