

## BAND PASS-BAND REJECT BASE STATION FILTERS

### FVN Series • 60 - 960 MHz



**Fiplex** FVN Series, are versatile single, dual or triple cavities bandpass-bandreject filters. They are intended to "protect" the received signal from a jamming carrier. Also, the filtering response make them adequate to reduce the noise emission at some specific lateral and narrow bandwidth. Two versions are available: 4" O.D. cavities ("L" type) and 7" O.D. cavities ("N" type). Models FVN 90-2/3 and FVN 90-3/3 use  $\frac{3}{4}$  wavelength coaxial resonators. Cavity outer conductors are made of 6063-T6 aluminum, anodine passivated to avoid corrosion. Copper inner lines are silver plated in order to get a long life performance. Standard connectors are N female. Other connector types are available upon request. For other than specified, please contact the factory or sales offices.



FVN15-2L



FVN15-2N



FVN45-3N

<b>ELECTRICAL SPECIFICATIONS</b>	<b>FVN07-2L</b>	<b>FVN07-2N</b>	<b>FVN10-1N</b>	<b>FVN10-1NH</b>
Frequency Range - MHz	70 - 90	70 - 90	88 - 108	88 - 108
Continuous Power Input, Max - W.	250	250	1000	3000
Cavity O.D., in inches	4	4	7	7
Separation Pass-Reject. - MHz	0.4 3.0	0.4 3.0	Contact Factory	Contact Factory
Insertion Loss at fo - dB	1.5 1.0	1.5 0.9		
Rejection ( undesired freq.) - dB	70 85	70 85		
RL - dB	22	22	22	22
Connectors, Standard Type	N(f)	N(f)	EIA 7/8	EIA 7/8
Connectors, Optional	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)	N(f) ; DIN 7/16	EIA 1 5/8
Temperature range - °C	- 30 to + 60	- 30 to + 60	- 30 to + 60	- 30 to + 60

<b>MECHANICAL SPECIFICATIONS</b>	<b>FVN07-2L</b>	<b>FVN07-2N</b>	<b>FVN10-1N</b>	<b>FVN10-1NH</b>
Height - in (mm)	54.0(1370.0)	54.0(1370.0)	53.0(1340.0)	53.0(1340.0)
Width - in (mm)	19.9(483.0)	19.9(483.0)	7.0(177.0)	7.0(177.0)
Depth - in (mm)	5.0(127.0)	8.0(203.0)	7.0(177.0)	7.0(177.0)
Weight - lbs ( kg)	17.6(8.0)	20.2(9.2)	20.2(9.2)	33.0(15.0)

<b>ELECTRICAL SPECIFICATIONS</b>	<b>FVN15-2L</b>	<b>FVN15-3L</b>	<b>FVN15-1N</b>	<b>FVN15-2N</b>
Frequency Range - MHz	136 - 174	136 - 174	136 - 174	136 - 174
Continuous Power Input, Max - W.	250	250	250	250
Cavity O.D., in inches	4	4	7	7
Separation Pass-Reject. - MHz	0.6 1.5	0.5 0.8	0.5 1.0	0.5 1.0
Insertion Loss at fo - dB	1.5 1.2	1.5 1.3	1.2 1.2	1.2 1.2
Rejection ( undesired freq.) - dB	70 85	70 85	35 42	70 85
RL - dB	22	22	22	22
Connectors, Standard Type	N(f)	N(f)	N(f)	N(f)
Connectors, Optional	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)
Temperature range - °C	- 30 to + 60	- 30 to + 60	- 30 to + 60	- 30 to + 60

<b>MECHANICAL SPECIFICATIONS</b>	<b>FVN15-2L</b>	<b>FVN15-3L</b>	<b>FVN15-1N</b>	<b>FVN15-2N</b>
Height - in (mm)	36.0(915.0)	36.0(915.0)	36.0(915.0)	36.0(915.0)
Width - in (mm)	19.0(483.0)	19.0(483.0)	19.0(483.0)	19.0(483.0)
Depth - in (mm)	5.0(127.0)	5.0(127.0)	8.0(203.0)	8.0(203.0)
Weight - lbs ( kg)	11.5(5.2)	14.8(6.7)	9.3(4.2)	15.0(6.8)

