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Preselectors

Model	Short description	Band, MHz	Price, EUR
PS8-2FM	2 cavities, 8", N-female(7/16), BP=400 kHz, insertion loss -1 dB, 1500 W	100-108	791
PS5-2V HAM	2 cavities, 5", N-female, BP=300 kHz, insertion loss -1 dB	140-174	377
PS5-4V	4 cavities, 5", N-female, BP=700 kHz, insertion loss -2 dB	140-174	774
PS5-6V	6 cavities, 5", N-female, BP=1.5 MHz, insertion loss -3 dB	140-174	1170
PS8-2V HAM	2 cavities, 8", N-female, BP=300 kHz, insertion loss -1 dB	140-174	521
PS8-4V	4 cavities, 8", N-female, BP=700 kHz, insertion loss -2 dB	140-174	1048
PS4-2A	2 cavities, 4", N-female, BP=600 kHz, insertion loss -1 dB	300-360	372
PS4-4A	4 cavities, 4", N-female, BP=3 MHz, insertion loss -2 dB	300-360	753
PS4-2U	2 cavities, 4", N-female, BP=1 MHz, insertion loss -1 dB	400-490	354
PS4-3U	3 cavities, 4", N-female, BP=1.5 MHz, insertion loss -1.5 dB	400-490	536
PS4-4U	4 cavities, 4", N-female, BP=2 MHz, insertion loss -2 dB	400-490	716
PS4-6U	6 cavities, 4", N-female, BP=4 MHz, insertion loss -3 dB	400-490	1067
PS8-2U	2 cavities, 8", N-female, BP=400 kHz, insertion loss -1 dB	400-490	521
PS2-3V	3 cavities, 2", N-female, BP=1.5 MHz, BR@5MHz=-30dB, 150 W	140-165/150-175	198
PSL2-3V HAM	3 cavities, 2", N-female, BP=2 MHz, 150 W	140-149	
PS2-3U	3 cavities, 2", N-female, BP=2.5 MHz, BR@5MHz=-18dB, 150 W	400-460/430-490	198
PS2-4G	4 cavities, 2", N-female, BP=10-20 MHz, BR@10MHz=-25dB	820-970	329

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100-108 MHz
Preselector PS8-2FM

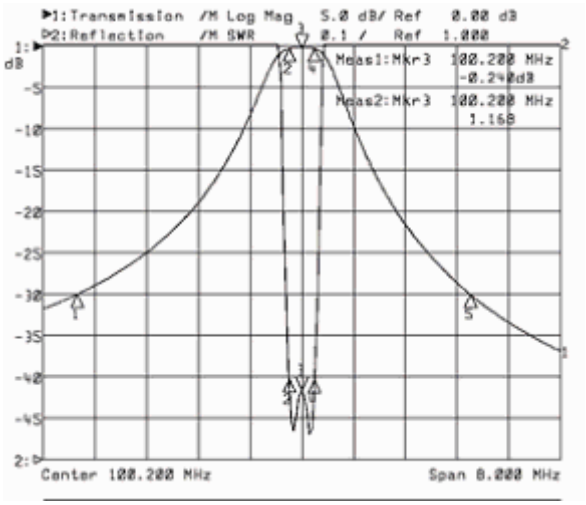
Electrical specifications

Model	PS8-2FM
Operating frequency band, MHz	100-108
Insertion loss (adjustable) not more, dB	0,35
Max. frequency bandwidth, kHz	400
Impedance, Ohm	50
Gain	see figure
VSWR, not more than	1,2
Input power not more than , W	1500
Temperature range, °C	-30 to +60
Cavity electrical length	1/4λ

Mechanical specifications

Model	PS8-2FM
Diameter, mm (ins.)	206 (8")
Weight, kg	14
Connector	N-female
(7/16 optional)	
Mount to 19-inch rack	present
Length/Width/Depth not more, mm	400x1010x200

Typical gain-frequency characteristics PS8-2FM



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140-174 MHz Preselectors PS5-2V, PS5-4V, PS5-6V

PS5-2V

PS5-6V

Electrical specifications

Model	PS5-2V	PS5-4V	PS5-6V
Operating frequency band, MHz		140-174	
Insertion loss (adjustable) not more, dB	1,5	2	3
Max. frequency bandwidth, MHz	0,3	0,7	1.5
Impedance, Ohm		50	
Gain		see figure	
VSWR, not more than		1,5	
Input power, W		not more than 300	
Temperature range, °C		from -30 to +60	
Cavity electrical length		1/4λ	

