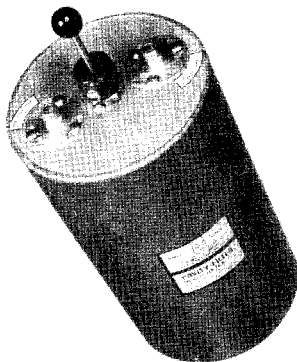


BANDPASS CAVITY FILTERS

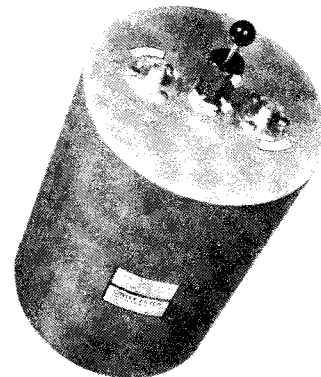
VHF

UHF

- TEMPERATURE STABLE
- FIELD TUNEABLE
132-174 & 406-512 MHz
- ADJUSTABLE LOOPS
0.5 thru 3.0 dB
- HI-Q DESIGN



CP 450-701 N



CP 450-101 N

MICROWAVE ASSOCIATES BANDPASS CAVITY FILTERS:

- were designed to be the most effective tool available to eliminate transmitter intermodulation whenever a frequency separation of approximately 1.5 MHz or more exists between the desired and undesired signals.
- will reduce or eliminate other forms of interference such as transmitter side band noise, and transmitter spurious radiations.

7 INCH

CP 150-701 N CP 150-702 N CP 150-703 N
Single Dual Triple

Loop Setting \ Deviation	.5	1.0	3.0	1.0	2.0	1.5	3.0
100 KHz	1.0	3.2	8.7	1.9	8.3	3.0	12.3
150 KHz	2.0	5.3	12.0	2.9	13.0	5.0	20.5
200 KHz	2.9	7.0	14.2	4.7	18.0	7.8	28.0
300 KHz	4.7	9.7	17.0	11.8	25.0	19.3	40.0
500 KHz	9.0	14.0	21.5	21.5	33.5	34.0	53.5
1 MHz	14.2	19.9	28.0	34.0	44.5	53.0	70.5
3 MHz	22.8	28.5	36.5	50.0	64.5	85.0	97.0
5 MHz	26.5	33.0	40.8	61.0	73.0	92.0	—
10 MHz	33.5	39.0	45.5	70.0	85.0	—	—
Max Power Input (W)	350	180	90	350	180	350	180

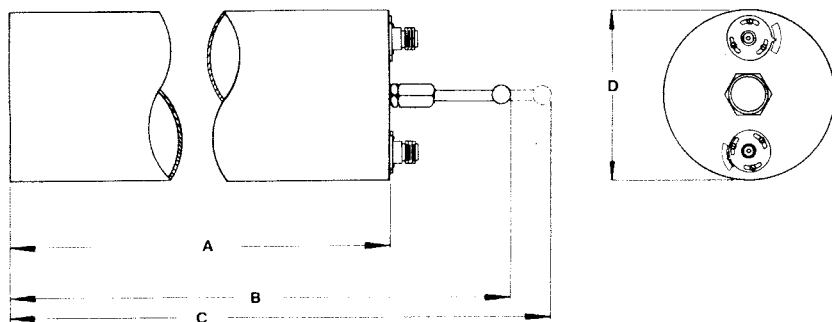
10 INCH

CP 150-101 N CP 150-102 N CP 150-103 N
Single Dual Triple

Loop Setting \ Deviation	.5	1.0	3.0	1.0	2.0	1.5	3.0
100 KHz	2.1	4.7	12.2	2.9	9.1	4.1	13.0
150 KHz	3.0	6.8	15.7	7.0	15.2	10.7	22.6
200 KHz	4.5	9.5	18.3	11.3	19.3	17.8	29.8
300 KHz	6.8	11.3	21.7	16.5	27.5	25.4	43.0
500 KHz	10.5	16.4	26.0	27.5	37.2	40.0	58.0
1 MHz	16.1	22.3	31.5	38.8	48.0	55.5	76.0
3 MHz	26.2	31.5	39.3	56.5	69.5	77.0	92
5 MHz	30.5	36.0	46.0	66.7	78.0	87.0	—
10 MHz	36.0	42.0	51.5	78.5	90.0	—	—
Max Power Input (W)	400	210	90	400	210	400	210

