FP30207-3 Cavity filter, bandpass, high Q, two 7" cavities, 406-512 MHz

- · Aluminum cylinder with brass and copper coaxial inner conductor
- · Silver plating and chromate conversion coating limit corrosion and enhance performance
- · Temperature compensated for 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.

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
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com

Dated: 18-03-15 Dated: 26-09-13 Temperature range



Cavity Filters UHF and Tetra Bandpass Cavities FP30207 Series

*1:350W @ 0.5dB/185W @ 1dB/80W @3dB

Notes

A Norsat Company Norsat

Frequency Range	MHz	406 to 512	
VSWR (max)	1.5:1		
Insertion Loss (max)	dB	6	
Impedance	Ω	50	
Number of Cavities		2	
Average Power Input (max)	W	80-350	**
Input Connectors	N-Female		
Output Connectors	N-Female		
land attack to the land	dB 1		
insertion loss (min)	ub		
	dВ	6	
Insertion loss (min) Insertion loss (max) Tx to Ant Mechanical Specifications Depth		7 (178)	
Insertion loss (max) Tx to Ant Mechanical Specifications Depth	dB		
Insertion loss (max) Tx to Ant Mechanical Specifications Depth Length/ Height	dB in (mm)	7 (178)	
Insertion loss (max) Tx to Ant Mechanical Specifications Depth Length/ Height Width	dB in (mm) in (mm)	7 (178) 10 (254)	
Insertion loss (max) Tx to Ant Mechanical Specifications Depth	dB in (mm) in (mm) in (mm)	7 (178) 10 (254) 19 (483)	

°F (°C)

°F	$\overline{\mathcal{U}}$
-10	1
-20	
(9) -30 —	
Attenuation (dB)	Both Cavities 0.5 dB
	Both Cavities 1.0 dB
-50	
	~~~

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world	
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165	
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com	
Product Specification Sheet EPR 018279		FP30207-3	Issue: 17	Dated: 18-03-15 Dated: 26-09-13	
Customer Tech Manual 005066		Sinclair's commitment to product leadership may result in improvement or change to this product			

-22 to +140 (-30 to +60)