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 black vinyl-coated to prevent corrosion.

SPECIFICATIONS

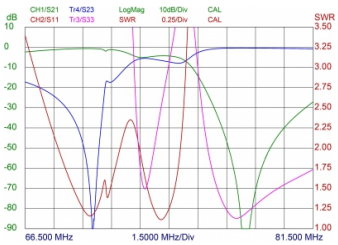
Electrical	
Model	DPF 4/6 S-...
Frequency	66 - 88 MHz
Max. Input Power	50 W
Insertion Loss Tx-Ant and Ant-Rx	Single-channel tuned < 1.2 dB Multi-channel tuned, 2 MHz BW < 1.3 dB
Spacing	3 - 16 MHz (see table)
Tx-Noise Suppression on Rx-Frequency	Single-channel tuned > 80 dB Multi-channel tuned, 2 MHz BW > 40 dB
Rx-Isolation on Tx-Frequency	Single-channel tuned > 80 dB Multi-channel tuned, 2 MHz BW > 40 dB
Impedance	50 Ω
VSWR	< 1.4:1

Mechanical	
Connection(s)	BNC(f)
Dimensions	170 x 154 x 33 mm
Weight	1.05 kg / 2.31 lb

Environmental	
Operating Temperature Range	-30°C to +60°C
Frequency Stability	9 ppm/° C (approx.)

DIAGRAM

TYPICAL RESPONSE CURVES



ORDERING

Type	Product No.	Frequency
DPF 4/6 S-3/4	200000280	3 - 4 MHz
DPF 4/6 S-4/13	200000248	4 - 13 MHz

ADDITIONAL DATA

PLEASE NOTE

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