

8-Cavity Duplexer for the 160 MHz Band

DESCRIPTION

- The DPF 2/44... is a 8-cavity duplex filter for duplex radio transceivers.
- This duplexer is delivered in a low band version type DPF 2/44 L, tunable within 138 - 156 MHz and a high band version type DPF 2/44 H, tunable within 152 - 175 MHz. These models are again delivered in 3 submodels, each dedicated to work with a certain duplex spacing. See Ordering information under the "Specifications" tab below.
- The DPF 2/44... models are primarily intended for equipment, where the Tx and Rx operate on several channels, (multi-channel turned) i.e. within a certain port bandwidth.
- 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.



SPECIFICATIONS

Electrical		
Model	DPF 2/44...	
Frequency	DPF 2/44 L : 138 - 156 MHz DPF 2/44 H : 152 - 175 MHz	
Max. Input Power	50 W	
Special spec. info	Multi-channel tuned, BW = 1.5 MHz	Multi-channel tuned, BW = 5 MHz
Insertion Loss Tx-Ant and Ant-Rx	< 1.4 dB (typ. 1.2 dB)	< 1.4 dB (typ. 1.2 dB)
Tx-Rx Spacing	4 - 10 MHz (adjustable)	
Tx-Noise Suppression on Rx-Frequency	> 90 dB	> 65 dB
Rx-Isolation on Tx-Frequency	> 90 dB	> 65 dB
Impedance	50 Ω	
VSWR	< 1.5:1	

Mechanical	
Connection(s)	N(f)
Dimensions	215 x 105 x 54 mm / 8.46 x 4.13 x 2.13 in.
Weight	Approx. 1.1 kg / 2.43 lb.

Environmental	
Operating Temperature Range	-30°C to +60°C
Frequency Stability	5 ppm/° C (approx.)

ORDERING

Type	Product No.	Description	Frequency
DPF 2/44 L-4/6-N	200002379	SPACING: 4 - 6 MHz	138 - 156 MHz
DPF 2/44 L-6/8-N	200002380	SPACING: 6 - 8 MHz	138 - 156 MHz
DPF 2/44 L-8/10-N	200002381	SPACING: 8 - 10 MHz	138 - 156 MHz
DPF 2/44 H-4/6-N	200002382	SPACING: 4 - 6 MHz	152 - 175 MHz
DPF 2/44 H-6/8-N	200002383	SPACING: 6 - 8 MHz	152 - 175 MHz
DPF 2/44 H-8/10-N	200002384	SPACING: 8 - 10 MHz	152 - 175 MHz

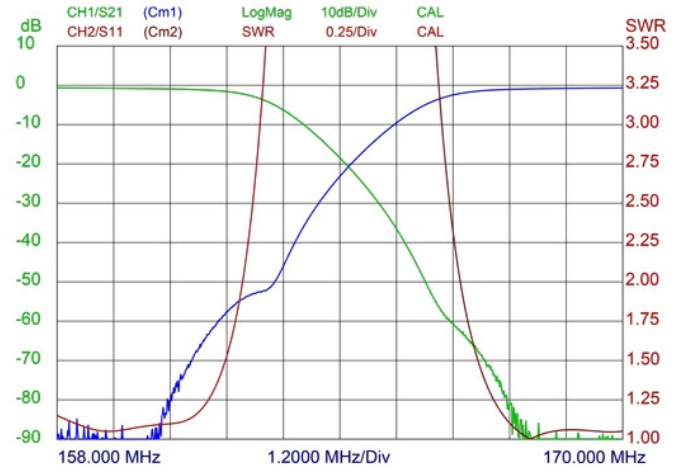
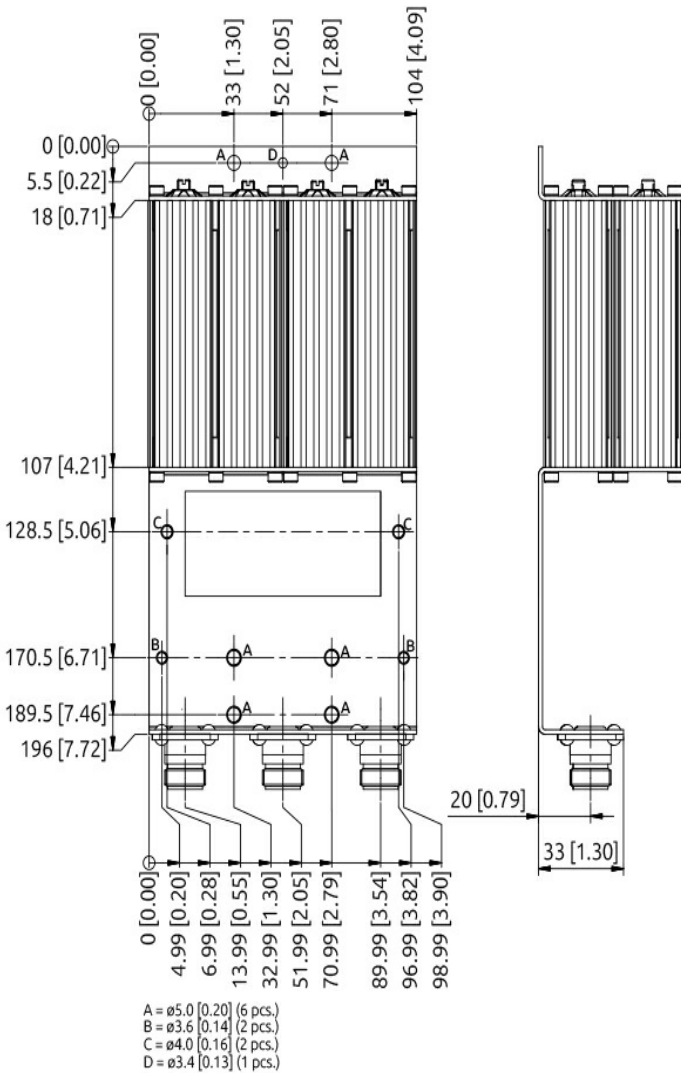
ORDERING INFORMATION

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

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.

MOUNTING DETAILS

TYPICAL VSWR CURVE



All dimensions are given in mm [in.]

