



The RFS 6PPXX45E 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.



6PPXX45E Filter

Technical features

GENERAL SPECIFICATIONS

Product Line		Filters
Product Type		Band IV/V (UHF) TV Bandpass Filter
Model		6PPXX45E
Filter type		6 Pole with 2 cross couplings - 45 mm ground plane spacing
Input / Output Connector		7-16 DIN Female (Standard)

MECHANICAL SPECIFICATIONS

Dimension-WxDxH	mm (in)	122 x 183 x 150, (4.8 x 7.2 x 5.9)
Color		Black
Weight	kg (lb)	2.5 (5.4)

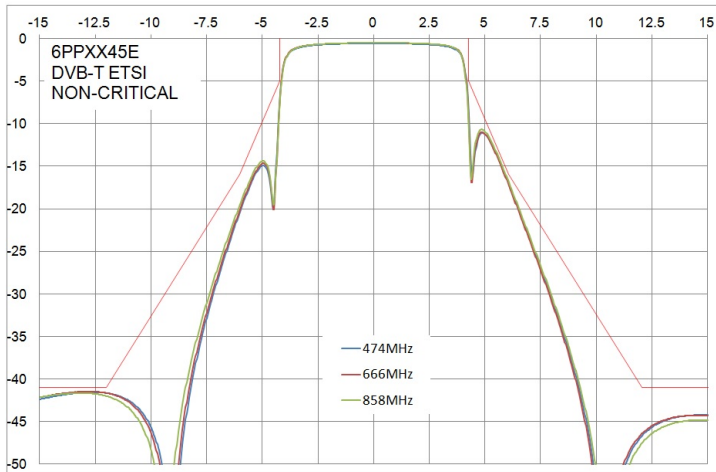
COOLING

Cooling		Natural air
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SPECIFICATIONS

Out-of-Band Emissions Mask		DVB-T ETSI non-critical	DVB-T ETSI critical	Australia	ISDB-T subcritical	ISDB-T critical	ATSC	ATSC Stringent
Channel Bandwidths	MHz	8	8	7	6	6	6	6
Frequency Range	MHz	474-858	474-858	529.5-816.5	473-858	473-858	473-858	473-858
Input Power Rating	kW	0.13	0.13	0.12	0.13	0.13	0.15	0.15
Insertion Loss at fc	dB	<0.56	<0.67	<0.66	<0.87	<0.94	<0.9	<0.7
Attenuation	dB	<1.9 ± 3.8 MHz >5.0 ± 4.2 MHz >16.0 ± 6.0 MHz >41.0 ± 12.0 MHz	<3.5 ± 3.8 MHz >13.0 ± 4.2 MHz >24.0 ± 6.0 MHz >42.0 ± 12.0 MHz	<1.1 ± 3.2 MHz >5.8 ± 3.7 MHz >13.8 ± 5.25 MHz >42.8 ± 10.5 MHz	<3.25 ± 2.79 MHz >8.0 ± 3.15 MHz >24.0 ± 4.5 MHz >50.0 ± 9.0 MHz	<3.8 ± 2.79 MHz >11.0 ± 3.15 MHz >26.0 ± 4.5 MHz >53.0 ± 9.0 MHz	<1.7 ± 2.69 MHz >1.3 ± 3.25 MHz >3.4 ± 3.5 MHz >40.0 ± 6.0 MHz >50.0 ± 9.0 MHz	<2.05 ± 2.69 MHz >7.0 ± 3.25 MHz >7.0 ± 3.50 MHz >36.0 ± 6.0 MHz >36.0 ± 9.0 MHz
VSWR average across carriers		<1.1	<1.2	<1.1	<1.17	<1.2	<1.1	<1.1
Return Loss Average Across Carriers	dB	26.4	20.8	26.4	22.1	20.8	26.4	26.4
Group Delay Variation	ns	<295 ± 3.8 MHz	<495 ± 3.8 MHz	<350 ± 3.33 MHz	<475 ± 2.79 MHz	<585 ± 2.79 MHz	<150 ± 2.69 MHz	<290 ± 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)						

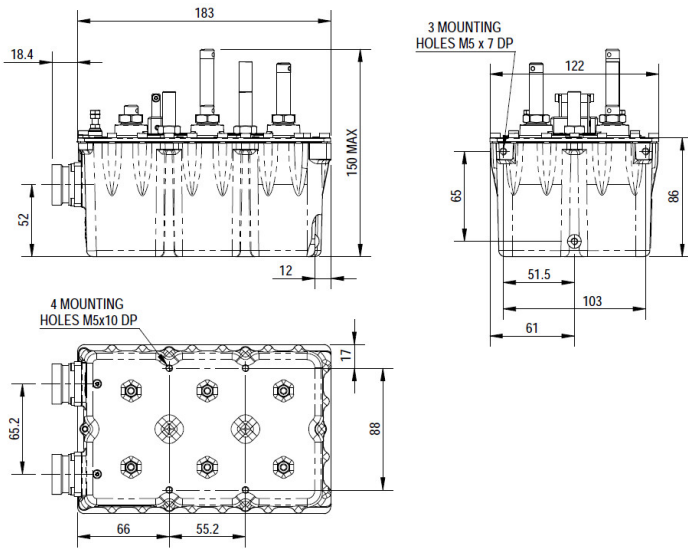


6PPXX45E response



6PPXX45E Series

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



6PPXX45E Filter Views

External Document Links

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

Notes

Australian attenuation specifications are WRT fc