# DPF 2/44...

## 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" below.
- The DPF 2/44... models are primarily intended for equipment, where the TX and RX operate on several channels, 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 black vinyl-coated to prevent corrosion.



#### ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	TUNING RANGE (MHZ)	DUPLEX SPACING (MHZ)
DPF 2/44 L-4/6-N	200002379	138 - 156	4 - 6
DPF 2/44 L-6/8-N	200002380	138 - 156	6 - 8
DPF 2/44 L-8/10-N	200002381	138 - 156	8 - 10
DPF 2/44 H-4/6-N	200002382	152 - 175	4 - 6
DPF 2/44 H-6/8-N	200002383	152 - 175	6 - 8
DPF 2/44 H-8/10-N	200002384	152 - 175	8 - 10

#### 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.

## SPECIFICATIONS

ELECTRICAL		
MODEL	DPF 2/44	
TX/RX FREQUENCY	DPF 2/44 L : 138 - 156 MHz DPF 2/44 H : 152 - 175 MHz	
MAX. INPUT POWER	50 W	
INSERTION LOSS TX-ANT AND ANT-RX (at 4 MHz duplex spacing) Multi-channel tuned, 1.5 MHz BW Multi-channel tuned, 5 MHz BW	≤ 1.4 dB (typ. 1.2 dB) ≤ 1.4 dB (typ. 1.2 dB)	
TX NOISE SUPPRESSION ON RX-FREQUENCY Multi-channel tuned, 1.5 MHz BW Multi-channel tuned, 5 MHz BW	> 90 dB > 65 dB	
RX ISOLATION ON TX-FREQUENCY Multi-channel tuned, 1.5 MHz BW Multi-channel tuned, 5 MHz BW	> 90 dB > 65 dB	
DUPLEX SPACING	4 - 10 MHz (adjustable)	
IMPEDANCE	Nom. 50 Ω	
SWR	≤ 1.5	
MECHANICAL		
TEMP. RANGE	-30° C → +60° C	
FREQ. STABILITY	Approx. 5 ppm/° C	
CONNECTORS	N-female	
DIMENSIONS (L x W x H) With connector	215 x 105 x 54 mm	
WEIGHT	Approx. 1100 g	

### TYPICAL RESPONSE CURVES @ 4 MHz DUPLEX SPACING & 1,5 BW



TYPICAL RESPONSE CURVES @ 4 MHz DUPLEX SPACING & 5 BW





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