

6-cavity duplexer for the 450 MHz band

DESCRIPTION

- > The DPF 70/6... is a 6-cavity duplex filter for duplex transceivers.
- > The DPF 70/6... 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 70/6... 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 multi channels, i.e. within a certain port bandwidth. In the last case, factory-tuning is recommended.
- > The filter uses full-length $\frac{1}{4} \lambda$ 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.
- > DPF 70/6... is coated with black vinyl to prevent corrosion.



ORDERING

| Type | Product No. | Frequency |
|----------------------|-------------|-------------|
| DPF 70/6-5/7-N(f) | 200000392 | 5 - 7 MHz |
| DPF 70/6-7/9-N(f) | 200000404 | 7 - 9 MHz |
| DPF 70/6-9/13-N(f) | 200000414 | 9 - 13 MHz |
| DPF 70/6-13/16-N(f) | 200000419 | 13 - 16 MHz |
| Accessories | | |
| 19" DPF Mounting kit | 210002327 | |

ORDERING INFORMATION

When ordering, please use the table 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 (e.g. RG 316 or RG 400 coaxial cable) terminated with connectors or for soldering-connection.

SPECIFICATIONS

| Electrical | |
|--------------------------------------|---|
| Model | DPF 70/6... |
| Frequency | 406 - 470 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) |
| 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), SMA(f) on request) |
| Dimensions | 226 x 154 x 33 mm / 8.9 x 6.0 x 1.3 in. |
| Weight | Approx. 0.99 kg / 2.18 lb |
| Environmental | |
| Operating Temperature Range | -30°C to +60°C |
| Frequency Stability | 4.5 ppm/° C (approx.) |

MOUNTING DETAILS

TYPICAL RESPONSE CURVES @ 10 MHz SPACING

