

6-Cavity Duplexer for the 175 - 250 MHz Band

DESCRIPTION

- The DPF 2/6-SHT-... is a 6-cavity duplex filter for duplex radiotelephones.
- This duplexer is delivered in a low band version type DPF 2/6-SHT-L, tunable within 175 - 200 MHz, medium band version type DPF 2/6-SHT-M, tunable within 200 - 230 MHz and a high band version type DPF 2/6-SHT-H, tunable within 230 - 260 MHz. These models are again delivered in 3 submodels, each dedicated to work with a certain duplex spacing.
See ordering information under the tab "Specifications" below.
- The DPF 2/6-SHT-... 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 filter has very small physical dimensions owing to the use of high-Q, temperature compensated helical resonators.
- The housing is made of extruded aluminium, the chassis of passivated steel, and teflon insulation has been applied in the rigid coaxial cables and in the connectors.
- The filter is coated with black vinyl to prevent corrosion.



ORDERING

Model	Product No.	Description	Frequency
DPF 2/6-SHT-L-4/6	200001852	SPACING: 4 - 6 MHz	175 - 200 MHz
DPF 2/6-SHT-L-6/8	200001853	SPACING: 6 - 8 MHz	175 - 200 MHz
DPF 2/6-SHT-L-8/10	200001854	SPACING: 8 - 10 MHz	175 - 200 MHz
DPF 2/6-SHT-M-4/6	200001855	SPACING: 4 - 6 MHz	200 - 230 MHz
DPF 2/6-SHT-M-6/8	200001856	SPACING: 6 - 8 MHz	200 - 230 MHz
DPF 2/6-SHT-M-8/10	200001857	SPACING: 8 - 10 MHz	200 - 230 MHz
DPF 2/6-SHT-H-4/6	200001858	SPACING: 4 - 6 MHz	230 - 260 MHz
DPF 2/6-SHT-H-6/8	200001859	SPACING: 6 - 8 MHz	230 - 260 MHz
DPF 2/6-SHT-H-8/10	200001860	SPACING: 8 - 10 MHz	230 - 260 MHz

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 duplexer are delivered factory adjusted. If Tx and Rx frequencies are not stated, the filters are delivered non-adjusted.

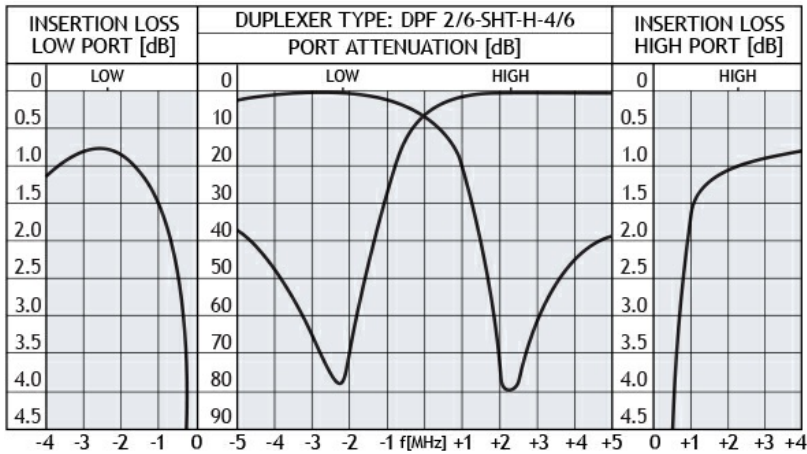
PLEASE NOTE

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 for soldering-connection.

SPECIFICATIONS

Electrical	
Model	DPF 2/6-SHT-...
Frequency	DPF 2/6-SHT-L: 175 - 200 MHz DPF 2/6-SHT-M: 200 - 230 MHz DPF 2/6-SHT-H: 230 - 260 MHz
Max. Input Power	50 W
Insertion Loss Tx-Ant and Ant-Rx	Single-channel tuned < 1.2 dB (typ. 1.0 dB) Multi-channel tuned, 1.5 MHz BW < 1.4 dB (typ. 1.2 dB)
Tx-Noise Suppression on Rx-Frequency	Single-channel tuned > 80 dB Multi-channel tuned, 1.5 MHz BW > 60 dB
Rx-Isolation on Tx-Frequency	Single-channel tuned > 80 dB Multi-channel tuned, 1.5 MHz BW > 60 dB
Impedance	50 Ω
Duplex Spacing	4 - 10 MHz (adjustable)
VSWR	< 1.5:1
Mechanical	
Connection(s)	N(f) (BNC(f), TNC(f), UHF(f) or SMA(f) on request)
Dimensions	191 x 154 x 33 mm / 7.5 x 6 x 1.2 in.
Weight	0.8 kg / 1.76 lb.
Environmental	
Operating Temperature Range	-30°C to +60°C
Frequency Stability	5 ppm/° C (approx.)

TYPICAL RESPONSE CURVES @ 4.5 MHZ DUPLEX SPACING



TYPICAL RESPONSE CURVES @ 9 MHZ DUPLEX SPACING

