


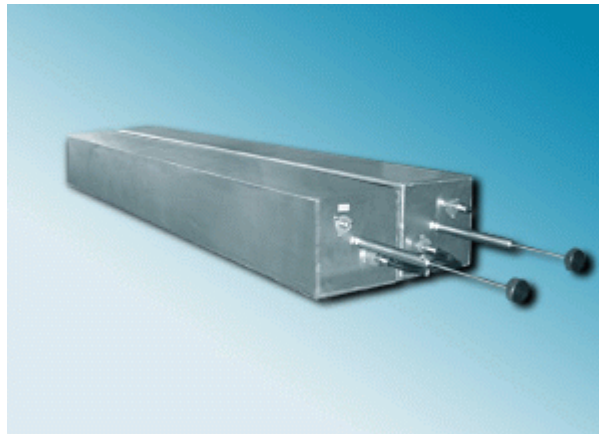


Bandpass filters

Model	Short description	Band, MHz	Price, EUR
PF8-2LB(L)	Dual Cavity, 8", N-fem, 200 W, 1/4λ	30-40	1153
PF8-2LB(H)	Dual Cavity, 8", N-fem, 200 W, 1/4λ	38-48	969
PF12-1AVIA	Single Cavity, 12", 300 W, N-female	118-136	
PF4-1V	Single Cavity, 4", 200 W, N-fem.	140-174	
PF5-1V 	Single Cavity, 5", 200 W, N-fem., Q(0,707)@il-1dB=500	140-174	177
PF5-2V	Dual Cavity, 5", N-fem, 200 W, 1/4λ	140-174	375
PF5-3V	Triple Cavity, 5", N-fem, 200 W, 1/4λ	140-174	564
PF8-1V	Single Cavity, 8", N-fem., 300 W, 1/4λ, Q(0,707)@il-1dB=700	140-174	249
PF8-2V	Dual Cavity, 8", N-fem., 300 W, 1/4λ	140-174	516
PF8-3V	Triple Cavity, 8", N-fem., 300 W, 1/4λ	140-174	775
PF10-1V	Single Cavity, 10", N-fem., 300 W, 1/4λ, Q(0,707)@il-1dB=800	140-174	294
PF10-2V	Dual Cavity, 10", N-fem., 300 W, 1/4λ	140-174	605
PF12-1V	Single Cavity, 12", N-fem., 350 W, 1/4λ, Q(0,707)@il-1dB=950	140-174	376
PF12-2V	Dual Cavity, 12", N-fem., 350 W, 1/4λ	140-174	766
PF4-1A	Single Cavity, 4", N-fem., 200 W, 1/4λ	300-360	174
PF4-2A	Dual Cavity, 4", N-fem., 200 W, 1/4λ	300-360	369
PF10-1A	Single Cavity, 10", N-fem., 300 W, 1/4λ	300-360	287
PF10-2A	Dual Cavity, 10", N-fem., 300 W, 1/4λ	300-360	595
PF8-1U	Single Cavity, 8", N-fem., 300 W, 1/4λ	400-490	239
PF8-1UL	Single Cavity, 8", N-fem., 300 W, 3/4λ	400-490	249
PF10-1U	Single Cavity, 10", N-fem., 300 W, 1/4λ	400-490	255
PF10-2U	Dual Cavity, 10", N-fem., 300 W, 1/4λ	400-490	517
PF10-1UL	Single Cavity, 10", N-fem., 300 W, 3/4λ	400-490	294
PF10-2UL	Dual Cavity, 10", N-fem., 300 W, 3/4λ	400-490	605
PF5-2HAM-200, PF5-3HAM-400	Band pass filters for EME, N-female, 5"	144-146	
PF8-2HAM-100, PF8-2HAM-250, PF8-3HAM-300	Band pass filters for EME, N-female, 8"	144-146	
PF10-2HAM-100	Band pass filters for EME, N-female, 10"	144-146	



