

# DPF VHF/33-DR 3000

6-Cavity Duplexer for the 160 MHz Band for installation inside Motorola DR 3000

## DESCRIPTION

- The DPF VHF/33-DR 3000 is a 6-cavity duplex filter designed to be built into the Motorola DR 3000 duplex radiotelephone.
- This duplexer is delivered in a low-band version DPF VHF/33-DR 3000-L, tunable within 150 - 162 MHz, and a high band version DPF VHF/33-DR 3000-H, tunable within 162 - 174 MHz. The duplexer is delivered with 5 MHz spacing.
- The DPF VHF/33-DR 3000 is primarily intended for TX and RX operation 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 filter uses full-length  $\frac{1}{4} \lambda$  cavities in a compact, extruded aluminium housing. The chassis is made of passivated steel and teflon insulation has been applied in the coaxial cables and in the connectors.
- The filter is coated with black vinyl to prevent corrosion.



## ORDERING DESIGNATION

TYPE	PRODUCT NO.	TUNING RANGE (MHZ)
DPF VHF/33-DR 3000-L	200002189	150 - 162 MHz
DPF VHF/33-DR 3000-H	200002202	162 - 174 MHz

ORDERING INFORMATION: When ordering, please state TX and RX frequencies. If TX and RX frequencies are not stated, the filters are delivered non-adjusted.

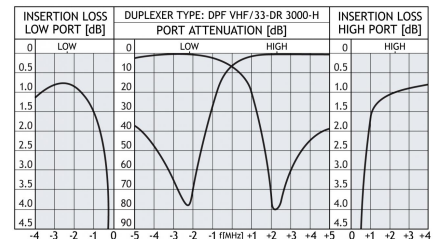
## PLEASE NOTE

Special configurations of this filter type may be quoted on request. The filter is supplied with flying leads (RG 400 coaxial cable) terminated with connectors.

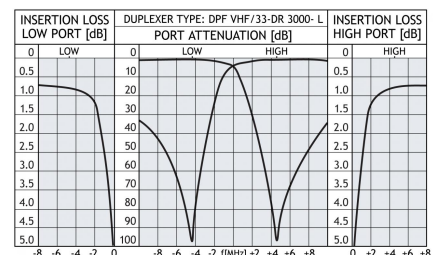
## SPECIFICATIONS

ELECTRICAL	
MODEL	DPF VHF/33-DR 3000
FREQUENCY	DPF VHF/33-DR 3000-L: 150 - 162 MHz DPF VHF/33-DR 3000-H: 162 - 174 MHz
MAX. INPUT POWER	50 W
INSERTION LOSS LOW OR HIGH TO ANT. (at 5 MHz duplex spacing)	Single-channel tuned: $\leq 1.3$ dB Multi-channel tuned, 1.5 MHz BW: $\leq 1.4$ dB
LOW TO HIGH ISOLATION ON LOW FREQUENCY	Single-channel tuned: $\geq 80$ dB Multi-channel tuned, 1.5 MHz BW: $\geq 40$ dB
HIGH TO LOW ISOLATION ON HIGH FREQUENCY	Single-channel tuned: $\geq 80$ dB Multi-channel tuned, 2 MHz BW: $\geq 40$ dB
IMPEDANCE	Nom. 50 $\Omega$
SWR (All ports)	$\leq 1.5$
MECHANICAL	
TEMP. RANGE	$-30^{\circ} \text{C}$ $\rightarrow$ $+60^{\circ} \text{C}$
FREQ. STABILITY	Approx. 4.5 ppm/ $^{\circ} \text{C}$
CONNECTION	RG 400 Length = 530 mm
CONNECTORS	Low and high port: BNC male Ant. port: N female, bulkhead
DIMENSIONS (L x W x H)	186.5 x 77 x 60 mm
WEIGHT	Approx. 860 g
MOUNTING	Supplied with 3 stays (length 63 mm) for mounting with screws M4 x 12 mm

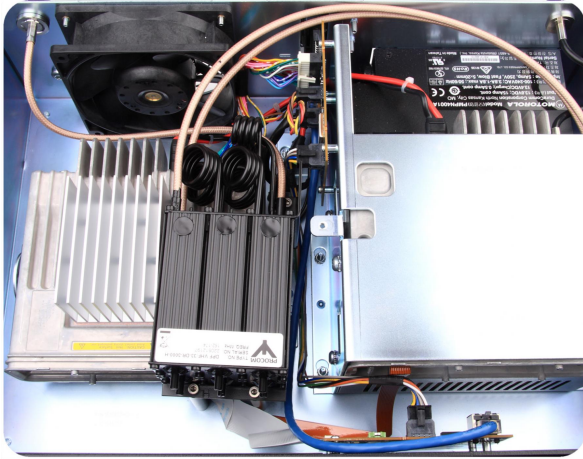
## TYPICAL RESPONSE CURVES



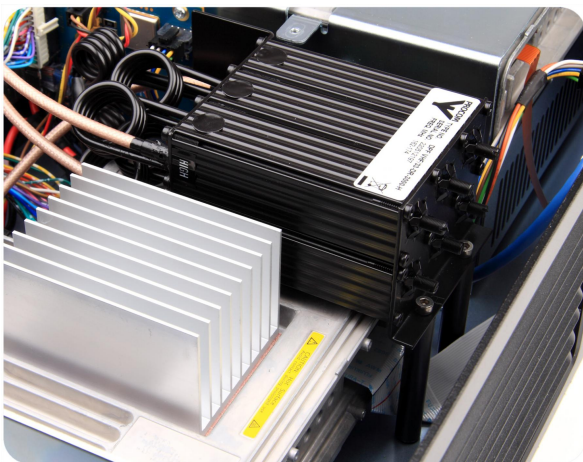
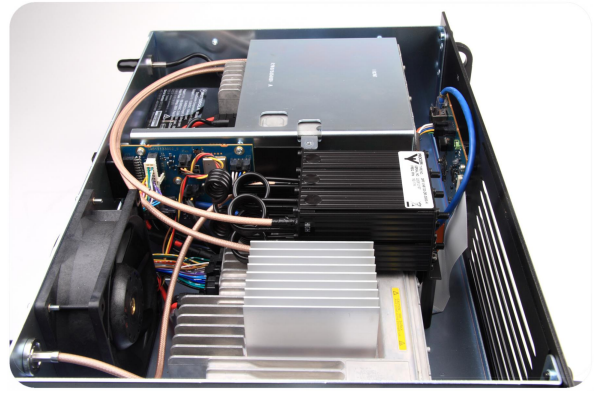
## TYPICAL RESPONSE CURVES



MOUNTING IN MOTOROLA DR 3000



MOUNTING IN MOTOROLA DR 3000



PROCOM A/S reserve the right to amend specifications without prior notice.  
19/10/12