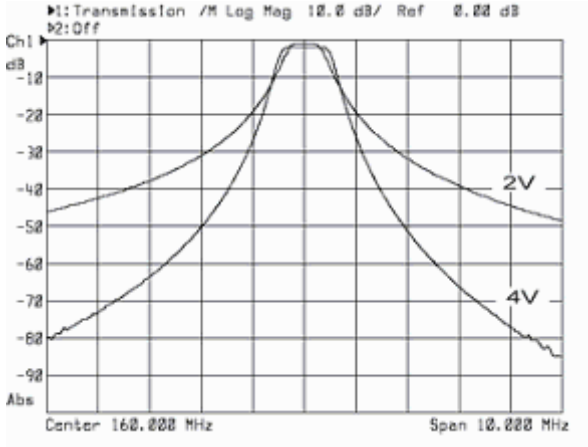
Mechanical specifications

Model	PS5-2V	PS5-4V	PS5-6V
Diameter of cavity, mm (ins.)		128 (5")	
Weight, kg	4,4	8,3	12,2
Connector		N-female	
Mount to 19-inch rack		present	
Length/Width/Depth not more, mm	800x480x140	800x480x265	

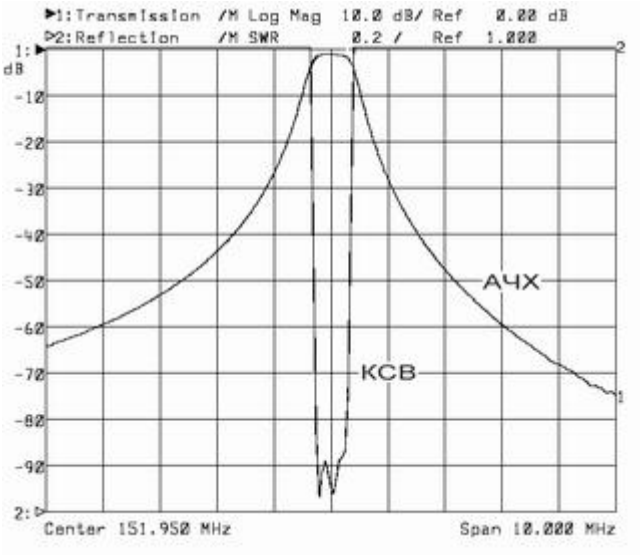
Preselectors PS5-4(6)V are based on bandpass filters and designed to pass several frequency channels and cut out the other. PS5-4V type preselectors are essential for every modern trunking communication station. Combine them with broadband antenna and receiver distribution panel and you will get finest repeater receiving section antenna system. Addition of new cavities (model PS5-6V) enables to enlarge bandwidth during communication system growth and increase in number of channels.

Preselectors typical gain-frequency characteristics

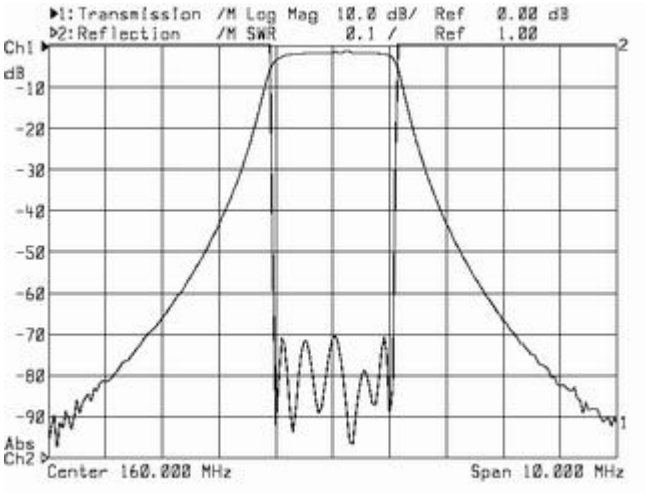
PS5-2V, PS5-4V



PS5-3V



PS5-6V



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140-174 MHz
Preselectors PS8-2V, PS8-4V