30-48 MHz Bandpass filter PF8-2LB



Electrical specifications

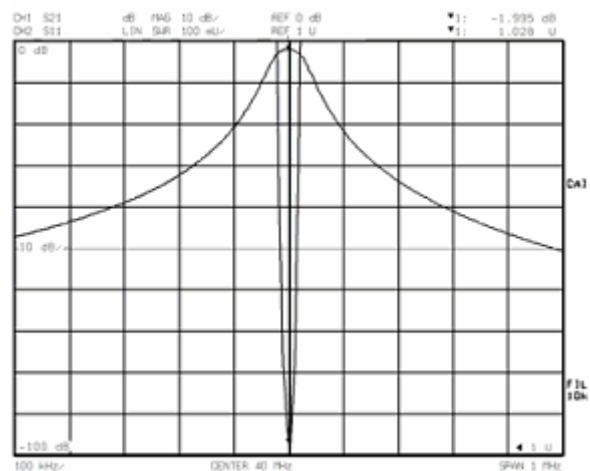
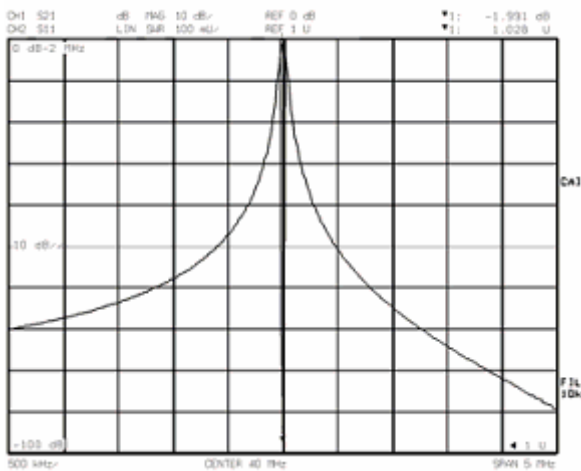
Model	PF8-2LB(L)	PF8-2LB(H)
Operating frequency band, MHz	30-40	38-48
Insertion loss (adjustable), dB		0,5-3
Impedance, Ohm		50
Attenuation		see fig.
VSWR, not more than		1,2
Input power, not more, W		not more than 200
Temperature range °C		from -30 to +60
Cavity electrical length		1/4λ

Mechanical specifications

Model	PF8-2LB(L)	PF8-2LB(H)
Diameter, mm (ins.)		200x200 (8"x8")
Weight, kg	38,7	33,7
Connector		N-female
Mount to 19-inch rack		for order
Length/Width/Depth, mm	200x480x2780	200x480x2480

The application of enhanced quality-factor (of diameter 8") for construction of bandpass filters and bandpass duplexers within the range Low Band makes it possible to increase the selectivity of receivers, to decrease the influence of out-of-band interference.

Typical selectivity characteristics PF8-2LB





118-136 MHz Bandpass filter PF12-1AVIA

Electrical specifications

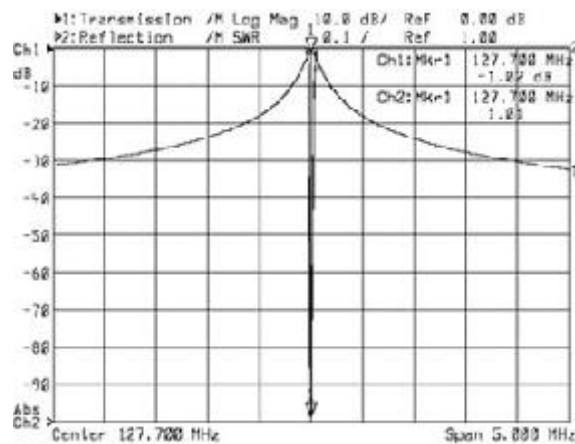
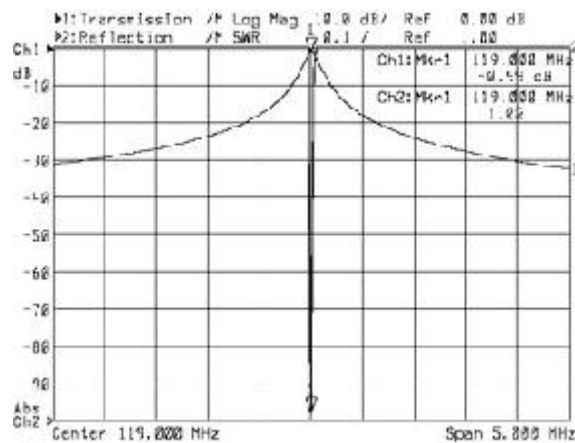
Model	PF12-1AVIA
Operating frequency band, MHz	118-136
Insertion loss (adjustable), dB	0,5-3
Impedance, Ohm	50
Attenuation	see fig.
VSWR, not more than	1,2
Input power, not more, W	not more than 300
Temperature range, °C	from -30 to +60
Cavity electrical length	1/4λ

Mechanical specifications

Model	PF12-1AVIA
Diameter, mm (ins.)	308x308 (12"x12")
Weight, kg	8
Connector	N-female
Mount to 19-inch rack	optional
Length/Width/Depth, mm	800x270x270



Typical selectivity characteristics PF12-1AVIA





140-174 MHz Bandpass filter PF4-1V



PF4-1V



PF4-2V



PF4-3V

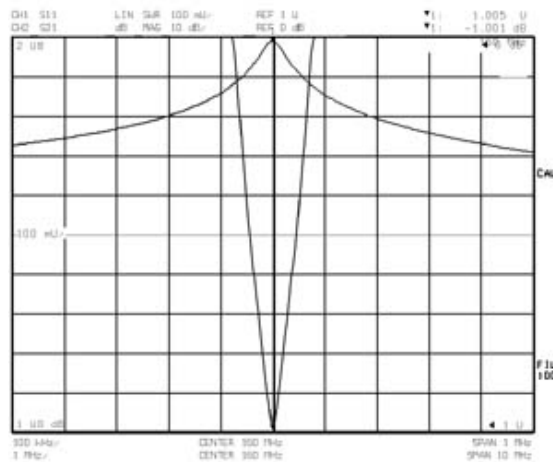
Electrical specifications

Model	PF4-1V
Operating frequency band, MHz	140-174
Insertion loss (adjustable), dB	0,5-3
Impedance, Ohm	50
Attenuation	see fig.
VSWR, not more than	1,2
Input power, not more, W	200
Temperature range, °C	from -30 to +60
Cavity electrical length	1/4λ

Mechanical specifications

Model	PF4-1V
Diameter, mm (ins.)	105 (4")
Weight, kg	2.6
Connector	N-female
Mount to 19-inch rack	optional
Length/Width/Depth, mm	800x105x105

Typical selectivity characteristic PF4-1V





140-174 MHz Bandpass filters PF5-1V, PF5-2V, PF5-3V

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru



Electrical specifications

Model	PF5-1V	PF5-2V	PF5-3V
Operating frequency band, MHz		140-174	
Insertion loss (adjustable), dB	0,5-3	1-5	1,5-6
Impedance, Ohm		50	
Attenuation		see fig.	
VSWR, not more than		1,2	
Input power, not more, W		not more than 300	
Temperature range, °C		from -30 to +60	
Cavity electrical length		1/4λ	

Mechanical specifications

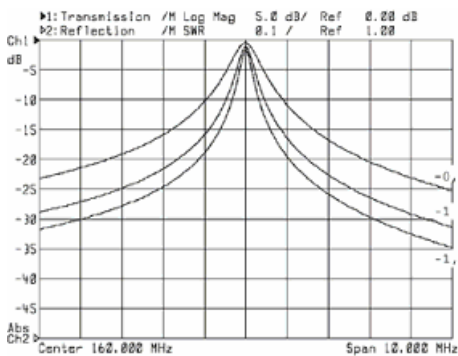
Model	PF5-1V	PF5-2V	PF5-3V
Diameter, mm (ins.)		128 (5")	
Weight, kg	1,85	4,4	6,25
Connector	N-female		
Mount to 19-inch rack	optional		yes
Length/Width/Depth, mm	800x128x128		800x480x140

Using PF5-V filters in antenna section of radio stations and repeaters you will raise selectivity of their receivers, lower influence of out-of-band interference, escape effect of UHF blanking by nearby radio transmitters and desensitization, and eliminate intermodulation interference, also.

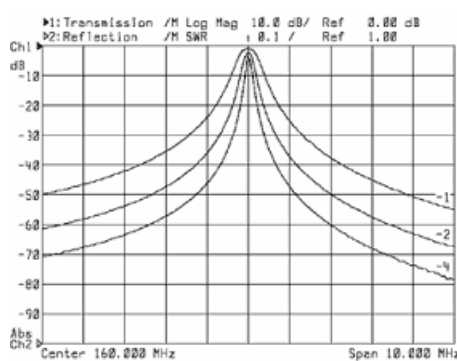
Filters, installed in transmitters circuit, lower stray emission level and prevent intermodulation products occurrence. Recommended to use if equipment is installed in locations with high density of transmitting devices.