Freq. Range	132-174-MHz
Insertion Loss	Adjustable
Temp Range	-40° thru 70° C
Freq. Stability	0.6 ppm/°C Typical 1.0 ppm/°C Maximum
Connections	N Female
Materials:	
Outer Conductor	Aluminum
Inter Conductor	Silverplated Copper & Brass
Tuning Rod	INVAR
End Plates	Aluminum
Coupling Loops	Silverplated Copper

This high-Q cavity shares the same sturdy characteristics and is available in the same configurations as its UHF counterpart. Uniquely designed, it provides frequency stability over the entire temperature range and reduces interference under the severest conditions.



Model \ Dimensions	A	B	C	D
CP 150-701 N	24	27	32	7
CP 150-101 N	26.5	30	35	10
CP 450-701 N	12	14.5	17	7
CP 450-101 N	14	17.5	20	10

		7 INCH						
		CP 450-701 N Single		CP 450-702 N Dual		CP 450-703 N Triple		
Loop Setting	Deviation	.5	1.0	3.0	1.0	2.0	1.5	3.0
100 KHz		0.9	1.9	5.5	1.2	3.7	2.0	6.0
150 KHz		1.5	2.5	6.7	1.5	5.3	2.5	7.4
200 KHz		1.9	3.3	8.8	2.4	6.5	4.0	9.9
300 KHz		2.7	4.8	12.9	5.4	12.9	8.1	20.8
500 KHz		4.6	8.4	18	10	20.5	16.5	35.7
1 MHz		9.3	14.1	23.5	22	31.8	35.9	52.5
3 MHz		18	24.5	34	40.5	51	63.0	81
5 MHz		23	30	40	48.3	61	75	—
10 MHz		30	34	42	61.0	75	—	—
Max Power Input (W)		300	160	75	300	160	300	160

		10 INCH						
		CP 450-101 N Single		CP 450-102 N Dual		CP 450-103 N Triple		
Loop Setting	Deviation	.5	1.0	3.0	1.0	2.0	1.5	3.0
100 KHz		1.0	2.1	7.5	1.5	3.7	2.5	5.7
150 KHz		1.5	3.5	13.0	1.9	6.7	3.5	10.3
200 KHz		2.0	4.9	14.2	4.0	9.9	6.2	14.7
300 KHz		3.5	6.3	16.4	7.2	14.6	10.5	18.5
500 KHz		6.0	9.7	20.5	13.0	22.5	19.0	35.5
1 MHz		11.3	16.5	26.2	24.5	36.5	38.5	55
3 MHz		20.5	26.0	37.0	45	55	67.5	84
5 MHz		25.2	30.3	40.0	53	64	81	—
10 MHz		30.5	34.2	45.5	65	77	—	—
Max Power Input (W)		350	180	90	350	180	350	180

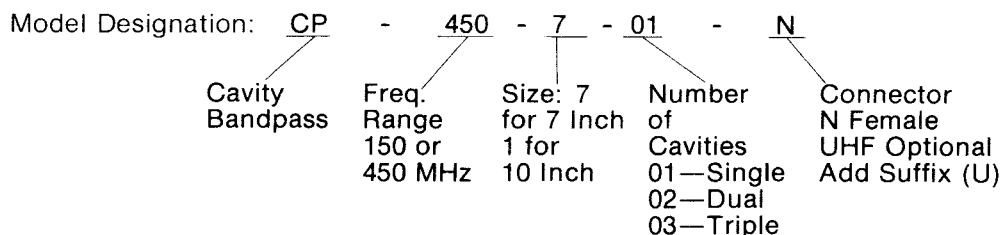
Freq. Range	406-512-MHz
Insertion Loss	Adjustable
Temp Range	-40° thru 70° C
Freq. Stability	0.4 ppm/°C Typical 0.87 ppm/°C Max.
Connections	N Female
Materials:	
Outer Conductor	Aluminum
Inter Conductor	Silverplated Copper & Brass
Tuning Rod	INVAR
End Plates	Aluminum
Coupling Loops	Silverplated Copper

One model covers the entire 406 to 512 MHz range. The cavity, available in one, two or three cavity combinations, may be mounted in any position. The two and three cavity combinations are shipped complete with all interconnect cables, mounting brackets and hardware.

