

DPL 450

50 Watt, 6-Cavity UHF Band Reject Duplexer

DESCRIPTION

- The DPL 450 is a 6-cavity 50 Watt duplex filter for duplex radiotelephones.
- This duplexer is tunable within 400 - 480 MHz.
- The DPL 450 is primarily intended for equipment, where the TX and RX operate on single frequencies, but 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 and uses silver plated high-Q, temperature compensated resonators.
- The housing is made of extruded aluminium, the chassis of passivated steel, and teflon insulation has been applied in the semi rigid coaxial cables and in the connectors.
- The filter is grey powder coated and tin plated to prevent corrosion.



SPECIFICATIONS

ELECTRICAL	
MODEL	DPL 450
TX/RX FREQUENCY	400 - 480 MHz
MAX. INPUT POWER	50 W Continuous
INSERTION LOSS TX-ANT AND ANT-RX (at 5 MHz duplex spacing)	
Single-channel tuned	≤ 1.3 dB
Multi-channel tuned, 1.5 MHz BW	≤ 1.4 dB
TX NOISE SUPPRESSION ON RX-FREQUENCY	
Single-channel tuned	> 75 dB
Multi-channel tuned, 1.5 MHz BW	> 40 dB
RX ISOLATION ON TX-FREQUENCY	
Single-channel tuned	> 75 dB
Multi-channel tuned, 1 MHz BW	> 40 dB
DUPLEX SPACING	5 - 10 MHz
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)	280 x 166 x 36 mm
WEIGHT	Approx 1.3 Kg

MODEL SELECTION TABLE

TUNING RANGE (MHz)	DUPLEX SPACING (MHz)	ORDERING DESIGNATION
400 - 480	5 - 10	DPL 450

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. All untuned duplexers are adjusted on test frequencies.

PLEASE NOTE

Special configurations of this duplexer type may be quoted on request. For instance, the duplexer can be delivered with other connector types such as BNC or PL259 female.