



The RFS 8PPXX110E is designed for global filtering applications associated with DTV television transmission. It is an 8-pole filter incorporating two cross couplings to meet all 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, 7 & 8 MHz channels for global applications.
- External, non-invasive coupling adjustment.
- Tunable for ETSI critical, ISDB-T critical, or ATSC applications.
- -5 to 55 degree ambient temperature operation.



8PPXX110E Filter

**Technical features**

**GENERAL SPECIFICATIONS**

<b>Product Line</b>		Filters
<b>Product Type</b>		Band IV/V (UHF) TV Bandpass Filter
<b>Model</b>		8PPXX110E
<b>Filter type</b>		8 Pole with 2 cross couplings - 110 mm ground plane spacing
<b>Input / Output Connector</b>		7-16 DIN female (Standard), 7/8" EIA Flange Female & 1-5/8" EIA Unflanged or Flanged Female (Optional)

**MECHANICAL SPECIFICATIONS**

<b>Dimension-WxDxH</b>	mm (in)	242 x 587 x 381 (9.5 x 23.1 x 15)
<b>Color</b>		Black
<b>Weight</b>	kg (lb)	24.3 (53.6)

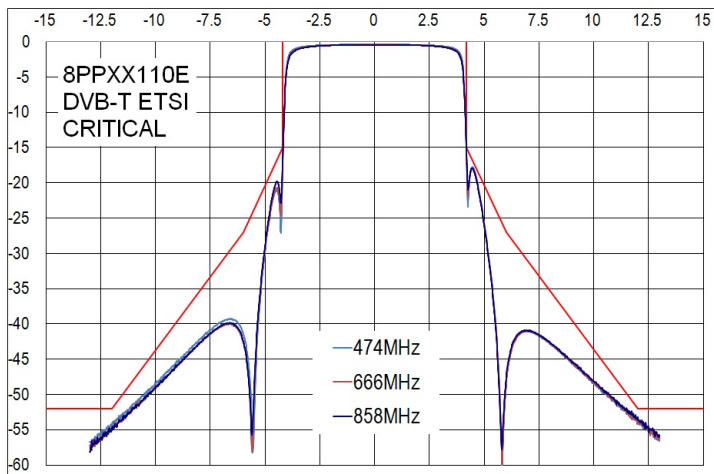
**COOLING**

<b>Cooling</b>		Natural air
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**SPECIFICATIONS**

Out-of-Band Emissions Mask		DVB-T & T2 ETSI critical	DVB-T & T2 ETSI critical	ISDB-T critical	ATSC 1.0/ ATSC 3.0
Channel Bandwidths	MHz	8	6	6	6
Input Power Rating	kW	1.9 @ 474 MHz 1.4 @ 858 MHz	1.6 @ 473 MHz 1.2 @ 803 MHz	1.5 @ 473 MHz 1.2 @ 803 MHz	1.5 @ 473 MHz 1.2 @ 803 MHz
Insertion Loss at fc	dB	<0.37 @ 474 MHz <0.50 @ 858 MHz	<0.49 @ 473 MHz <0.63 @ 803 MHz	<0.58 @ 473 MHz <0.71 @ 803 MHz	<0.58 @ 473 MHz <0.71 @ 803 MHz
Attenuation	dB	<1.99 at Fc ± 3.8 MHz >15.0 at Fc ± 4.2 MHz >27.0 at Fc ± 6.0 MHz >52.0 at Fc ± 12.0 MHz	<2.79 at Fc ± 2.85 MHz >15.0 at Fc ± 3.15 MHz >27.0 at Fc ± 4.5 MHz >52.0 at Fc ± 9.0 MHz	<2.45 at Fc ± 2.79 MHz >14.0 at Fc ± 3.15 MHz >31.0 at Fc ± 4.5 MHz >61.0 at Fc ± 9.0 MHz	<1.42 at Fc ± 2.69 MHz >20.0 at Fc ± 3.5 MHz >20.0 at Fc ± 4.0 MHz >40.0 at Fc ± 6.0 MHz >65.0 at Fc ± 9.0 MHz Note 1
VSWR average across carriers		≤1.1	≤1.1	≤1.1	≤1.1
Return Loss Average Across Carriers	dB	≥26.4	≥26.4	≥26.4	≥26.4
Group Delay Variation	ns	<590 at Fc ± 3.8 MHz	<690 at Fc ± 2.85 MHz	<590 at Fc ± 2.79 MHz	<290 at Fc ± 2.69 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)			

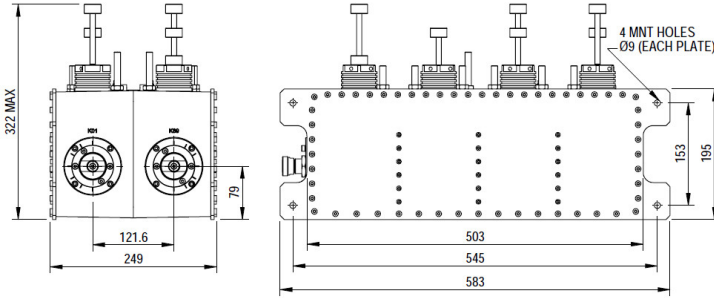
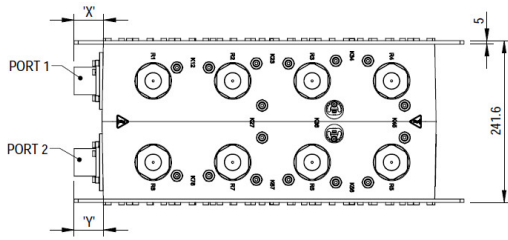


8PPXX110E response



**8PPXX110E Series**

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



8PPXX110E Filter Views

**External Document Links**

[CA and CW ETSI DVB\\_T T2 6MHz](#)

[Application Guide ETSI DVB-T and T2 8MHz](#)

[CA and CW ATSC 6MHz](#)

[CA and CW ISDB\\_T 6MHz](#)

**Notes**

- Note 1. Tx Intermode shoulders 37dB.