<b>ELECTRICAL SPECIFICATIONS</b>	<b>FVN15-3N</b>	<b>FVN25-2L</b>	<b>FVN25-3L</b>	<b>FVN35-2L</b>
Frequency Range - MHz	136 - 174	220 - 280	220 - 280	300 - 400
Continuous Power Input, Max - W.	250	250	250	250
Cavity O.D., in inches	7	4	4	4
Separation Pass-Reject. - MHz	0.27 0.5	1.0 3.0	0.7 3.0	3.0 5.0
Insertion Loss at fo - dB	2.2 2.2	1.2 1.2	1.4 1.2	0.9 0.9
Rejection ( undesired freq.) - dB	80 95	75 90	70 95	80 90
RL - dB	22	22	22	22
Connectors, Standard Type	N(f)	N(f)	N(f)	N(f)
Connectors, Optional	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)
Temperature range - °C	- 30 to + 60	- 30 to + 60	- 30 to + 60	- 30 to + 60

<b>MECHANICAL SPECIFICATIONS</b>	<b>FVN15-3N</b>	<b>FVN25-2L</b>	<b>FVN25-3L</b>	<b>FVN35-2L</b>
Height - in (mm)	36.0(915.0)	27.0(686.0)	27.0(686.0)	17.0(432.0)
Width - in (mm)	19.0(483.0)	19.0(483.0)	19.0(483.0)	19.0(483.0)
Depth - in (mm)	16.0(406.0)	5.0(127.0)	5.0(127.0)	5.0(127.0)
Weight - lbs ( kg)	21.3(9.7)	11.0(5.0)	13.5(6.1)	10.4(4.7)

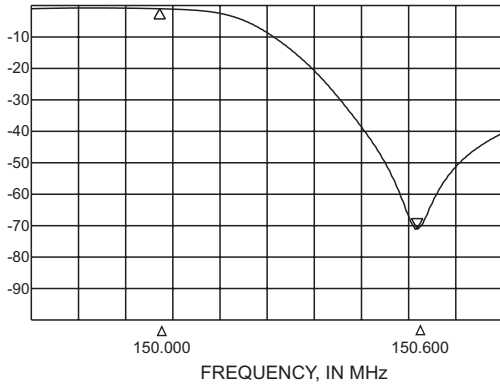
<b>ELECTRICAL SPECIFICATIONS</b>	<b>FVN45-2L</b>	<b>FVN45-3L</b>	<b>FVN45-1N</b>	<b>FVN45-2N</b>
Frequency Range - MHz	400 – 520	400 – 520	400 – 520	400 – 520
Continuous Power Input, Max – W.	250	250	250	250
Cavity O.D., in inches	4	4	7	7
Separation Pass-Reject. - MHz	3.0 5.0	1.0 3.0	1.0 3.0	1.0 3.0
Insertion Loss at fo – dB	0.9 0.9	1.5 1.0	0.6 0.5	1.2 1.1
Rejection ( undesired freq.) - dB	80 90	75 95	35 42	70 85
RL - dB	22	22	22	22
Connectors, Standard Type	N(f)	N(f)	N(f)	N(f)
Connectors, Optional	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)
Temperature range - °C	- 30 to + 60	- 30 to + 60	- 30 to + 60	- 30 to + 60

<b>MECHANICAL SPECIFICATIONS</b>	<b>FVN45-2L</b>	<b>FVN45-3L</b>	<b>FVN45-1N</b>	<b>FVN45-2N</b>
Height – in (mm)	16.0(406.0)	16.0(406.0)	16.0(406.0)	16.0(406.0)
Width – in (mm)	19.0(483.0)	19.0(483.0)	19.0(483.0)	19.0(483.0)
Depth – in (mm)	5.0(127.0)	5.0(127.0)	8.0(203.0)	8.0(203.0)
Weight – lbs ( kg)	6.2(2.8)	8.4(3.8)	5.8(2.6)	7.7(3.5)

