

Cavity Filters Low Band, Aviation, and VHF Bandpass Cavities FP20207 Series

1-1 Cavity filter, bandpass, high Q, two 7" cavities, 108-114 MHz

Also referred as: FP20207\*1

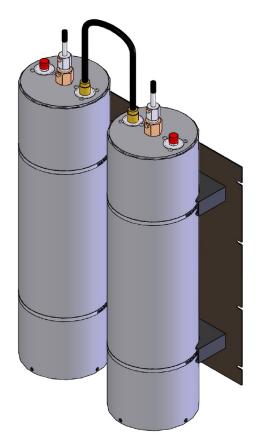
- Aluminum cylinder with brass and copper coaxial inner conductor
- Silver plating and chromate conversion coating limit corrosion and enhance performance
- · Two temperature compensated bandbass cavities with extremely low frequency drift

Sinclair's FP series cavity filters are the building blocks of the finest antenna systems. These filters pass a band of frequencies while attenuating frequencies on either side of the desired frequency band. The insertion loss of the passband may be preset at the factory or adjusted in the field. The amount of attenuation (selectivity) can be increased by increasing the insertion loss or using multiple cavities in series. Filter design must recognize the extremely close tolerances required to assure flawless performance over temperature when small variations in electrical wavelength mean significant changes in frequency response curves. Consequently, Sinclair engineers have carefully adapted the FP series filters for a variety of applications in the low band, VHF, UHF and 806-960 frequency ranges.

The FP series band pass filters are designed to:

•Protect one receiver further from front-end overload by carriers of co-located transmitters.

Suppress IM generation in one transmitter by protecting it further from incoming carriers of co-located transmitters (usually in conjunction with a ferrite isolator).
Suppress sideband noise of a single transmitter on co-located receiver frequencies.
Generally, "Protect One from Many."



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Product Specification Sheet EPR 018968		FP20207-1-1	Issue: 0	Dated: 04-10-17 Dated: 04-10-17
Customer Tech Manual 005066		Sinclair's commitment to product leadership may result in improvement or change to this product		



Electrical Specifications		
Frequency Range	MHz	108 to 114
Input Connectors		N-Female
Output Connectors		N-Female
Input VSWR (max)		1.5:1
Insertion loss (adjustable)	dB	1 to 3
Impedance	Ω	50
Average Power Input (max)	W	350W @ 1.2db, 185W @ 2.2db

## **Mechanical Specifications**

Electrical Specifications

Width	in (mm)	19 (483)
Depth	in (mm)	7 (178)
Length/ Height	in (mm)	43.75 (1111)
Finish		chemical conversion
Weight	lbs (kg)	27 (12.26)
Mounting configurations		19 inch rack
Actual shipping weight	lbs (kg)	35 (15.89)
Shipping dimensions	in (mm)	45x23x12 (1143x584x305)

## Ordering Information

Specify insertion loss and pass frequency when ordering.

## **Environmental Specifications**

Temperature range	°F (°C)	-22 to +140 (-30 to +60)		

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Product Specification Sheet EPR 018968 Customer Tash Manual 005056		FP20207-1-1	Issue: 0	Dated: 04-10-17 Dated: 04-10-17
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