

High Pass Filter

50Ω 700 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 BHP models available with wide selection of fco

Applications

- lab use
- transmitters/receivers
- radio communications

BHP-700+



Generic photo used for illustration purposes only

CASE STYLE: FF55

Connectors	Model
BNC	BHP-700+

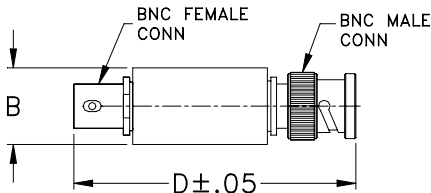
+RoHS Compliant

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

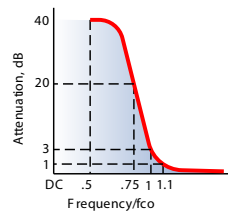
High Pass Filter Electrical Specifications

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-400	400-520	640	700-3000	17	1.6

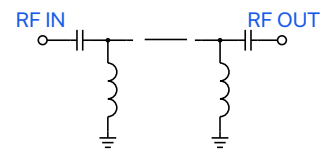
Outline Drawing



typical frequency response



electrical schematic

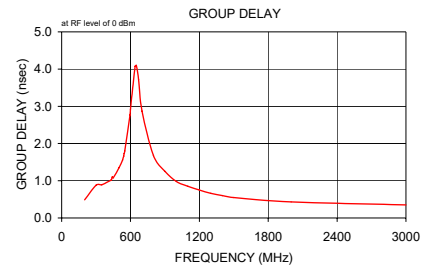
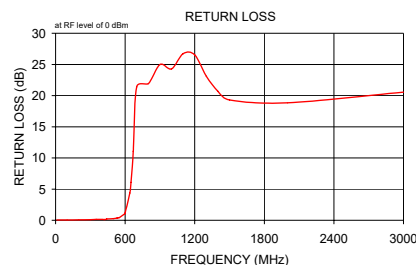
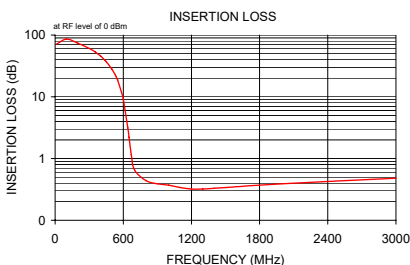


Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ			
10.00	71.13	3.73	0.05	200.00	0.49
100.00	86.10	2.60	0.05	300.00	0.88
200.00	73.72	0.25	0.07	350.00	0.89
300.00	60.72	0.42	0.10	400.00	0.97
350.00	53.62	0.27	0.15	425.00	1.01
400.00	45.60	0.35	0.15	433.00	1.02
425.00	41.41	0.44	0.12	441.00	1.10
441.00	38.65	0.51	0.20	450.00	1.08
450.00	37.09	0.54	0.22	500.00	1.35
500.00	28.11	0.74	0.26	530.00	1.55
530.00	22.58	0.88	0.36	535.00	1.61
540.00	20.70	0.93	0.40	540.00	1.66
545.00	19.75	0.96	0.42	545.00	1.73
550.00	18.80	0.98	0.44	550.00	1.80
595.00	10.16	1.20	1.01	595.00	2.77
600.00	9.24	1.21	1.17	600.00	2.92
640.00	3.13	0.83	4.36	640.00	4.07
650.00	2.21	0.63	6.07	650.00	4.10
670.00	1.15	0.28	11.07	670.00	3.72
700.00	0.65	0.04	21.39	700.00	2.87
800.00	0.44	0.01	21.92	800.00	1.68
900.00	0.39	0.02	24.99	900.00	1.25
1000.00	0.37	0.02	24.30	1000.00	0.98
1100.00	0.34	0.01	26.73	1100.00	0.85
1200.00	0.32	0.01	26.52	1200.00	0.75
1300.00	0.32	0.01	23.09	1300.00	0.66
1400.00	0.33	0.02	20.67	1400.00	0.60
1500.00	0.34	0.02	19.29	1500.00	0.55
2000.00	0.39	0.02	18.85	2000.00	0.43
3000.00	0.48	0.02	20.55	3000.00	0.35