PS8-2V

PS8-4V

Electrical specifications

Model	PS8-2V	PS8-4V
Operating frequency band, MHz		140-174
Gain (adjusted), dB	0,8-3	1-4
Max. frequency bandwidth, MHz	0,3	0,7
Impedance, Ohm		50
Gain		see figure
VSWR, not more than		1,5
Input power, W		not more than 300
Temperature range, °C		from -30 to +60
Cavity electrical length		1/4λ

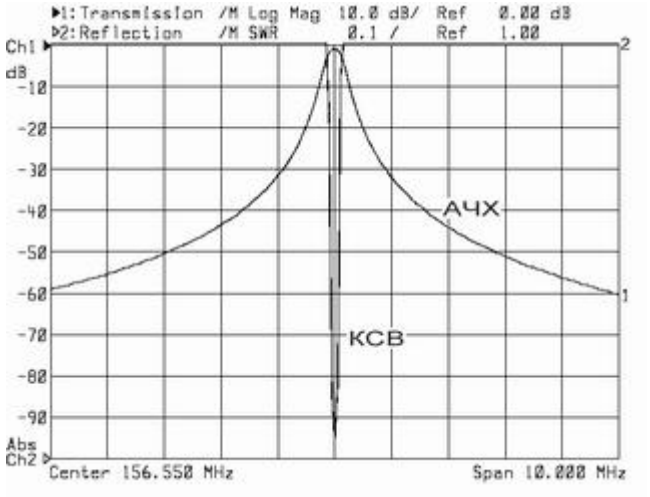
Mechanical specifications

Model	PS8-2V	PS8-4V
Diameter of cavity, mm (ins.)		206 (8")
Weight, kg	7,2	13,9
Connector		N-female
Mount to 19-inch rack		present
Length/Width/Depth not more, mm	800x480x210	800x480x420

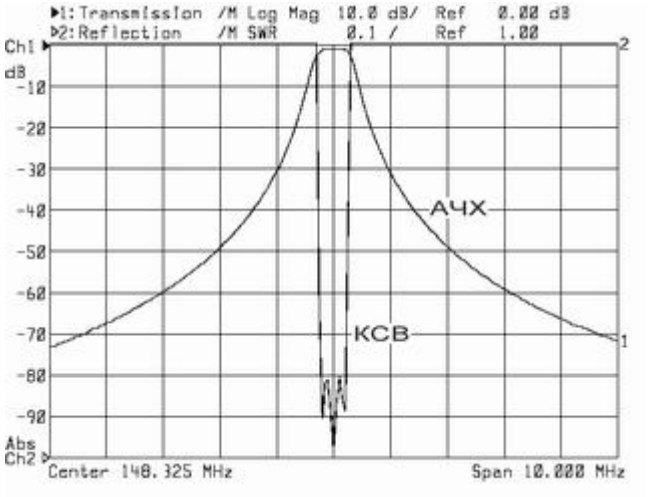
Preselectors PS8-4(6)V are based on bandpass filters and designed to pass several frequency channels and cut out the other. Combine them with broadband antenna and receiver distribution panel and you will get finest repeater receiving section antenna system. Application of 8-inch cavities provides higher preselector gain-frequency characteristic gain slope. Addition of new cavities (model PS8-6V) enables to enlarge bandwidth during communication system growth and increase in number of channels.

Preselectors typical gain-frequency characteristics

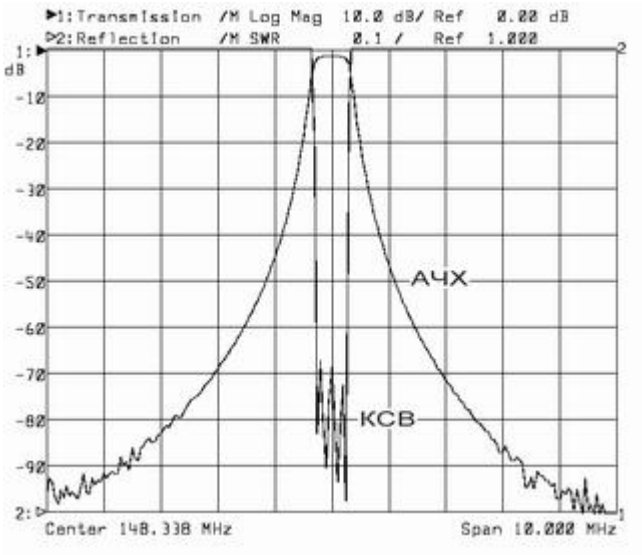
PS8-2V



PS8-3V



PS8-4V



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300-360 MHz
Preselectors PS4-2A, PS4-4A