Our temperature stability is achieved by the proper geometric combining of metals to achieve a temperature stability approximately one-half that of INVAR; which is 1.6 ppm/°C.

Select by model number; please specify frequency and loop setting desired for factory adjusted unit ready for use and installation.

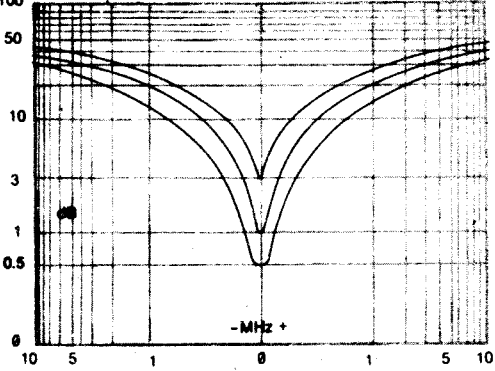
All units not specified will ship with 1dB loops at either 160 MHz or 460 MHz.



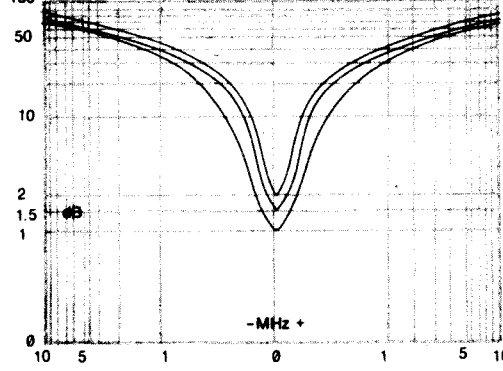
M/A-COM LAND MOBILE COMMUNICATIONS INCORPORATED

RESPONSE CHARACTERISTICS:

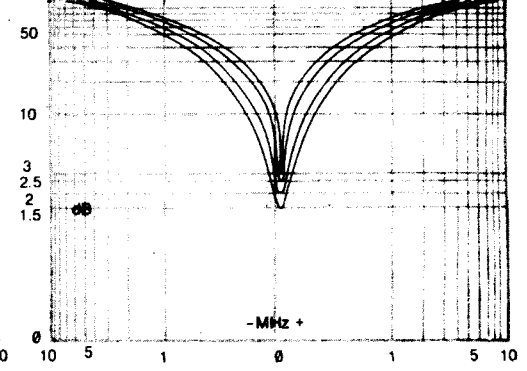
CP 150-701 N



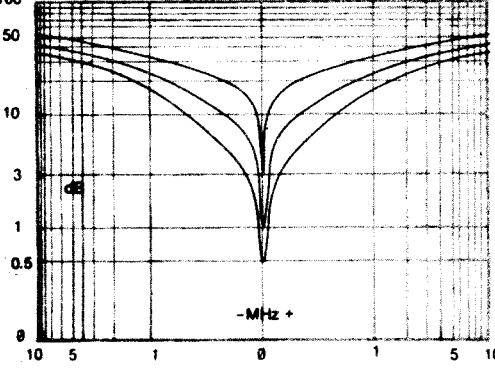
CP 150-702 N



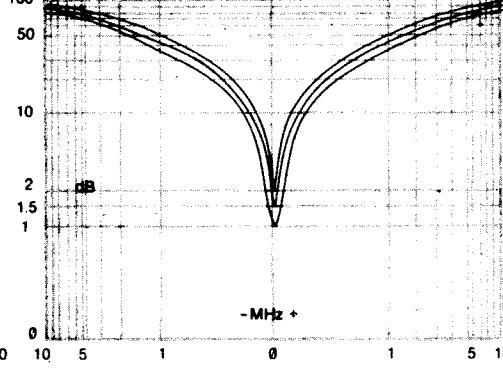
CP 150-703 N



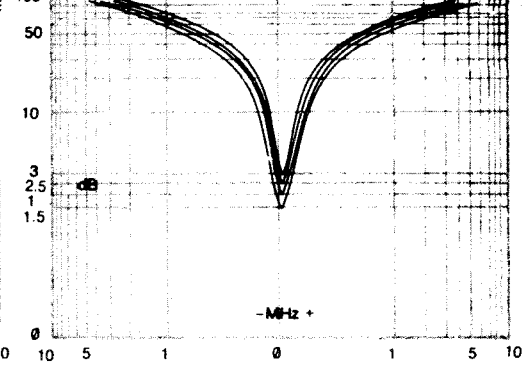
CP 150-101 N



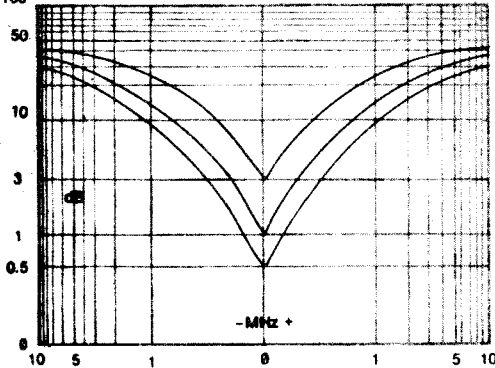
CP 150-102 N



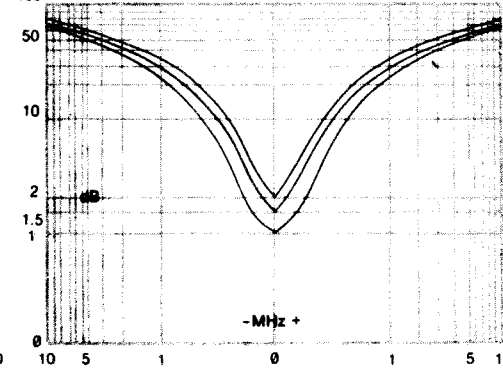
CP 150-103 N



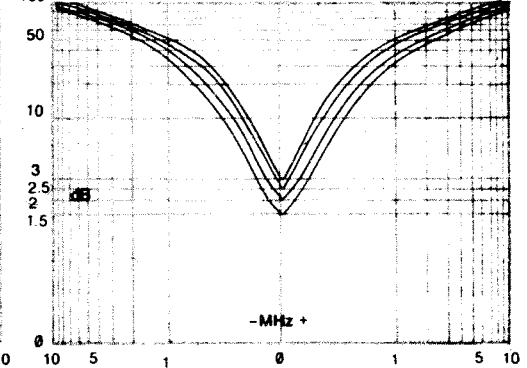
CP 450-701 N



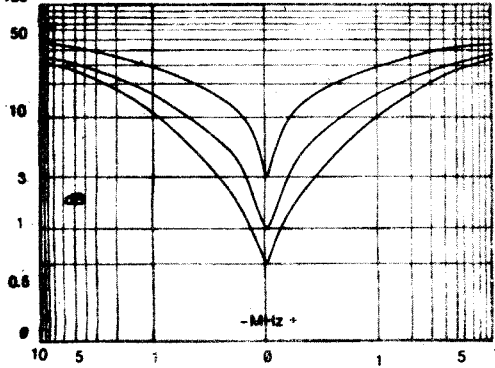
CP 450-702 N



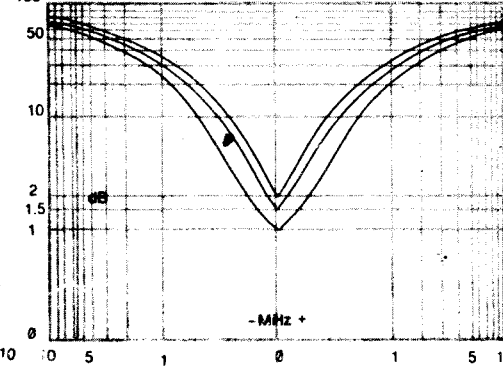
CP 450-703 N



CP 450-101 N



CP 450-102 N



CP 450-103 N