Outline Dimensions (inch/mm)

B	D	wt
.57	2.59	grams
14.47	65.79	40.0



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



Coaxial High Pass Filter

BHP-700+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	71.13	0.05	200.0	0.490
100.0	86.10	0.05	300.0	0.880
200.0	73.72	0.07	350.0	0.890
300.0	60.72	0.10	400.0	0.970
350.0	53.62	0.15	425.0	1.010
400.0	45.60	0.15	433.0	1.020
425.0	41.41	0.12	441.0	1.100
433.0	40.02	0.13	450.0	1.080
441.0	38.65	0.20	500.0	1.350
450.0	37.09	0.22	530.0	1.550
500.0	28.11	0.26	535.0	1.610
530.0	22.58	0.36	540.0	1.660
535.0	21.64	0.38	545.0	1.730
540.0	20.70	0.40	550.0	1.800
545.0	19.75	0.42	580.0	2.380
550.0	18.80	0.44	585.0	2.500
580.0	13.02	0.70	590.0	2.630
585.0	12.06	0.78	595.0	2.770
590.0	11.10	0.88	600.0	2.920
600.0	9.24	1.17	605.0	3.070
605.0	8.33	1.35	620.0	3.570
620.0	5.79	2.20	625.0	3.720
630.0	4.33	3.09	630.0	3.870
635.0	3.69	3.67	635.0	3.990
640.0	3.13	4.36	640.0	4.070
645.0	2.63	5.15	645.0	4.110
650.0	2.21	6.07	650.0	4.100
655.0	1.86	7.12	655.0	4.050
660.0	1.57	8.30	660.0	3.970
665.0	1.34	9.61	665.0	3.850
670.0	1.15	11.07	670.0	3.720
675.0	1.01	12.66	675.0	3.570
680.0	0.89	14.38	680.0	3.420
700.0	0.65	21.39	700.0	2.870
750.0	0.51	20.03	750.0	2.060
800.0	0.44	21.92	800.0	1.680
850.0	0.40	25.07	850.0	1.430
900.0	0.39	24.99	900.0	1.250
950.0	0.39	24.13	950.0	1.110
1000.0	0.37	24.30	1000.0	0.980
1050.0	0.36	25.32	1050.0	0.920
1100.0	0.34	26.73	1100.0	0.850
1150.0	0.33	27.25	1150.0	0.800
1200.0	0.32	26.52	1200.0	0.750
1250.0	0.32	24.63	1250.0	0.700
1300.0	0.32	23.09	1300.0	0.660
1350.0	0.33	21.69	1350.0	0.630
1400.0	0.33	20.67	1400.0	0.600
1450.0	0.33	19.84	1450.0	0.580
1500.0	0.34	19.29	1500.0	0.550
2000.0	0.39	18.85	2000.0	0.430
2500.0	0.40	21.19	2500.0	0.380
3000.0	0.48	20.55	3000.0	0.350

