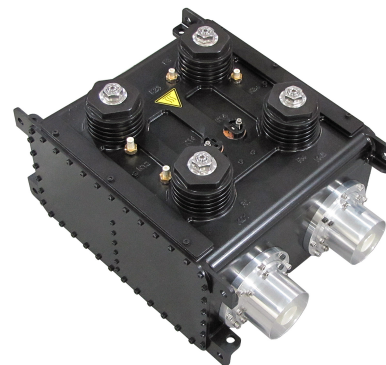




The RFS 4PPX160E is designed for global filtering applications associated with DTV television transmission. It is a 4-pole filter incorporating one cross coupling to meet global mask requirements.

**FEATURES / BENEFITS**

- Very compact for easy integration into equipment.
- Very low insertion loss (lowest for this size).
- Highest power rating for size/class.
- Tunable over full UHF band (470 – 862 MHz).
- Adjustable bandwidth, available for 6 & 8 MHz channels for global applications.
- External, non-invasive coupling adjustment.
- Tunable for ETSI, ISDB-T and ATSC applications.
- -5 to 55 degree ambient temperature operation.



4PPX160E filter

**Technical features**

**GENERAL SPECIFICATIONS**

Product Line		Filters
Product Type		Band IV/V (UHF) TV Bandpass Filter
Model		4PPX160E
Filter type		4 pole with one cross coupling - 160mm ground plane spacing
Input / Output Connector		3-1/8" EIA UF Female (standard) 1-5/8" EIA UF Female, NAX39D, NAX77D, WX39D (optional)

**MECHANICAL SPECIFICATIONS**

Dimension-WxDxH	mm (in)	353 x 434 x 268 (13.9 x 17.1 x 10.6)
Color		Black
Weight	kg (lb)	24 (52.9)

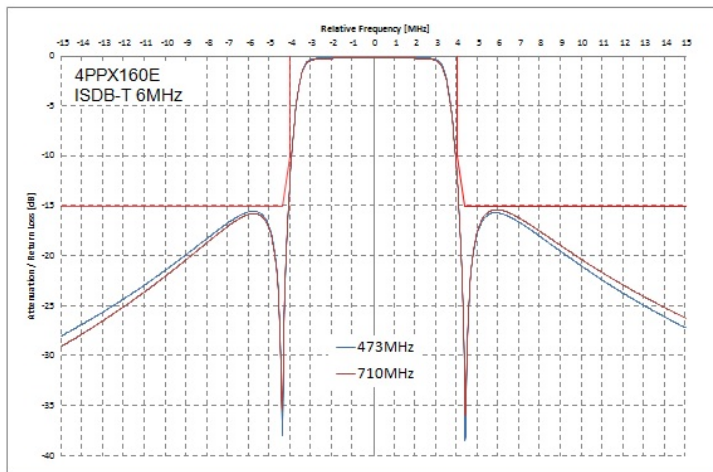
**COOLING**

Cooling		Natural air
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**SPECIFICATIONS**

Out-of-Band Emissions Mask		ISDB-T	Combiner 6MHz	Combiner 6MHz	Combiner 8MHz
Channel Bandwidths	MHz	6	6	6	8
Frequency Range	MHz	470-710	470-806	470-806	470-862
Insertion Loss at Fc	dB	< 0.17 @ fc = 473 MHz < 0.22 @ fc = 707 MHz	< 0.16 @ fc = 473 MHz < 0.19 @ fc = 803 MHz	< 0.16 @ fc = 473 MHz < 0.19 @ fc = 803 MHz	< 0.16 @ fc = 473 MHz < 0.19 @ fc = 803 MHz
Attenuation	dB	< 0.42 @ fc ± 2.79 MHz > 10 @ fc ± 4.0 MHz > 15 @ fc ± 4.36-15.0 MHz	> 30 @ fc ± 9.0MHz > 35 @ fc ± 15 MHz	> 30 @ fc ± 9.0MHz > 35 @ fc ± 15 MHz	> 30 @ fc ± 12 MHz > 35 @ fc ± 20 MHz
VSWR average across carriers		< 1.15	< 1.12	< 1.12	< 1.12
VSWR - maximum peak across carriers		< 1.20	< 1.18	< 1.18	< 1.18
Group Delay Variation	ns	< 100 ± 2.79 MHz	< 29 ± 2.69 MHz	< 29 ± 2.69 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)	<2 (1.2)			
Freq Drift - Ambient Temperature	kHz/°C(°F)	<2 (1.2)			

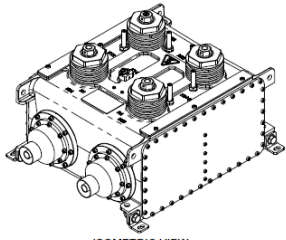


4PPX160E response



4PPX160E Series

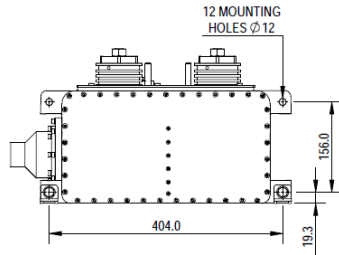
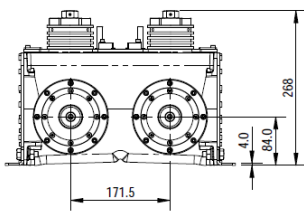
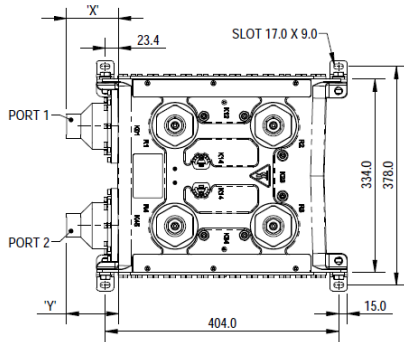
Band IV/V (UHF) PeakPower+™ bandpass filter



ISOMETRIC VIEW



CAUTION:  
HOT SURFACE  
(LABELS ON TOP OF FILTER)



NOTE: TOLERANCE OF DIMENSIONS  $\pm 0.5$  UNO.

4PPX160E Sketch

[External Document Links](#)  
[ATSC Application Guide](#)

Notes