

# DUPLEXERS, DIPLEXERS AND POWER SPLITTERS

## DPF 2/6-HX-150 6-cavity Mobile or Base Station Duplexer for the 136-175 MHz Band



### DESCRIPTION:

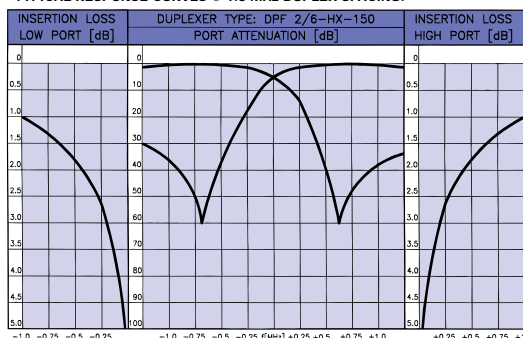
- ★ The DPF 2/6-HX-150 is a six-cavity high-power mobile or base station duplexer for the 136-175 MHz band.
- ★ This type of filter uses six large 40 x 40 mm cavities, all equipped with 3.5 mm silver-plated helical resonators, diameter 19 mm.
- ★ The use of large cavities and resonators means higher Q, resulting in smaller duplex spacing with lower loss.
- ★ The larger dimensions extend power rating to 100 W continuous.
- ★ The DPF 2/6-HX-150 is designed for single-channel equipment, but can, with slightly reduced specification, be broadband-adjusted to allow multichannel equipment to be used.
- ★ The cavities are made of extruded aluminium, the chassis of passivated steel. All coaxial cables are of the semi-rigid type, and teflon has been used in all connectors and cables.
- ★ The filter is black vinyl coated to prevent corrosion.
- ★ Please specify the frequencies for TX and RX when ordering, as all filters are made individually.

### SPECIFICATIONS:

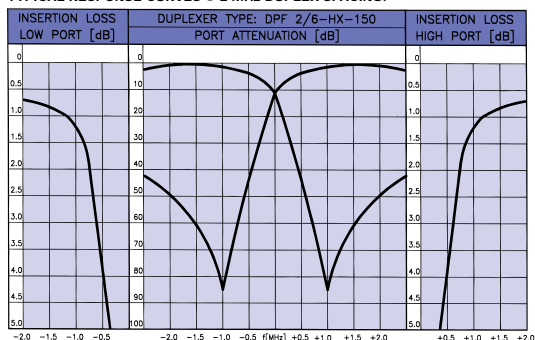
| ELECTRICAL                                                            |                                                                                     |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| TX/RX FREQUENCY                                                       | 136-175 MHz                                                                         |
| MAX. INPUT POWER                                                      | 100 watt at 1 dB insertion loss                                                     |
| MIN. DUPLEX SPACING                                                   | 1.3 MHz                                                                             |
| TYPICAL INSERTION LOSS                                                | @ 1.3 MHz spacing: 1.5 dB<br>@ 2.0 MHz spacing: 1.2 dB<br>@ 3.0 MHz spacing: 1.0 dB |
| TX NOISE SUPPRESSION ON RX-FREQUENCY AND RX ISOLATION ON TX-FREQUENCY | @ 1.3 MHz spacing: 60 dB<br>@ 2.0 MHz spacing: 85 dB<br>@ 3.0 MHz spacing: 100 dB   |
| IMPEDANCE                                                             | Nom. 50 Ω                                                                           |
| SWR                                                                   | ≤ 1.5                                                                               |
| MECHANICAL                                                            |                                                                                     |
| TEMP. RANGE                                                           | -30° C i +60° C                                                                     |
| FREQ. STABILITY                                                       | Approx. 8 ppm/° C                                                                   |
| CONNECTORS                                                            | N-female                                                                            |
| DIMENSIONS (L x W x H)                                                | 185 x 250 x 50 mm                                                                   |
| WEIGHT                                                                | Approx. 2.1 kg                                                                      |



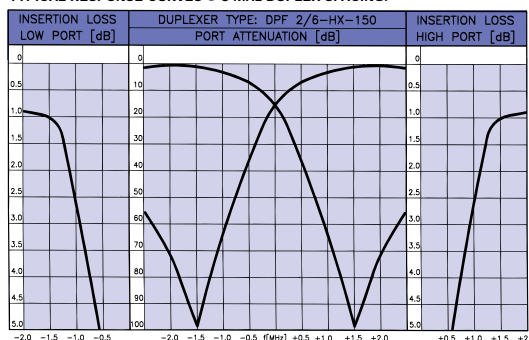
TYPICAL RESPONSE CURVES @ 1.3 MHz DUPLEX SPACING:



TYPICAL RESPONSE CURVES @ 2 MHz DUPLEX SPACING:



TYPICAL RESPONSE CURVES @ 3 MHz DUPLEX SPACING:



PROCOM A/S reserve the right to amend specifications without prior notice.