REV. X1
BHP-700+
070628
Page 1 of 1



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

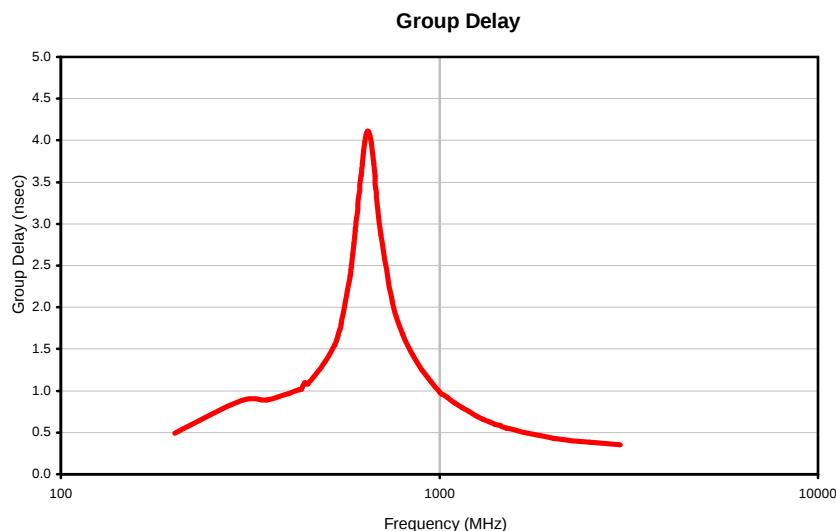
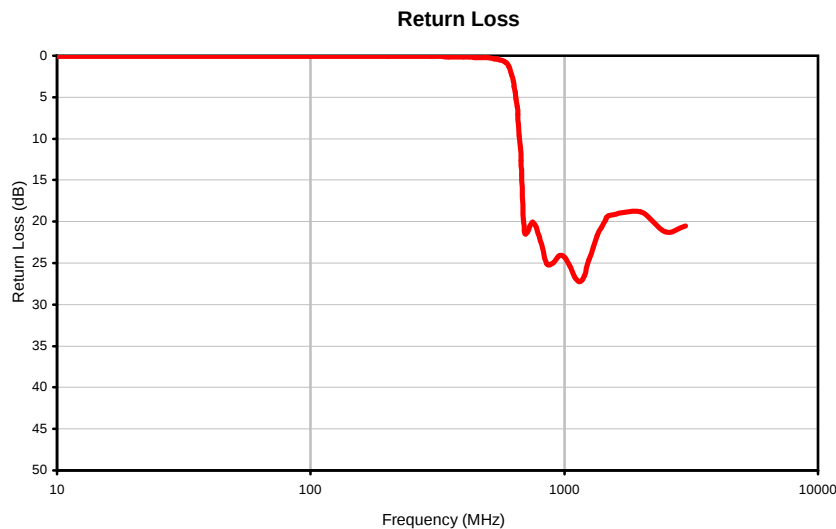
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



Typical Performance Curves



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

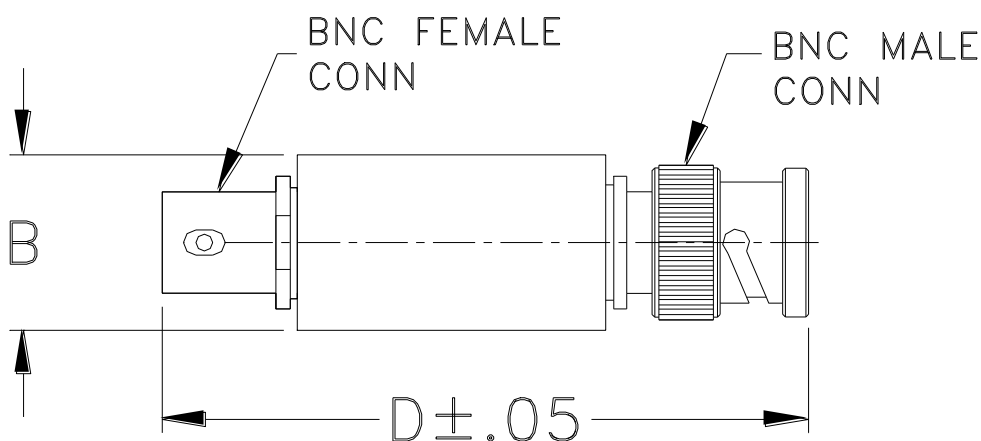


The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



REV. X1
BHP-700+
070628
Page 1 of 1

Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF55	--	.57 (14.47)	--	2.59 (65.79)	--	40.0

Dimensions are in inches (mm). Tolerances: 2Pl. +.03/-.04; 3Pl. ± .015

Note:

- 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