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LB Duplexers

Model	Short description	Band, MHz
DPR4-4LB(L)	Bandpass/bandreject 4 cavities diam. 4", separat. 800 kHz, -1,5 dB, -75 dB, 200 W	30-40
DPR4-4LB(H)	Bandpass/bandreject 4 cavities diam. 4", separat. 800 kHz, -1,5 dB, -75 dB, 200 W	38-48
DPR8-4LB(L)	Bandpass/bandreject 4 cavities diam. 8", separat. 600 kHz, -1,5 dB, -75 dB, 200 W	30-40
DPR8-4LB(H)	Bandpass/bandreject 4 cavities diam. 8", separat. 600 kHz, -1,5 dB, -75 dB, 200 W	38-48
DPF8-4LB(L)	Narrowband duplexer, 4 cavities diam. 8", separat. 3 MHz, -1 dB, -55 dB, 200 W	30-40
DPF8-4LB(H)	Narrowband duplexer, 4 cavities diam. 8", separat. 3 MHz, -1 dB, -55 dB, 200 W	38-48
DPF8-6LB(L)	Narrowband duplexer, 6 cavities diam. 8", separat. 1 MHz, -1 dB, -75 dB, 200 W	30-40
DPF8-6LB(H)	Narrowband duplexer, 6 cavities diam. 8", separat. 1 MHz, -1 dB, -75 dB, 200 W	38-48
MDF-6LB(M)	6 cavities, sep. 3 MHz, -1,5 dB, -90 dB, 150 W	37-44
MDF-6LB(H)	6 cavities, sep. 3 MHz, -1,5 dB, -90 dB, 150 W	42,5-50

2009



30-48 MHz Pass/reject duplexers DPR4- 4LB, DPR8-4LB

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Electrical specifications

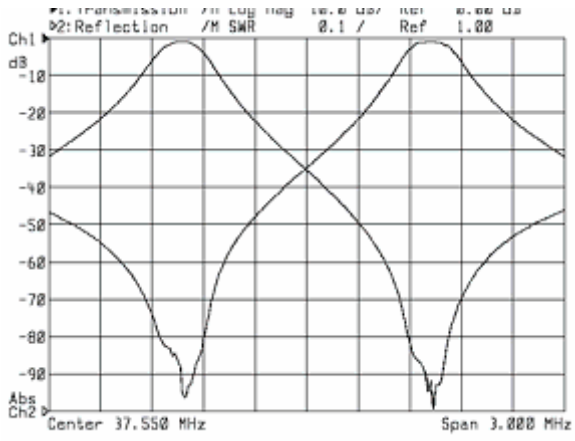
Model	DPR4-4LB(L)	DPR4-4LB(H)	DPR8-4LB(L)	DPR8-4LB(H)
Operating frequency band, MHz	30-40	38-48	30-40	38-48
Insertion loss (adjustable) not more, dB			1,5	
Frequency separation TX/RX (min), MHz	0,8	0.8	0.6	0.6
Impedance, Ohm	50	50	50	50
Isolation, not less, dB	75	75	75	75
VSWR, not more than	1,5	1.5	1.5	1.5
Input power, not more, W			not more than 200	
Temperature range, °C			from -30 to +60	
Cavity electrical length			1/4λ	

Mechanical specifications

Model	DPR4-4LB(L)	DPR4-4LB(H)	DPR8-4LB(L)	DPR8-4LB(H)
Diameter, mm (ins.)	116 (4")	116 (4")	200x200(8"x8")	200x200(8"x8")
Weight, kg	38	34	67.5	61
Connector			N-female	
Mount to 19-inch rack			yes	
Length/Width/Depth, mm	250x460x2780	250x460x2480	400x480x2780	400x480x2480

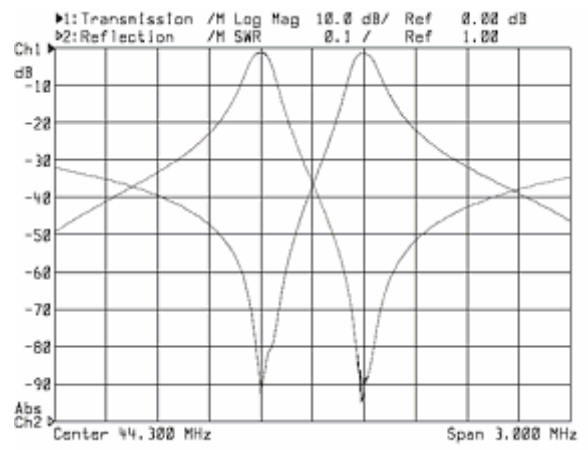
Activity in wrongly forgotten, due to outdated communication equipment, "LOW BAND" range encouraged us to develop highly effective filters and duplexers for this range. And now we are ready to suggest you our new product band pass-reject duplex filter. It is assembled from full-size quarter-wave 4" diameter cavities. This enables to use it in repeaters with various frequency separation TX/RX. It retains steady characteristics at any temperature disturbance thanks to thermostable design. Faintly defined band pass characteristic will protect repeater from interference influence, especially from 27 MHz and at distant radiopropagation.