PS4-2A

PS4-4A

Electrical specifications

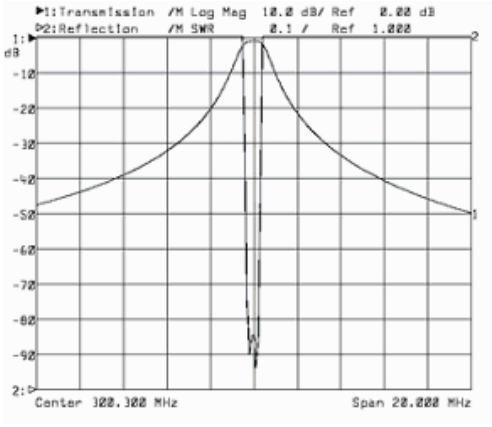
Model	PS4-2A	PS4-4A
Operating frequency band, MHz		300-360
Insertion loss (adjustable) not more, dB	1	2
Max. frequency bandwidth, MHz	0,6	3
Impedance, Ohm		50
Gain		see figure
VSWR, not more than		1,5
Input power, W		not more than 300
Temperature range, °C		from -30 to +60
Cavity electrical length		1/4λ

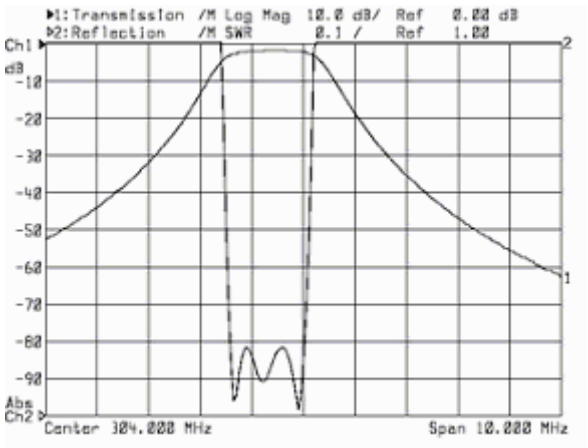
Mechanical specifications

Model	PS4-2A	PS4-4A
Diameter of cavity, mm (ins.)		110 (4")
Weight, kg	3,3	6,1
Connector		N-female
Mount to 19-inch rack		present
Length/Width/Depth not more, mm	400x480x115	400x480x230

Preselectors PS4-4(6)VA are based on bandpass filters and designed to pass several frequency channels and cut out the other. Absence of wide variety of 300 MHz range equipment yet restrains active usage of this frequency range in the trunking systems. PS4-4(6)A type preselectors, and other "ALT" range equipment: broadband dipole, directional antennas, filters, duplexers, transmitter combiners, enable you to construct highly effective 300-360 MHz communication system.

Preselectors typical gain-frequency characteristics





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PS4-2A **PS4-4A**

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400-490 MHz Preselectors PS4-2U, PS4-4U, PS4-6U

PS4-2U

PS4-3U

PS4-4U

PS4-6U

Electrical specifications

Model	PS4-2U	PS4-3U	PS4-4U	PS4-6U
Operating frequency band, MHz	400-490			
Insertion loss (adjustable) not more, dB	1	1,5	2	3
Max. frequency bandwidth, MHz	1	1,5	2	4
Impedance, Ohm	50			
Gain	see figure			
VSWR, not more than	2			
Input power, W	not more than 300			
Temperature range, °C	from -30 to +60			
Cavity electrical length	1/4λ			

