

DPF 70/4...

4-Cavity Duplexer for the 450 MHz Band



DESCRIPTION:

- ★ The DPF 70/4... is a 4-cavity duplex filter for duplex radiotelephones.
- ★ The DPF 70/4... can be adjusted within the complete 406-470 MHz band. The duplexer can be delivered in four different versions according to required duplex spacing. See also "Ordering information" below.
- ★ The DPF 70/4... is primarily intended for equipment, where the TX and RX operate 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 $1/4 \lambda$ 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:

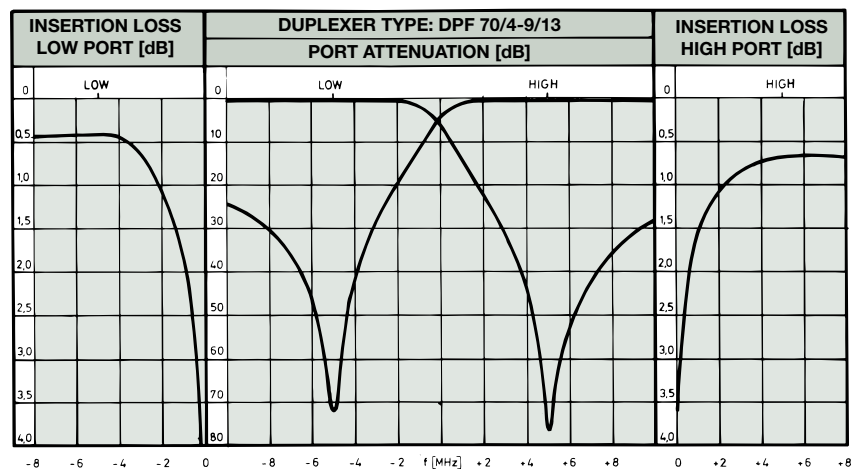
ELECTRICAL	
MODEL	DPF 70/4...
TX/RX FREQUENCY	406-470 MHz
MAX. INPUT POWER	50 watts
INSERTION LOSS TX-ANT AND ANT-RX (at 10 MHz duplex spacing)	
Single-channel tuned	≤ 1.0 dB (typ. 0.8 dB)
Multi-channel tuned, 2 MHz BW	≤ 1.2 dB (typ. 1.0 dB)
TX NOISE SUPPRESSION ON RX-FREQUENCY	
Single-channel tuned	> 65 dB
Multi-channel tuned, 2 MHz BW	> 45 dB
RX ISOLATION ON TX-FREQUENCY	
Single-channel tuned	> 65 dB
Multi-channel tuned, 2 MHz BW	> 45 dB
DUPLEX SPACING	5-16 MHz (see table)
IMPEDANCE	Nom. 50 Ω
SWR	≤ 1.5
MECHANICAL	
TEMP. RANGE	-30° C → +60° C
FREQ. STABILITY	Approx. 4.5 ppm/° C
CONNECTORS	BNC-female
DIMENSIONS (L x W x H)	226 x 104 x 33 mm
WEIGHT	Approx. 690 g



MODEL SELECTION TABLE:

DUPLEX SPACING (MHz)	ORDERING DESIGNATION
5-7	DPF 70/4 - 5/7
7-9	DPF 70/4 - 7/9
9-13	DPF 70/4 - 9/13
13-16	DPF 70/4 - 13/16

TYPICAL RESPONSE CURVES @ 10 MHz SPACING:



ORDERING INFORMATION:

When ordering, please use the table above to select the appropriate ordering designation for the desired filter type. 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.

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.

PROCOM A/S reserve the right to amend specifications without prior notice.