# MPX 2/6... 6-Resonator Mini-Duplexer for the 160 MHz Band

## **DESCRIPTION:**

- ★ The MPX 2/6... is a 6-resonator miniaturized duplex filter for duplex radiotelephones. This compact "miniplexer" meets the demand for a modern space saving, high performance filter type.
- ★ Model MPX 2/6 L can be tuned within the band 138-156 MHz and model MPX 2/6 H within the band 152-175 MHz, both with duplex spacing between 4 and 15 MHz.
- ★ The MPX 2/6... is primarily intended for equipment, where the TX and 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 miniaturization of the filter has been realized by using special high-Q, temperature compensated helical resonators with discrete-component interconnections.
- **★** The housing is made of extruded aluminium, and the connectors are provided with teflon insulation.
- $\star$  The filter is black vinyl coated to prevent corrosion.



### SPECIFICATIONS:

| ELECTRICAL  |  |  |
|---|--|--|
| MODEL   | MPX 2/6  |  |
| TX/RX FREQUENCY   | MPX 2/6 L :138-156 MHz<br>MPX 2/6 H :152-175 MHz |  |
| MAX. INPUT POWER  | 50 watts   |  |
| INSERTION LOSS<br>TX-ANT AND ANT-RX<br>(at 4.5 MHz duplex spacing)<br>Single-channel tuned<br>Multi-channel tuned, 1.5 MHz BW | ≤1.5 dB<br>≤1.5 dB                               |  |
| TX NOISE SUPPRESSION<br>ON RX-FREQUENCY<br>Single-channel tuned<br>Multi-channel tuned, 1.5 MHz BW                            | > 90 dB<br>> 60 dB                               |  |
| RX ISOLATION ON<br>TX-FREQUENCY<br>Single-channel tuned<br>Multi-channel tuned, 1.5 MHz BW                                    | > 90 dB<br>> 60 dB                               |  |
| DUPLEX SPACING  | 4-15 MHz (see table)                             |  |
| IMPEDANCE   | Nom. 50 Ω  |  |
| SWR   | ≤1.4   |  |
| MECHANICAL  |  |  |
| TEMP. RANGE   | $-30^{\circ}C \rightarrow +60^{\circ}C$          |  |
| CONNECTORS  | BNC-female                                       |  |
| DIMENSIONS (L x W x H)  | 133 x 154 x 33 mm                                |  |
| WEIGHT  | Approx. 660 g                                    |  |

# MODEL SELECTION TABLE:

|                       | _                       |                         |   |
|-----------------------|-------------------------|-------------------------|---|
| TUNING RANGE<br>(MHz) | DUPLEX SPACING<br>(MHz) | ORDERING<br>DESIGNATION |   |
| 138-156               | 4-6                     | MPX 2/6 L - 4/6         | _ |
|                       | 6-15                    | MPX 2/6 L - 6/15        |   |
| 152-175               | 4-6                     | MPX 2/6 H - 4/6         |   |
|                       | 6-15                    | MPX 2/6 H - 6/15        |   |

PROCOM

#### PLEASE NOTE:

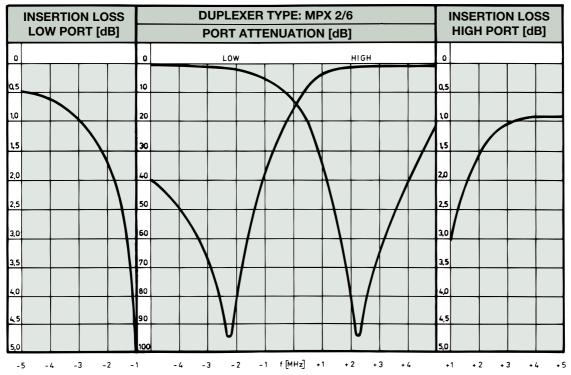
Special configurations of this filter type may be quoted on request. As an example, the filter can be delivered with flying leads (RG 316 coaxial cable), with connectors or for soldering-connection.

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

MPX 2/6... 6-Resonator Mini-Duplexer for the 160 MHz Band



#### TYPICAL RESPONSE CURVES @ 5 MHz DUPLEX SPACING:



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