



## Duplexers for ALT 300-360 MHz band

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Model	Short description	Band, MHz
DPS4-4A	Bandpass duplexer, 4 cavities, 4", BP=700kHz, 1 dB, -55 dB	300-360
DPS4-6A	Bandpass duplexer, 6 cavities, 4", BP=1500kHz, 1.5 dB, -70 dB	300-360
MDF-6A	Mobile duplexer, 6 cavities, reject, sep. 36 MHz, -1,3 dB, -75 dB, 50 W	300-305/336-342

2009



## 300-360 MHz Band Pass Duplexer DPS4-4A, DPS4-6A

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DPS4-4A



DPS4-6A



### Electrical specifications

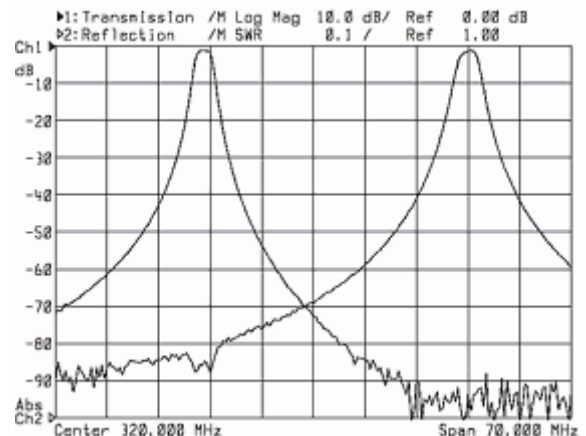
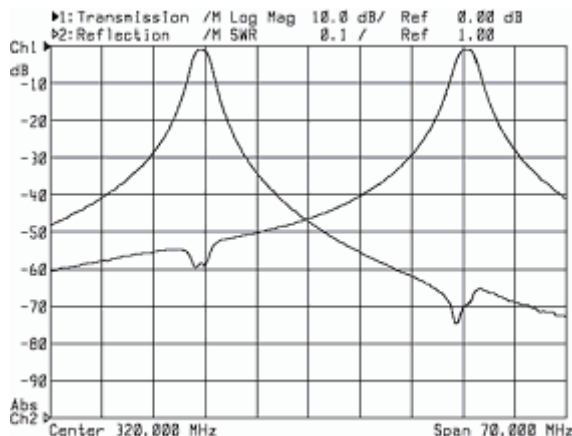
Model	DPS4-4A	DPS4-6A
Operating frequency band, MHz		300-360
Insertion loss (adjustable) not more, dB	1	1,5
Band pass, kHz	0,9	1,5
Impedance, Ohm		50
Isolation, not less, dB	55	70
VSWR, not more than		1,5
Input power, not more, W		200
Temperature range, °C		from -30 to +60
Cavity electrical length		1/4λ

### Mechanical specifications

Model	DPS4-4A	DPS4-6A
Diameter, mm (ins.)		110 (4")
Weight, kg	6,2	8,5
Connector		N-female
Mount to 19-inch rack		yes
Length/Width/Depth, mm		400x480x230

We suggest you to utilize DPS4-4A and DPS4-6A duplexers, if you are planning to construct multichannel 300 MHz repeater but unable to install two separated antennas. It will provide, together with wide-band D or DS series antenna, operation of repeater at standard duplex separation of 36 MHz and will easily pass transmitting and receiving frequency bands. In DPS4-4A and DPS4-6A each arm represents two- or three-jar 4" coaxial cavity preselector. DPS4-6A duplexer provides wider transmitting and receiving bandwidth, than DPS4-4A.

### Typical duplexers response curves





## 400-490 MHz Mobile duplexers MDF-6U



### Electrical specifications

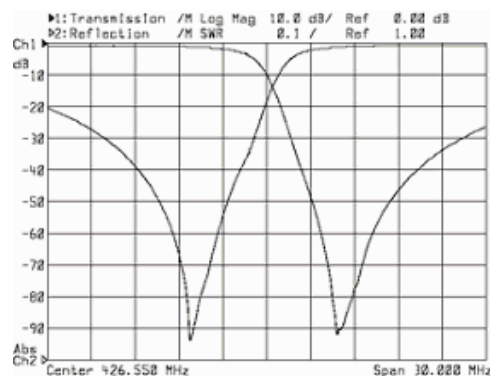
Model	MDF-6UL5/8	MDF-6UL8/13	MDF-6UM8/13
Operating Frequency band, MHz	400-430	400-430	440-470
Insertion loss (adjustable) not more, dB	1,3	1.3	1.3
Frequency separation TX/RX (min), MHz	5-8	8-13	8-13
Impedance, Ohm		50	
Isolation, not less, dB		75	
VSWR, not more than		1,5	
Input power, not more, W		not more than 50	
Temperature Range, °C		from -30 to +50	

### Mechanical specifications

Model	MDF-6UL5/8	MDF-6UL8/13	MDF-6UM8/13
Weight, kg	0,62	0.62	0.62
Connector		N-female	
Length/Width/Depth, mm		170x160x40	

Strong interest in duplex filters, providing simultaneous operation of mobile station with one antenna, was initiated by availability of full-duplex mobile radio stations on domestic market. We have designed and begin to manufacture such devices: mobile duplex filter MDF-6V and MDF-6U, recently. Compact mobile duplexers are manufactured using six-section helical resonators and rejection circuit. Having frequency separation 5-8 MHz (MDF-6U5/8) and 8-13 MHz (MDF-6U8/13), they provide mobile radio stations full duplex operation mode at minimum loss and 50 watt standard power output. Duplexer MDF-6U dimensions enable to mount it in the same case with radio station. However, one should notice, that such duplexers are ineffective, when implemented in base stations or in locations with compromised electromagnetic compatibility.

### Typical duplexers response curves



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