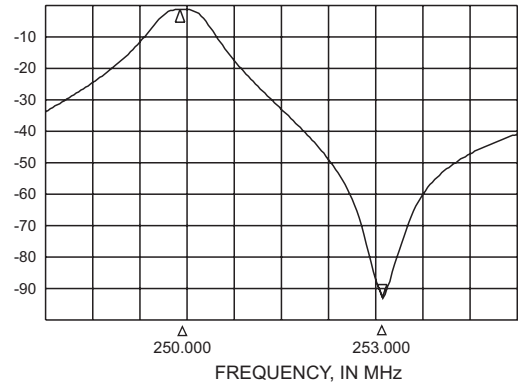
<b>ELECTRICAL SPECIFICATIONS</b>	<b>FVN45-3N</b>	<b>FVN90-2/3L</b>
Frequency Range - MHz	400 – 520	400 – 520
Continuous Power Input, Max – W.	250	250
Cavity O.D., in inches	7	7
Separation Pass-Reject. - MHz	0.6 1.0	3.6 25
Insertion Loss at fo – dB	1.3 1.2	1.5 0.7
Rejection ( undesired freq.) - dB	70 95	70 95
RL - dB	22	22
Connectors, Standard Type	N(f)	N(f)
Connectors, Optional	BNC(f) ; UHF(f)	BNC(f) ; UHF(f)
Temperature range - °C	- 30 to + 60	- 30 to + 60

<b>MECHANICAL SPECIFICATIONS</b>	<b>FVN45-3N</b>	<b>FVN90-2N</b>
Height – in (mm)	16.0(406.0)	20.0(508.0)
Width – in (mm)	19.0(483.0)	19.0(483.0)
Depth – in (mm)	16.0(406.0)	5.0(127.0)
Weight – lbs ( kg)	16.1(7.3)	10.4(4.7)

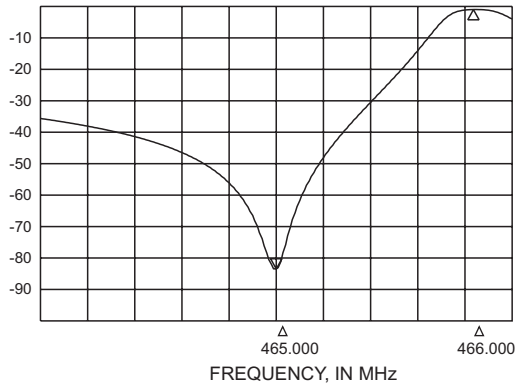
FVN15-2L • TYPICAL RESPONSE CURVES  
0.6 KHz split



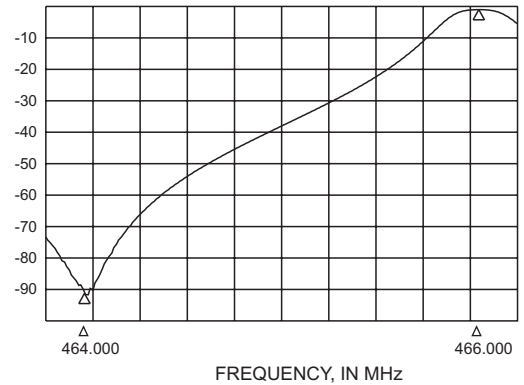
FVN25-2L • TYPICAL RESPONSE CURVES  
3.0 MHz split



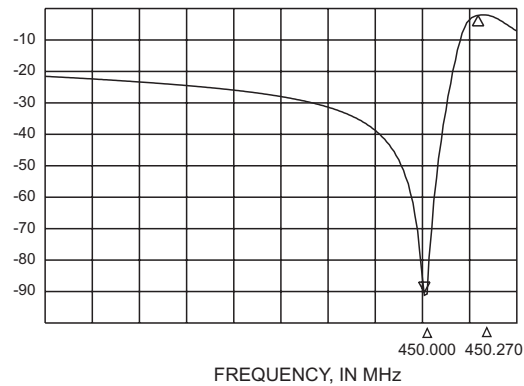
FVN15-2N • TYPICAL RESPONSE CURVES  
1.0 MHz split



FVN15-2N • TYPICAL RESPONSE CURVES  
2.0 MHz split



FVN15-3N • TYPICAL RESPONSE CURVES  
270 KHz split



FVN15-3N • TYPICAL RESPONSE CURVES  
1.0 MHz split

