

6-Resonator Duplexer for the 80 MHz Band

DESCRIPTION

- ▶ The DPF 4/6 S-... is a 6-resonator duplex filter for duplex radiotelephones.
- ▶ This filter is primarily intended for equipment, where the Tx and the 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 can be tuned within the complete 66 - 88 MHz range with a duplex separation between 4 and 13 MHz.
- ▶ The filter has very small dimensions owing to the use of high-Q, temperature compensated helical resonators with discrete-component interconnections.
- ▶ The housing is made of extruded aluminium, the chassis of passivated steel, and the connectors are provided with teflon insulation.
- ▶ The filter is coated with black vinyl to prevent corrosion.



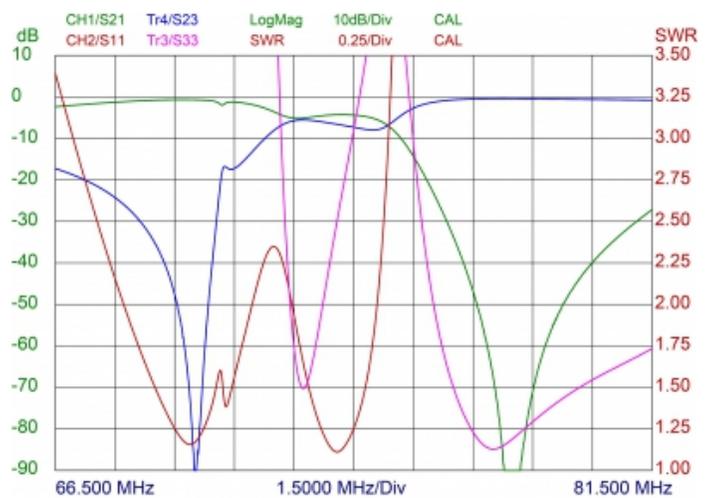
SPECIFICATIONS

| Electrical | |
|--------------------------------------|--|
| Model | DPF 4/6 S-... |
| Frequency | 66 - 88 MHz |
| Max. Input Power | 50 W |
| Special spec. info | Single-channel tuned : Multi-channel tuned, BW = 2 MHz : |
| Insertion Loss Tx-Ant and Ant-Rx | < 1.2 dB < 1.3 dB |
| Spacing | 3 - 16 MHz (see table) |
| Tx Noise Suppression on Rx Frequency | > 80 dB > 40 dB |
| Isolation Rx on Frequency Tx | > 80 dB > 40 dB |
| Impedance | 50 Ω |
| VSWR | < 1.4:1 |
| Mechanical | |
| Connection(s) | N(f) (Others on request) |
| Dimensions | 170 x 154 x 33 mm / 6.69 x 6.06 x 1.30 in. |
| Weight | Approx. 1.05 kg / 2.31 lb. |
| Environmental | |
| Operating temperature range | -30 °C to +60 °C |
| Frequency Stability | Approx. 9 ppm / °C |

ORDERING

| Model | Product No. | Frequency |
|---------------------|-------------|------------|
| DPF 4/6 S-3/4 N(f) | 200000282 | 3 - 4 MHz |
| DPF 4/6 S-4/13 N(f) | 200000263 | 4 - 13 MHz |

TYPICAL RESPONSE CURVES @ 4 MHz DUPLEX SPACING



PLEASE NOTE

This filter type can also be delivered with the resonators stacked 3 over 3, thereby accommodating special space restrictions. In this case please order DPF 4/33 S.

