



This series of DAB filters are tunable over the entire VHF Band III. The filters offer a compact and flexible solution for both transmitter mask filtering and digital RF channel combining. The DAB filter range is founded on RFS' world-leading RF combining technology and utilizes a similar platform of components to the company's VHF Band III;digital television combiners. DAB filters can be incorporated within transmitters to provide critical mask filtering of the digital RF signal, in keeping with global DAB standards. When used as the key components of a balanced DAB combiner, the filters can achieve both critical transmitter masking and adjacent channel combining simultaneously, eliminating the need for additional filters within the transmitter. The 100-mm models can be installed within a standard 19-inch rack. The nominal bandwidth of all models is 1.54 MHz, as specified by the global "Eureka 147" DAB standard.



Showing 8PX100DAB coaxial filter

FEATURES / BENEFITS

- Compact design
- 6 and 8 pole versions are available
- Tunable for various emission masks
- Available in 3 cavity sizes 100 mm, 180 mm and 270 mm
- Natural convection cooling for all power levels
- Low loss for all cavity sizes
- RFS R series connectors provide "mix and match" interface to common standards

Technical features

GENERAL SPECIFICATIONS

Product Line		Filters
Product Type		Band III DAB Filters
Filter type		6 Pole, single cross coupling

ELECTRICAL SPECIFICATIONS

Frequency Range (tuneable)	MHz	174 - 240
Impedance	Ω	50
Input Power (maximum)	kW Average	0.5
Insertion Loss at Channel Centre Frequency	dB	<1.3
Input Return Loss	dB	>23
Filter Selectivity	dB	< 0.9 \pm 0.77MHz > 21 \pm 0.97MHz > 69 \pm 2.2MHz > 69 \pm 3.0MHz

MECHANICAL SPECIFICATIONS

Input Connector		16R Note 1
Weight	kg (lb)	17 (37.4)
Dimensions (Height or Length)	cm (in)	65 (25.59)
Dimensions (Width)	cm (in)	11 (4.33)
Dimensions (Depth)	cm (in)	84 (33.07)

TESTING AND ENVIRONMENTAL

Temperature Range	$^{\circ}$ C($^{\circ}$ F)	0 to 45 (32 to 113)
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External Document Links
[DAB Filter Series](#)

Notes

Note 1: The RFS R series provides a "mix and match" interface to 50 ohm EIA/IEC standard connectors



PRODUCT DATASHEET

6PX100DAB

Band III (VHF) DAB Coaxial Filter



6PX100DAB

REV : 1

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