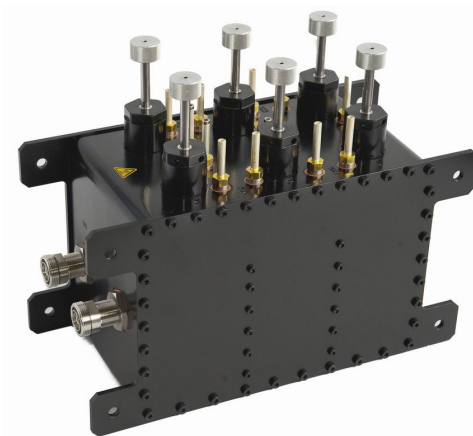




The RFS 6PPXX80E is designed for global filtering applications associated with DTV television transmission. It is a 6-pole filter incorporating two cross couplings to meet all mask requirements

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 and ISDB-T critical and non-critical, and ATSC applications.
- -5 to 55 degree ambient temperature operation.



6PPXX80E

Technical features

GENERAL SPECIFICATIONS

Product Line		Filters
Product Type		Band IV/V (UHF) TV Bandpass Filter
Model		6PPXX80E
Filter type		6 Pole with 2 cross couplings - 80 mm ground plane spacing
Input / Output Connector		7-16 DIN Female (Standard), 7/8" EIA Flange Female & 1 5/8" EIA Unflanged Female (Optional)

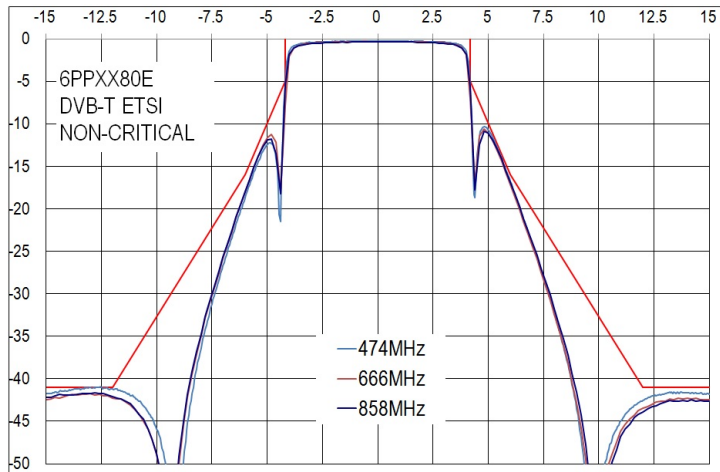
MECHANICAL SPECIFICATIONS

Dimension-WxDxH	mm (in)	172 x 358 x 326, (6.8 x 14.1 x 12.8)
Color		Black
Weight	kg (lb)	9.7 (21)



SPECIFICATIONS

Out-of-Band Emissions Mask		DVB-T ETSI non-critical	DVB-T ETSI critical	ISDB-T subcritical	ISDB-T critical	ATSC 1.0/ ATSC 3.0
Channel Bandwidths	MHz	8	8	6	6	6
Input Power Rating	kW	1.2 @ 474 MHz 0.8 @ 858 MHz	0.95 @ 474 MHz 0.75 @ 858 MHz	0.85 @ 473 MHz 0.65 @ 803 MHz	0.65 @ 473 MHz 0.6 @ 803 MHz	0.7 @ 473 MHz 0.65 @ 803 MHz
Insertion Loss at fc	dB	<0.36 @ 474 MHz <0.40 @ 858 MHz	<0.43 @ 474 MHz <0.50 @ 858 MHz	<0.57 @ 473 MHz <0.67 @ 803 MHz	<0.61 @ 473 MHz <0.69 @ 803 MHz	<0.57 @ 473 MHz <0.67 @ 803 MHz
Attenuation	dB	<1.4 ± 3.8 MHz >5.0 ± 4.2 MHz >16.0 ± 6.0 MHz >41.0 ± 12.0 MHz	<2.1 ± 3.8 MHz >13.0 ± 4.2 MHz >24.0 ± 6.0 MHz >42.0 ± 12.0 MHz	<2.28 ± 2.79 MHz >8.0 ± 3.15 MHz >24.0 ± 4.5 MHz >50.0 ± 9.0 MHz	<2.68 ± 2.79 MHz >11.0 ± 3.15 MHz >26.0 ± 4.5 MHz >53.0 ± 9.0 MHz	>1.22 ± 2.69 MHz >3.0 ± 3.50 MHz >8.0 ± 4.0 MHz >40.0 ± 6.0 MHz >65.0 ± 9.0 MHz
VSWR average across carriers		<1.1	<1.2	<1.17	<1.2	<1.1
Return Loss Average Across Carriers	dB	26.4	20.8	22.1	20.8	26.4
Group Delay Variation	ns	<270 ± 3.8 MHz	<495 ± 3.8 MHz	<400 ± 2.79 MHz	<500 ± 2.79 MHz	<150 ± 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)				

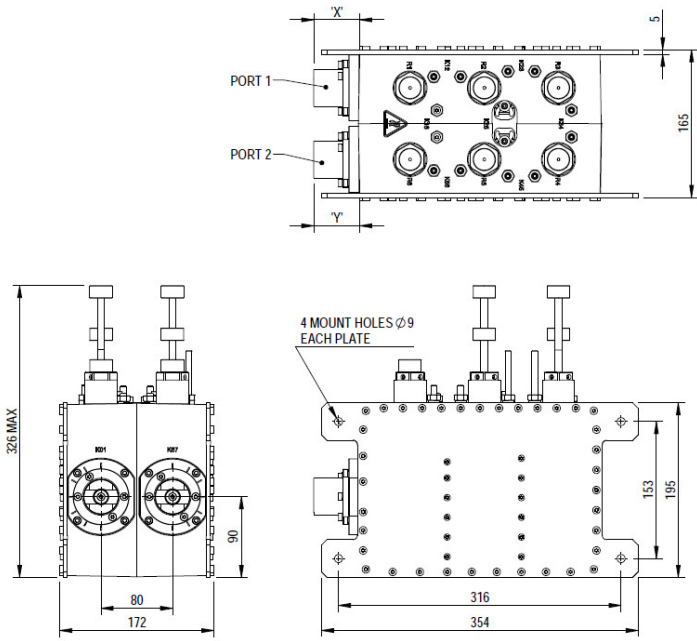


6PPXX80E response



6PPXX80E Series

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



6PPXX80E Filter Views

External Document Links

- [ETSI 6MHz Application Guide](#)
- [ETSI 8MHz Application Guide](#)
- [ATSC Application Guide](#)
- [ISDB-T 6MHz Application Guide](#)

Notes