Typical duplexer response curves



DPR4-4LB

2009



DPR8-4LB



30-48 MHz Narrowband duplexers DPF8- 4LB, DPF8-6LB

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Electrical specifications:

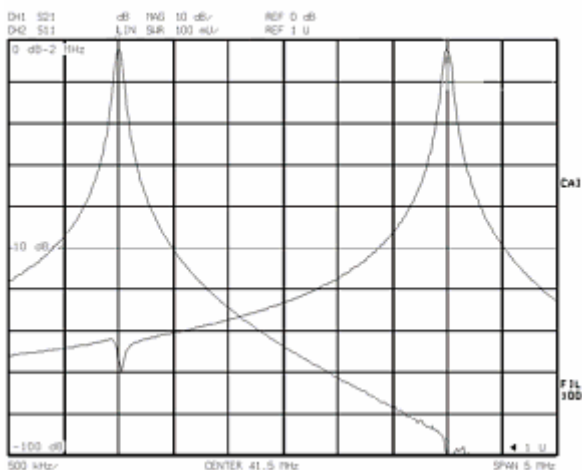
Model	DPF8-4LB(L)	DPF8-4LB(H)	DPF8-6LB(L)	DPF8-6LB(H)
Operating Frequency band, MHz	30-40	38-48	30-40	38-48
Insertion loss (adjustable) not more, dB	1.5	1.5	2	2
Frequency separation TX/RX (min), MHz	3	3	1	1
Impedance, Ohm	50	50	50	50
Isolation, not less, dB	55	55	75	75
VSWR, not more than	1.5	1.5	1.5	1.5
Input power, not more, W			not more than 200	
Temperature Range, °C			from -30 to +60	
Cavity electrical length			1/4λ	

Mechanical specifications

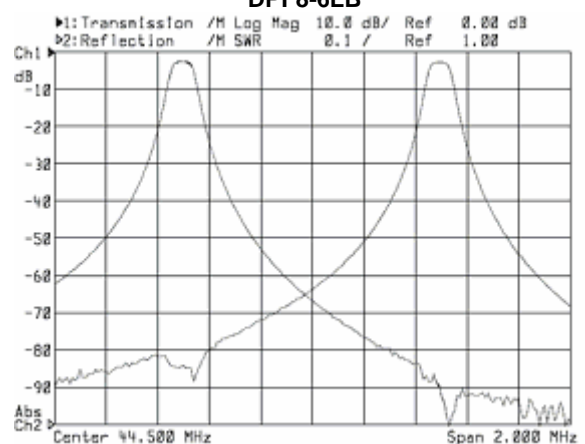
Model	DPF8-4LB(L)	DPF8-4LB(H)	DPF8-6LB(L)	DPF8-6LB(H)
Diameter, mm (ins.)			200x200 (8"x8")	
Weight, kg	77,5	67,5	112,5	101,5
Connector			N-female	
Mount to 19-inch rack			yes	
Length/Width/Depth, sm	40x48x278	40x48x248	60x48x278	60x48x248

Typical duplexers response curves

DPF8-4LB

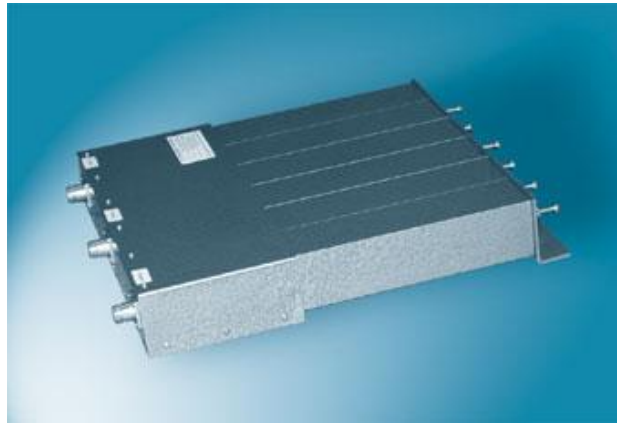


DPF8-6LB





37-50 MHz Mobile duplexers MDF-6LB



Electrical specifications

Model	MDF-6LB(M)	MDF-6LB(H)
Operating Frequency band, MHz	37-44	42.5-50
Insertion loss (adjustable) not more, dB		1.5
Frequency separation TX/RX (min), MHz		3
Impedance, Ohm		50
Isolation, not less, dB		90
VSWR, not more than		1.5
Input power, not more, W		not more than 150
Temperature Range, °C		from -30 to +50

Mechanical specifications

Model	MDF-6LB(M)	MDF-6LB(H)
Weight, kg	5.8	5.5
Connector		N-female
Length/Width/Depth, mm	415x315x60	385x315x60

For the operation of repeaters in low-frequency range VHF we have developed and launched the manufacturing of a duplexer on the spiral resonators. Two model of duplexers are being produced: MDF-6LB(M) - for the range 37-44 MHz and MDF-6LB(H) - for the upper range 42.5-50 MHz. With the separation of 3-4-MHz they provide a fully-duplex mode of operation of mobile radio stations at minimum losses and standard output power 150 Wt. This construction is significantly less in sizes than the fully-sized duplexer made on the basis of of the volume resonators. The duplexer MDF-6LB is recommended to be used jointly with our new antenna GPW-1LB.

Typical MDF-6LB(M) duplexer response curves

