

Coaxial High Pass Filter

50Ω 780 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-800+



Generic photo used for illustration purposes only

CASE STYLE: FF57

Connectors Model
N-Type NHP-800+

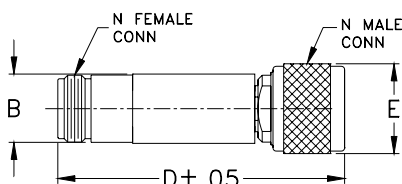
+RoHS Compliant

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 dB)	Stopband Typ.	Passband Typ.
DC-445	445-570	710	780-3000	17	2.1

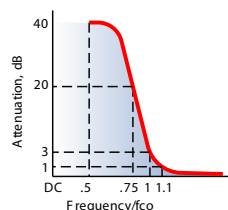
Outline Drawing



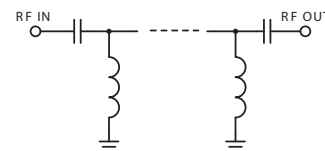
Outline Dimensions (inch)

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

typical frequency response

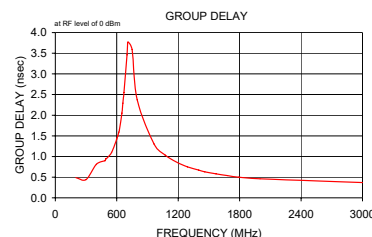
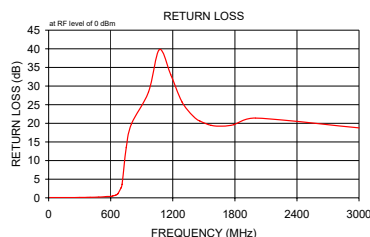
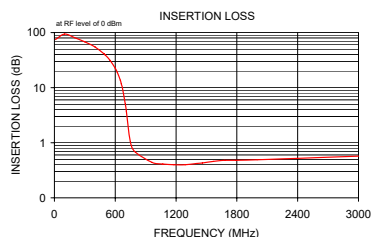


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
$\bar{x}$	σ			
10.00	74.59	6.84	200.00	0.49
100.00	94.26	7.80	300.00	0.44
200.00	80.68	1.20	400.00	0.81
300.00	68.07	0.23	485.00	0.90
400.00	54.92	0.50	490.00	0.92
485.00	41.80	0.71	495.00	0.95
490.00	41.00	0.71	500.00	0.95
495.00	40.19	0.72	550.00	1.10
500.00	39.38	0.73	600.00	1.42
550.00	31.17	0.81	610.00	1.50
600.00	22.58	0.88	620.00	1.59
620.00	19.06	0.91	625.00	1.64
650.00	13.62	0.95	650.00	2.05
660.00	11.79	0.95	660.00	2.29
670.00	9.98	0.94	670.00	2.55
700.00	5.03	0.77	700.00	3.46
710.00	3.71	0.66	710.00	3.77
750.00	1.03	0.15	750.00	3.59
800.00	0.67	0.03	800.00	2.37
965.00	0.44	0.01	965.00	1.30
1070.00	0.41	0.00	1070.00	1.04
1180.00	0.40	0.00	1180.00	0.87
1290.00	0.40	0.01	1290.00	0.75
1400.00	0.42	0.02	1400.00	0.67
1460.00	0.43	0.02	1460.00	0.63
1570.00	0.46	0.03	1570.00	0.58
1680.00	0.48	0.03	1680.00	0.54
1790.00	0.48	0.04	1790.00	0.50
2000.00	0.49	0.04	2000.00	0.46
3000.00	0.57	0.03	3000.00	0.37



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. D
M151107
NHP-800+
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Coaxial High Pass Filter