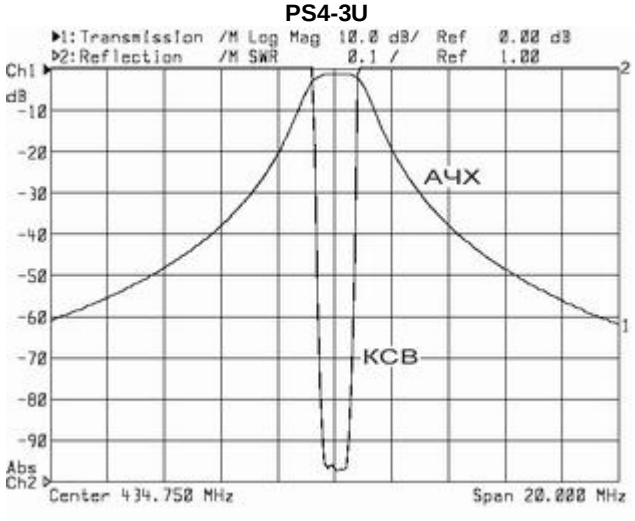
Mechanical specifications

Model	PS4-2U	PS4-3U	PS4-4U	PS4-6U
Diameter of cavity, mm (ins.)	110 (4")			
Weight, kg	3,1	4,4	5,7	8,3
Connector	N-female			
Mount to 19-inch rack	present			
Length/Width/Depth not more, mm	360x480x115		360x480x225	

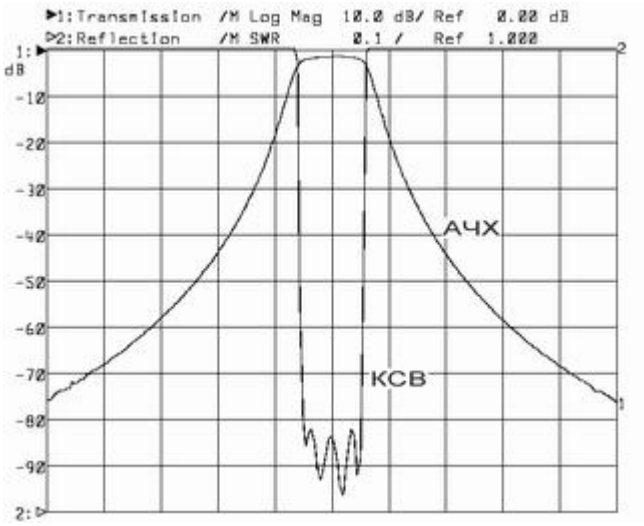
Conditions of UHF range communication systems development require broadband receiving filters with U-shaped characteristic. Moreover, the more receiving channels you have, the wide band must be. Our preselectors PS4-4(8)U, thanks to modular design, enable to increase the number of channels adding additional filters and conducting necessary adjustment. These filters provide repeater operation trough common antenna without duplexer used, at standard 10 MHz frequency separation.

Preselectors typical gain-frequency characteristics

PS4-3U



PS4-4U



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400-490 MHz
Preselectors PS8-2U

Electrical specifications

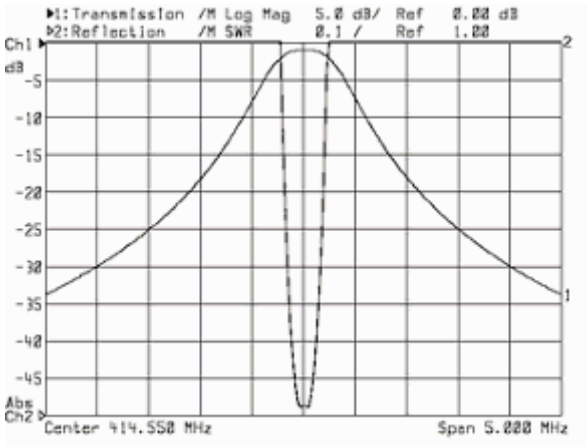
Model	PS8-2U
Operating frequency band, MHz	400-490
Insertion loss (adjustable) not more, dB	1
Max. frequency bandwidth, kHz	200
Impedance, Ohm	50
Gain	see figure
VSWR, not more than	2
Input power, W	not more than 300
Temperature range, °C	from -30 to +60
Cavity electrical length	1/4λ

Mechanical specifications

Model	PS8-2U
Diameter of cavity, mm (ins.)	206 (8")
Weight, kg	4,1
Connector	N-female
Mount to 19-inch rack	present
Length/Width/Depth not more, mm	360x480x210

Conducting sales managers of our company noted risen interest of customers to particular type of filters, which are preselectors with narrow 150-200 MHz band and slope response curve. Such concern in these devices is accounted for requirement to pass 4-5 receiving channels with slight frequency separation of 25-50 MHz and desire to cleanse spectra from all unwanted frequencies as better as it is possible. This makes our filter ideal in terms of characteristics, overall dimensions and price for construction of receiving sections at locations with labored electromagnetic environment.

