



MPX 70/6

6-Resonator Mini-Duplexer for the 450 MHz band



DESCRIPTION

- The MPX 70/6... 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.
- The duplexer is delivered in a low band version: MPX 70/6 L, tunable within the 406 – 440 MHz range, and a high band version: MPX 70/6 H, which is tunable within the 430 – 470 MHz range. These models are again delivered in 4 different versions according to required duplex spacing. See also “Ordering information” below.
- The MPX 70/6... models are primarily intended for equipment, where the Tx and Rx operate on single frequencies, but they 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.
- The housing is made of extruded aluminium, the chassis of steel, and teflon insulation has been applied in the rigid coaxial cables and in the connectors.
- MPX 70/6... is coated with black vinyl to prevent corrosion.

SPECIFICATION

Electrical

Model	MPX 70/6...
Frequency	MPX 70/6 L : 406 – 440 MHz MPX 70/6 H : 430 – 470 MHz
Max. Input Power	25 W
Special spec. info	Single-channel tuned :Multi-channel tuned BW = 1.5 MHz :
Spacing Tx-Rx	5 – 13 MHz (see tabel)
Insertion Loss	< 1.4 dB < 1.5 dB
Impedance	50 Ω
Tx Noise Suppression on Rx-Freq. / Rx Isolation on Tx-Freq (Col 2)	> 60 dB
Tx Noise Suppression on Rx-Freq. / Rx Isolation on Tx-Freq.	> 90 dB / > 80 dB @ 5 – 7 MHz spacing
VSWR	< 1.4:1

Environmental

Operating temperature range	-30 °C to +60 °C
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Mechanical

Mounting Hole	A = ø3.4 / 0.13 in. (2 pcs.) B = ø5.0 / 0.20 in. (6 pcs.)
Connection(s)	N(f) (BNC(f), TNC(f), UHF(f), SMA(f) on request)
Historic Brand	Procom

Dimensions	92 (excl. conn.) x 154 x 33 mm / 3.62 (excl. conn.) x 6.06 x 1.30 in.
Weight	Approx. 0.55 kg / 1.21 lb.

ORDERING CODES

Model	Product No.	Frequency	Additional Information
MPX 70/6L-5/7-N(f)	200000581	406 – 440 MHz	SPACING: 5 - 7 MHz
MPX 70/6L-7/9-N(f)	200000586	406 – 440 MHz	SPACING: 7 – 9 MHz
MPX 70/6L-9/13-N(f)	200000593	406 – 440 MHz	SPACING: 9 – 13 MHz
MPX 70/6L-13/16-N(f)	200000578	406 – 440 MHz	SPACING: 13 – 16 MHz
MPX 70/6H-5/7-N(f)	200000558	430 – 470 MHz	SPACING: 5 - 7 MHz
MPX 70/6H-7/9-N(f)	200000563	430 – 470 MHz	SPACING: 7 – 9 MHz
MPX 70/6H-9/13-N(f)	200000569	430 – 470 MHz	SPACING: 9 – 13 MHz
MPX 70/6H-13/16-N(f)	200000553	430 – 470 MHz	SPACING: 13 – 16 MHz

ADDITIONAL INFORMATION

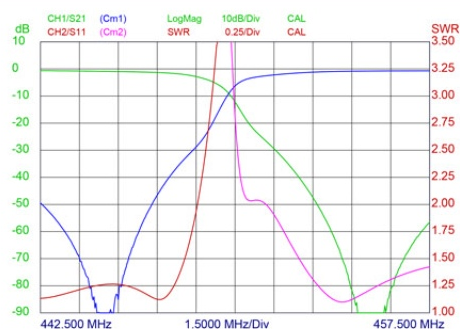
Ordering Information

When ordering, please use the table above to select the appropriate ordering designation for the desired filter type. If duplex Tx and Rx frequencies are stated when ordering, the duplexers are delivered factory adjusted. If Tx and Rx frequencies are not stated, the filters are delivered non-adjusted.

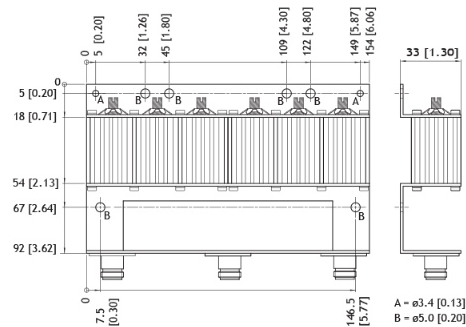
Please Note

Special configurations of this filter type may be quoted on request. For instance, the filter can be delivered with other connector types or with flying leads (RG 316 coaxial cable) terminated with connectors or prepared for direct soldering into PCB.

Typical Response curve



Mounting Details



All dimensions are given in mm [in.]

DIAGRAMS

MOUNTING DETAILS

All dimensions are given in mm [in.]

TYPICAL RESPONSE CURVE