NHP-800+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	74.59	0.07	200.0	0.490
100.0	94.26	0.06	300.0	0.440
200.0	80.68	0.07	400.0	0.810
300.0	68.07	0.10	485.0	0.900
400.0	54.92	0.14	490.0	0.920
485.0	41.80	0.21	495.0	0.950
490.0	41.00	0.21	500.0	0.950
495.0	40.19	0.22	550.0	1.100
500.0	39.38	0.22	600.0	1.420
550.0	31.17	0.32	605.0	1.460
600.0	22.58	0.41	610.0	1.500
605.0	21.70	0.43	615.0	1.540
610.0	20.83	0.45	620.0	1.590
615.0	19.94	0.48	625.0	1.640
620.0	19.06	0.51	650.0	2.050
625.0	18.16	0.54	660.0	2.290
650.0	13.62	0.77	665.0	2.410
660.0	11.79	0.91	670.0	2.550
665.0	10.88	1.01	675.0	2.700
670.0	9.98	1.13	700.0	3.460
675.0	9.09	1.27	705.0	3.620
700.0	5.03	2.65	710.0	3.770
705.0	4.34	3.06	715.0	3.880
710.0	3.71	3.62	720.0	3.950
720.0	2.65	5.10	725.0	3.980
725.0	2.23	6.04	730.0	3.970
730.0	1.88	7.15	735.0	3.930
735.0	1.58	8.41	740.0	3.840
740.0	1.35	9.87	745.0	3.720
745.0	1.17	11.55	750.0	3.590
750.0	1.03	13.50	755.0	3.440
755.0	0.93	15.79	800.0	2.370
800.0	0.67	19.87	855.0	1.790
855.0	0.59	17.25	910.0	1.500
965.0	0.44	28.39	965.0	1.300
1020.0	0.42	43.71	1020.0	1.130
1070.0	0.41	39.79	1070.0	1.040
1130.0	0.40	36.26	1130.0	0.940
1180.0	0.40	33.07	1180.0	0.870
1240.0	0.40	28.88	1240.0	0.800
1290.0	0.40	25.70	1290.0	0.750
1350.0	0.41	23.36	1350.0	0.700
1400.0	0.42	21.82	1400.0	0.670
1460.0	0.43	20.66	1460.0	0.630
1510.0	0.45	19.99	1510.0	0.600
1570.0	0.46	19.47	1570.0	0.580
1620.0	0.47	19.29	1620.0	0.560
1680.0	0.48	19.23	1680.0	0.540
1730.0	0.48	19.40	1730.0	0.520
1790.0	0.48	19.63	1790.0	0.500
1850.0	0.48	20.06	1850.0	0.490
2000.0	0.49	21.39	2000.0	0.460
2500.0	0.48	21.88	2500.0	0.400
3000.0	0.57	18.79	3000.0	0.370

REV. X1
NHP-800+
070628
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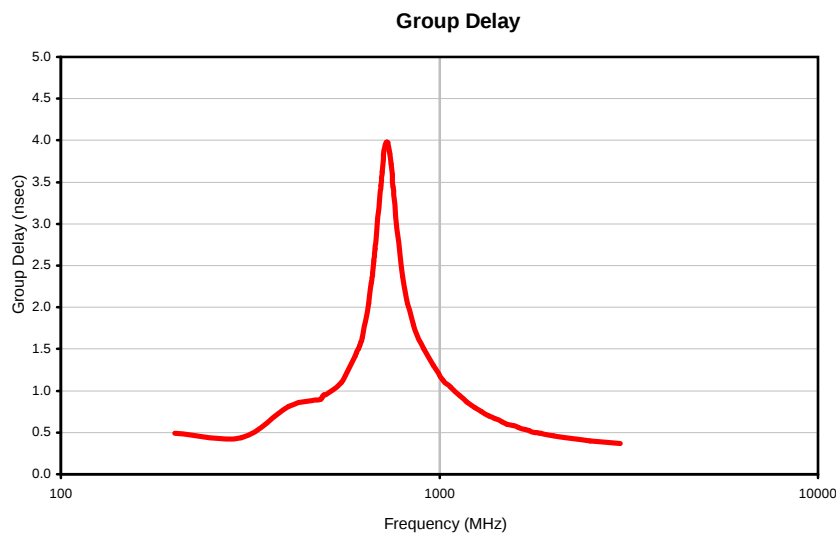
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Typical Performance Curves



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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