Preselector PS8-2U typical gain-frequency characteristics



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140-174, 400-490 MHz Mobile preselectors PS2-3V, PS2-3U

Electrical specifications

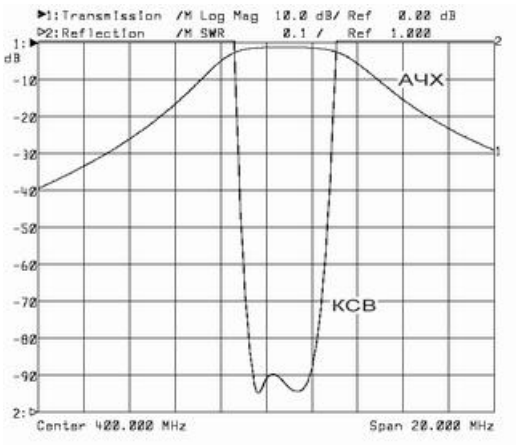
Model	PS2-3V(L)	PS2-3V(H)	PS2-3U(L)	PS2-3U(H)
Operating frequency band, MHz	140-165	150-175	400-460	430-490
Insertion loss (adjustable) not more, dB		1,3		1,5
Max. frequency bandwidth, MHz		1,5		2,5
Impedance, Ohm			50	
Gain			see figure	
VSWR, not more than			1,3	
Input power, W			not more than 150	
Temperature range, °C			from -30 to +50	

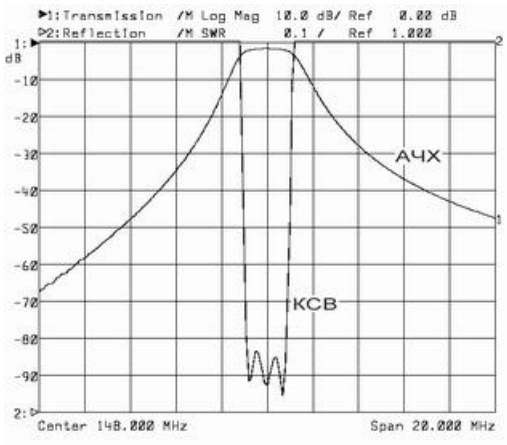
Mechanical specifications

Model	PS2-3V(L)	PS2-3V(H)	PS2-3U(L)	PS2-3U(H)
Diameter, mm (ins.)			50 (2")	
Weight, kg			1,04	
Connector			N-female	
Mount to 19-inch rack			optional	
Length/Width/Depth not more, mm			150x150x50	

This compact bandpass three-section helical resonator filter was specifically designed for application in receiving distribution panels for RX section of multichannel mobile wireless communication systems. We have designed selective device with optimal price/quality ratio thanks to particularly selected dimensions of resonators, construction simplification and advanced assembly technique. Such filters are much inexpensivier than coaxial resonator modifications, their response curves totally comply with requirements of input filter of a distribution panel of a tranking system. Filter design allows for not only frequency readjustment but also inter-cavity coupling depth tuning, enabling to adjust all devices for minimal VSWR. Application of N-type joints allows employing of these modern, highly effective connectors with standardized impedance value all over section. PS2-3V operating temperature range will fully satisfy those customers, which has its equipment installed in a heated room or in a garret. Considering increased flooding of 380-490 frequency range with transmitters application of concerned preselectors becomes nowadays essential even in areas with relatively serene electromagnetic environment.

Preselectors typical gain-frequency characteristics





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PS2-3U **PS2-3V**

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140-149 MHz
Preselector PSL2-3V

