

6-cavity duplexer for the 350 MHz band

DESCRIPTION

- The DPF 70/6-XL is a 6-cavity duplex filter for duplex transceivers.
- The DPF 70/6-XL can be adjusted within the complete 340 - 400 MHz band. The duplexer can be supplied in four different versions according to duplex spacing required.
Also see "Ordering information" below
- The DPF 70/6-XL is primarily intended for equipment with TX and RX operating on single frequencies, but it can also, however with slightly reduced data, be used where the TX and RX operate on several channels, i.e. within a certain port bandwidth. In the last case, factory tuning is recommended.
- The filter uses full-length ¼ cavities in a compact, extruded aluminium housing. The chassis is made of passivated steel and teflon insulation has been applied in the coaxial cables and in the connectors.
- The filter is black vinyl coated to prevent corrosion.



SPECIFICATIONS

Electrical	
Model	DPF 70/6-XL
Frequency	340 - 400 MHz
Max. Input Power	50 W
Insertion Loss Tx-Ant and Ant-Rx	Single-channel tuned. : ≤ 1.2 dB (typ. 1.0 dB) Multi-channel tuned, 2 MHz BW : ≤ 1.2 dB (typ. 1.0 dB) (at 10 MHz duplex spacing)
Tx-Noise Suppression on Rx-Frequency	Single-channel tuned. : ≥ 85 dB Multi-channel tuned, 2 MHz BW : ≥ 65 dB
Rx-Isolation on Tx-Frequency	Single-channel tuned. : ≥ 85 dB Multi-channel tuned, 2 MHz BW : ≥ 65 dB
Impedance	50 Ω
VSWR	< 1.5:1
Mechanical	
Connection(s)	N(f) (BNC(f), TNC(f), UHF(f) or SMA(f) on request)
Dimensions	243 x 154 x 33 mm / 9.5 x 6.0 x 1.3 in.
Weight	Approx. 1.123 kg / 2.48 lb.
Environmental	
Operating Temperature Range	-30°C to +60°C
Frequency Stability	4.5 ppm/° C (approx.)

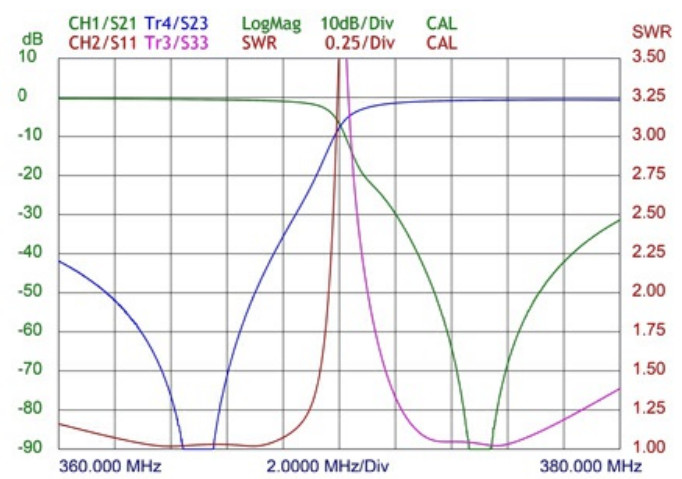
ORDERING

Model	Product No.	Frequency
DPF 70/6-XL-5/7-N(f)	200000423	5 - 7 MHz
DPF 70/6-XL-7/9-N(f)	200001635	7 - 9 MHz
DPF 70/6-XL-9/13-N(f)	200001794	9 - 13 MHz
DPF 70/6-XL-13/16-N(f)	200002705	13 - 16 MHz

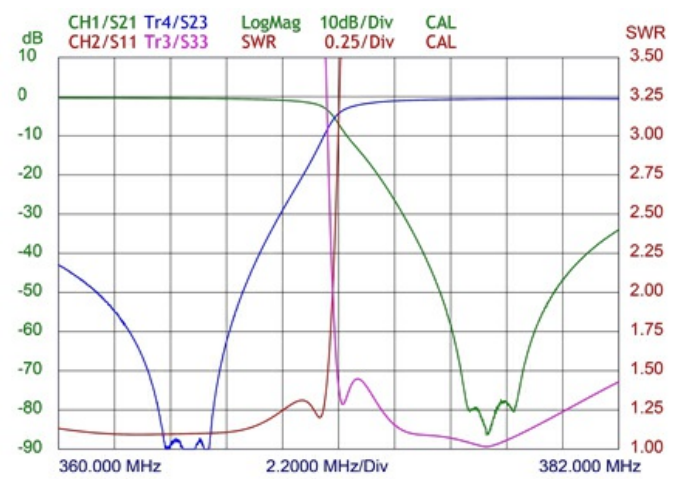
ORDERING INFORMATION

If duplex Tx and Rx frequencies are stated when ordering, the duplexers are delivered factory-adjusted. If Tx and Rx frequencies are not stated, the filters are delivered non-adjusted.

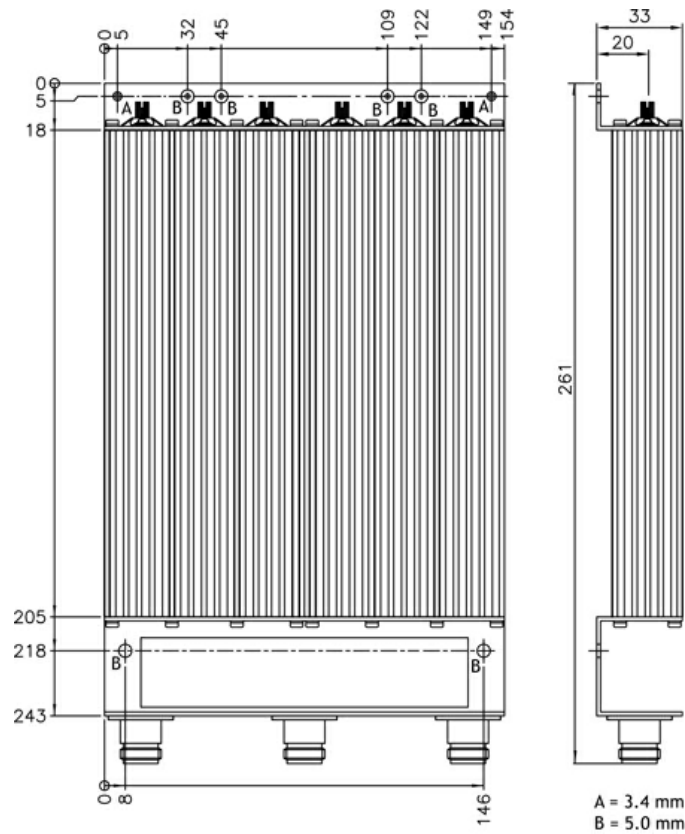
SINGLE-CHANNEL TYPICAL RESPONSE CURVES @ 10 MHZ SPACING



MULTI-CHANNEL, 2 MHZ BW TYPICAL RESPONSE CURVES @ 10 MHZ SPACING



MOUNTING DETAILS



PLEASE NOTE

Special configurations of this filter type may be quoted on request. For instance, the filter can be delivered with other connector types, or with flying leads (RG 316 coaxial cable) terminated with connectors or for soldering-connection.