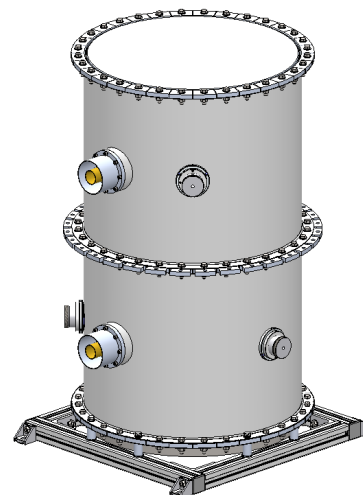




The RFS 4PXW filter is a 4-pole band-pass filter with single cross-coupling, which can be used for ISDB-T mask filtering applications or in a TV channel combiner with non-adjacent channels, where very low insertion loss is required.

FEATURES / BENEFITS

- Very compact for easy integration into equipment.
- Very low insertion loss (lowest for this size).
- Highest power rating for size/class.
- Adjustable bandwidth, available for 6, 7 & 8 MHz channels.
- -5 to 55 degree ambient temperature operation.
- Input and output options: same or opposite sides
- Tuneable elbows options extra



4PXW filter

Technical features

GENERAL SPECIFICATIONS

Product Line		Filters
Product Type		Band IV/V (UHF) TV Bandpass Filter
Model		4PXW
Filter type		4 pole with single cross coupling

MECHANICAL SPECIFICATIONS

Input / Output Connector		1-5/8", 3-1/8" EIA Flanged/Unflanged Female (Standard) or 4-1/16" EIA, 4-7/8" IEC Flanged/Unflanged Female (Optional)
Dimension-WxDxH	mm (in)	612 x 540 x 973 (24.1 x 21.3 x 38.2) varies with channel
Weight	kg (lb)	42 (93)

COOLING

Cooling		Convection cooled
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ELECTRICAL SPECIFICATIONS

Out-of-Band Emissions Mask		ISDB-T	No Mask	No Mask
Channel Bandwidths	MHz	6	6	8
Input Power Rating	kW	27.0 @ 473MHz 22.5 @ 587MHz 18.0 @ 701MHz	30/30 @ 473MHz 25/25 @ 605MHz 20/20 @ 701MHz	40.0 @ 474MHz 34.0 @ 586MHz 28.0 @ 698MHz
Insertion Loss at fc	dB	<0.1 @ 473MHz <0.1 @ 605MHz <0.12 @ 701MHz	<0.1 @ 473MHz <0.1 @ 605MHz <0.12 @ 701MHz	<0.1 @ 474MHz <0.1 @ 586MHz <0.12 @ 698MHz
Attenuation	dB	<0.17 @fc±2.79MHz <608MHz <0.19 @fc±2.79MHz <704MHz >5 @ fc ± 4.0 MHz > 15 @ fc ± 4.36 MHz > 15 @ fc ± 9.0 MHz	> 30 @ fc ± 9.0MHz	> 30 @ fc ± 12 MHz
VSWR average across carriers		< 1.13	< 1.1	< 1.1
Return Loss Average Across Carriers	dB	24	26.4	26.4
Group Delay Variation	ns	< 100 ± 2.79 MHz	< 29 ± 2.69 MHz < 33 ± 2.79 MHz	< 20 ± 3.8 MHz
Maximum Operating Temperature	°C (°F)	80 (176)		
Ambient Temperature Range	°C (°F)	-5 to 55 (23 to 131)		
Maximum Temperature Rise	°C (°F)	40 (104)		
Freq Drift - Tx Operation	kHz/°C(°F)	<1 (0.6)		

External Document Links
[ISDB-T Application Guide](#)

Notes

Note: Filter dimensions and weight varies by channel.