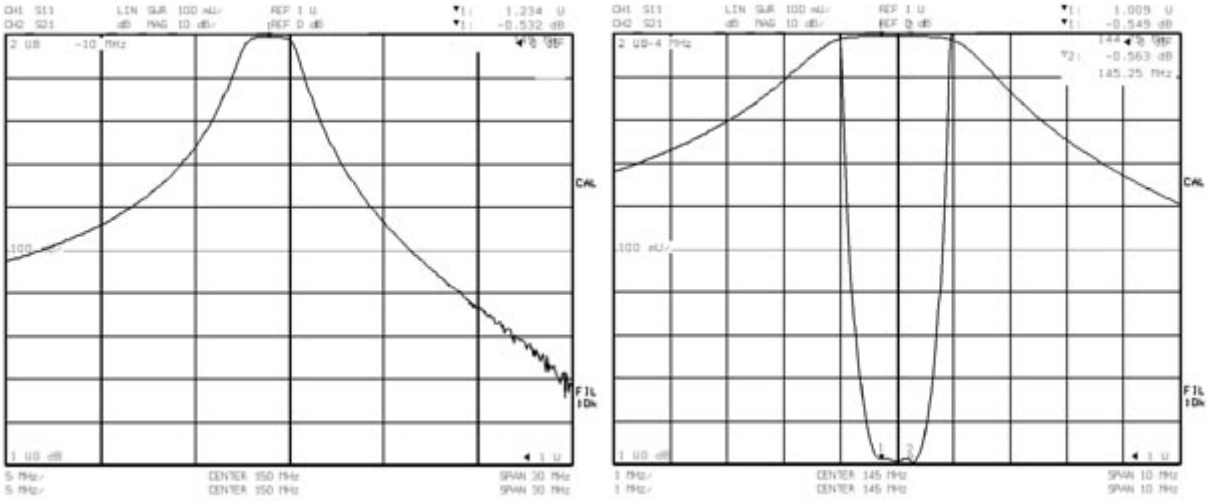
Electrical specifications

Model	PSL2-3V
Operating frequency band, MHz	140-149
Insertion loss (adjustable) not more, dB	1
Max. frequency bandwidth, MHz	2
Impedance, Ohm	50
Gain	see figure
VSWR, not more than	1.5
Input power, W	150
Temperature range, °C	from -30 to +60
Cavity electrical length	1/4λ

Mechanical specifications

Model	PSL2-3V
Diameter of cavity, mm (ins.)	55 (2")
Weight, kg	6
Connector	N-female
Length/Width/Depth not more, mm	58x165x560

Preselectors typical gain-frequency characteristics



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820-970 MHz
Mobile preselector PS2-4G

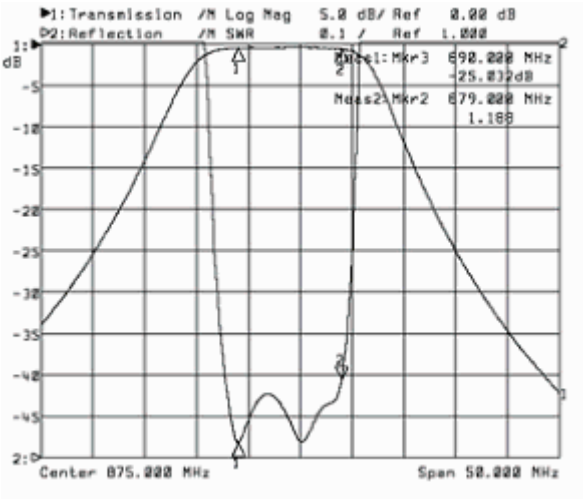
Electrical specifications

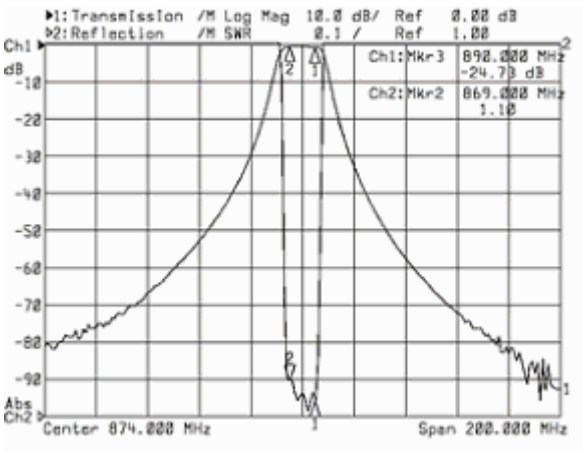
Model	PS2-4G
Operating frequency band, MHz	820-970
Insertion loss (adjustable) not more, dB	0,6
Max. frequency bandwidth, MHz	15
Impedance, Ohm	50
Gain	see figure
VSWR, not more than	1,3
Input power, W	not more than 300
Temperature range, °C	-40 to +60

Mechanical specifications

Model	PS2-4G
Diameter, mm (ins.)	50 (2")
Weight, kg	0,9
Connector	N-female
Mount to 19-inch rack	optional
Length/Width/Depth not more, mm	280x90x55

Typical gain-frequency characteristics PS2-4G





2009