

# DPF 4/4 S

## 4-Resonator Duplexer for the 80 MHz Band



### DESCRIPTION:

- ★ The DPF 4/4 S is a 4-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	
TX/RX FREQUENCY	66-88 MHz
MAX. INPUT POWER	50 watt
INSERTION LOSS TX-ANT AND ANT-RX (at 4 MHz duplex spacing)	
Single-channel tuned	≤ 0.8 dB
Multi-channel tuned, 1 MHz BW	≤ 1.0 dB
TX NOISE SUPPRESSION ON RX-FREQUENCY	
Single-channel tuned	> 60 dB
Multi-channel tuned, 1 MHz BW	> 40 dB
RX ISOLATION ON TX-FREQUENCY	
Single-channel tuned	> 60 dB
Multi-channel tuned, 1 MHz BW	> 40 dB
DUPLEX SPACING	4-13 MHz (adjustable)
IMPEDANCE	Nom. 50 Ω
SWR	≤ 1.5
MECHANICAL	
TEMP. RANGE	-30° C   +60° C
FREQ. STABILITY	Approx. 9 ppm/° C
CONNECTORS	BNC-female
DIMENSIONS (L x W x H)	173 x 104 x 33 mm
WEIGHT	Approx. 540 g

TYPICAL RESPONSE CURVES @ 4 MHz DUPLEX SPACING:

