

# DPF UHF/33-DR 3000

## 6-Cavity Duplexer for the 450 MHz Band Base Station / Repeater

### DESCRIPTION

- The DPF UHF/33-DR 3000 is a 6-cavity duplex filter designed to be built into the Motorola DR 3000 duplex base station/repeater.
- The DPF UHF/33-DR 3000 can be adjusted within the complete 406 - 470 MHz band. The duplexer can be delivered with a 5 - 16 MHz spacing.
- The DPF UHF/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 latter 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	DUPLEX SPACING (MHZ)	PRODUCT NO.
DPF UHF/33-DR 3000-5/7	5 - 7	200002426
DPF UHF/33-DR 3000-7/9	7 - 9	200002427
DPF UHF/33-DR 3000-9/13	9 - 13	200002067
DPF UHF/33-DR 3000-13/16	13 - 16	200002428

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

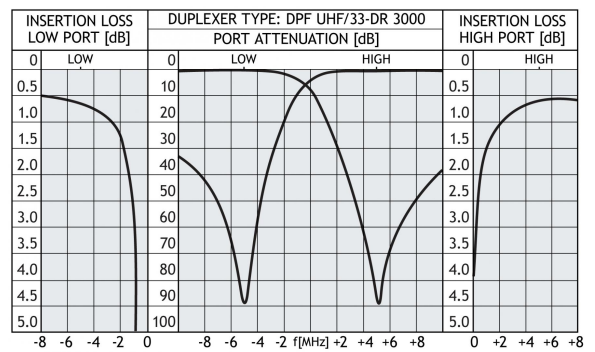
Special configurations of this filter type may be quoted on request. The filter is supplied with flying leads (RG 400 coaxial cable) terminated with connectors.

The filter is delivered with 4 stays and screws for mounting.

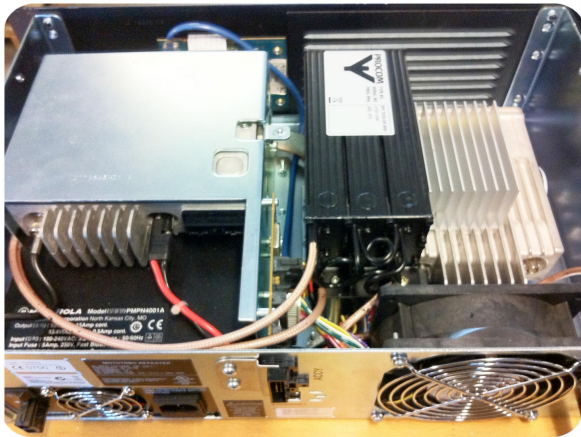
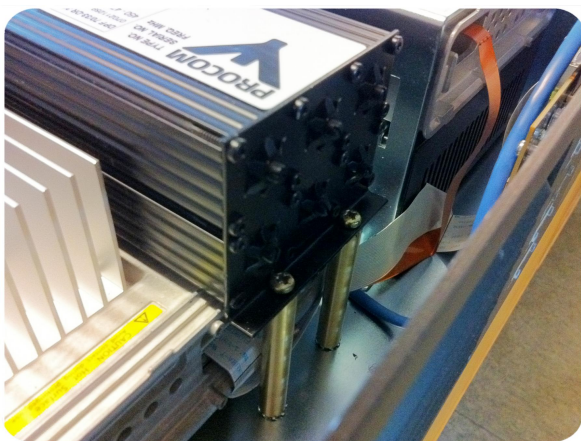
### SPECIFICATIONS

ELECTRICAL	
MODEL	DPF UHF/33-DR 3000
FREQUENCY	406 - 470 MHz
MAX. INPUT POWER	50 W
INSERTION LOSS LOW OR HIGH TO ANT. (at 10 MHz duplex spacing)	
Single-channel tuned:	≤ 1.2 dB (typ. 1.0 dB)
Multi-channel tuned, 2 MHz BW:	≤ 1.2 dB (typ. 1.0 dB)
LOW TO HIGH ISOLATION ON LOW FREQUENCY	
Single-channel tuned:	≥ 85 dB
Multi-channel tuned, 2 MHz BW:	≥ 65 dB
HIGH TO LOW ISOLATION ON HIGH FREQUENCY	
Single-channel tuned:	≥ 85 dB
Multi-channel tuned, 2 MHz BW:	≥ 65 dB
IMPEDANCE	Nom. 50 Ω
SWR (All ports)	≤ 1.5
MECHANICAL	
TEMP. RANGE	-30° C → +60° C
FREQ. STABILITY	Approx. 4.5 ppm/° C
CONNECTION	RG 400 Length = 430 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. 930 g
MOUNTING	Supplied with 4 stays (length 63 mm) for mounting with screws M4 x 12 mm

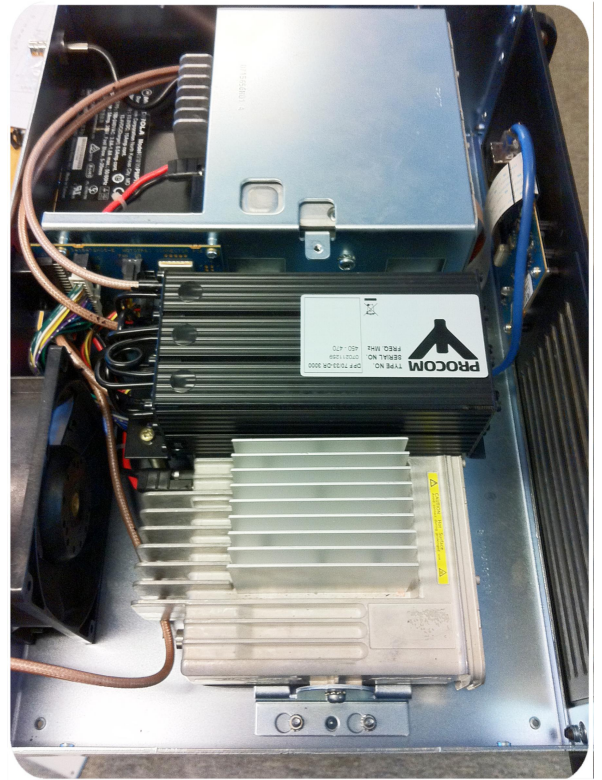
### TYPICAL RESPONSE CURVES @ 10 MHz SPACING



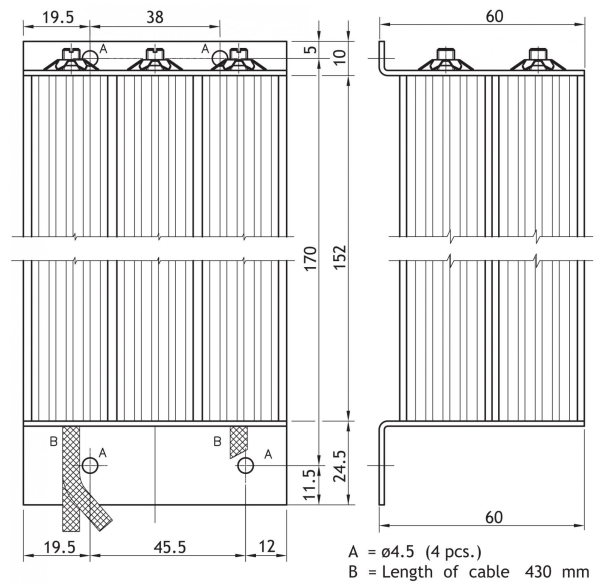
MOUNTING IN MOTOROLA DR 3000




MOUNTING IN MOTOROLA DR 3000



MOUNTING DETAILS



 PROCOM A/S reserve the right to amend specifications without prior notice.  
 19/03/14