8-Resonator Duplexer for the 80 MHz Band

DESCRIPTION

- The DPF 4/8 S-4/13 is an 8-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 duplexer can be tuned within the complete 66 - 88 MHz range with a duplex separation between 4 and 13 MHz.
- The filter has very small physical 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.

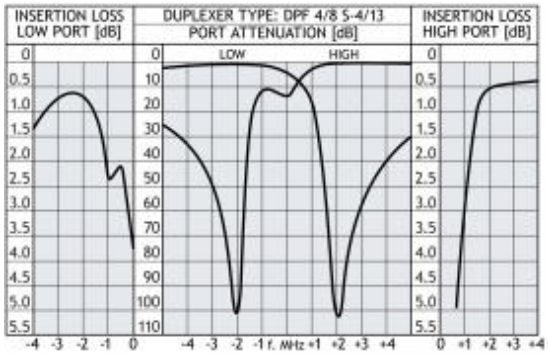
SPECIFICATIONS

Electrical	
Model	DPF 4/8 S-4/13
Frequency	66 - 88 MHz
Max. Input Power	50 W
Insertion Loss Tx-Ant and Ant-Rx	Single-channel tuned ≤ 1.0 dB Multi-channel tuned, 1.4 MHz BW ≤ 1.2 dB
Tx-Noise Suppression on Rx-Frequency	Single-channel tuned > 100 dB Multi-channel tuned, 1.4 MHz BW > 60 dB
Rx-Isolation on Tx-Frequency	Single-channel tuned > 100 dB Multi-channel tuned, 1.4 MHz BW > 60 dB
Impedance	50 Ω
Duplex Spacing	4 - 13 MHz (adjustable)
VSWR	≤ 1.5:1

Mechanical	
Connection(s)	BNC(f)
Dimensions	168 x 208 x 33 mm / 6.61 x 8.19 x 1.30 in.
Weight	Approx. 1.06 kg / 2.34 lb.

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

TYPICAL RESPONSE CURVES @ 4 MHZ DUPLEX SPACING



ORDERING

Model	Product No.
DPF 4/8 S-4/13	200000258

PLEASE NOTE

Special configurations of this filter type may be quoted on request. As an example, the filter can be delivered with the resonators stacked 4 over 4, thereby accomodating special space restrictions. In this case the filter designation is DPF 4/44 S.