

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 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 70/4...
Frequency	406 - 470 MHz
Max. Input Power	50 W
Insertion Loss Tx-Ant and Ant-Rx	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
Impedance	50 Ω
VSWR	< 1.5:1

Mechanical	
Connection(s)	BNC(f)
Dimensions	226 x 104 x 33 mm
Weight	0.69 kg / 1.52 lb

Environmental	
Operating Temperature Range	-30°C to +60°C
Frequency Stability	4.5 ppm/° C (approx.)

ORDERING

Type	Product No.	Frequency
DPF 70/4 - 5/7	200000299	5 - 7 MHz
DPF 70/4 - 7/9	200000303	7 - 9 MHz
DPF 70/4 - 9/13	200000306	9 - 13 MHz
DPF 70/4 - 13/16	200000293	13 - 16 MHz

ADDITIONAL DATA

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.

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.

DIAGRAM

TYPICAL RESPONSE CURVES