PF5-2V and PF5-3V filter represents two and three PF5-1V filters connected in series and combined by metal brackets. They have higher characteristics at corresponding loss.

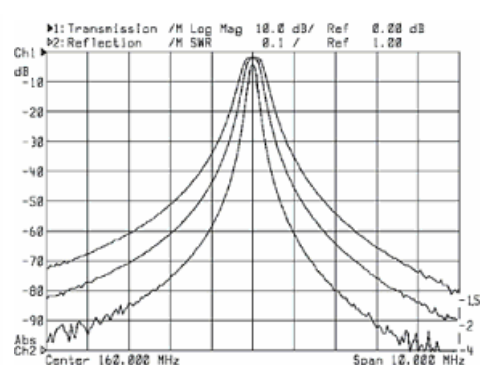
TYPICAL selectivity characteristics



PF5-1V



PF5-2V



PF5-3V



140-174 MHz Bandpass filters PF8-1V, PF8-2V, PF8-3V

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru



Electrical specifications

Model	PF8-1V	PF8-2V	PF8-3V
Operating frequency band, MHz		140-174	
Insertion loss (adjustable), dB	0,5-3	0,1-5	0,1-7
Impedance, Ohm		50	
Attenuation		see fig.	
VSWR, not more than		1,2	
Input power, not more, W		not more than 300	
Temperature range °C		from -30 to +60	
Cavity electrical length		1/4λ	

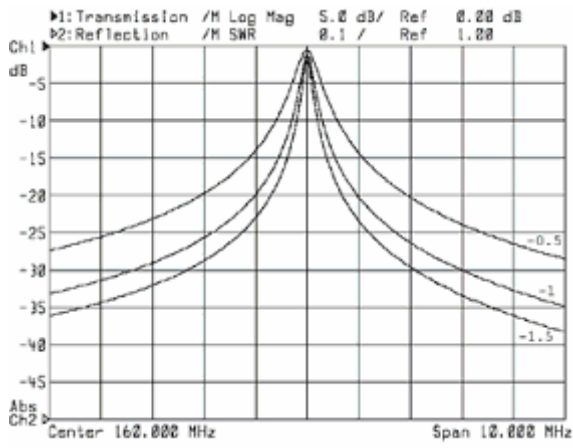
Mechanical specifications

Model	PF8-1V	PF8-2V	PF8-3V
Diameter, mm (ins.)		206 (8")	
Weight, kg	3,25	7,2	10,5
Connector		N-female	
Mount to 19-inch rack	optional		yes
Length/Width/Depth, mm	800x206x206	800x480x210	800x480x420

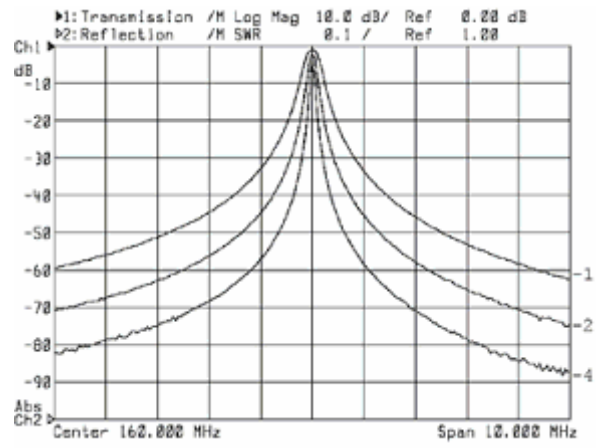
Using PF8-V series filters in antenna section of radio stations and repeaters you will raise selectivity of their receivers, lower influence of out-of-band interference, escape effect of UHF blanking by nearby radio transmitters and desensitization, and eliminate intermodulation interference, also. Recommended to use if equipment is installed in locations with high density of transmitting devices. Enlarged cavity diameter provides higher Q-factor comparing to five-inch filters

PF8-2V and PF8-3V filter represents two and three PF5-1V filters connected in series and combined by metal brackets. They have higher characteristics at corresponding loss.

Typical selectivity characteristics

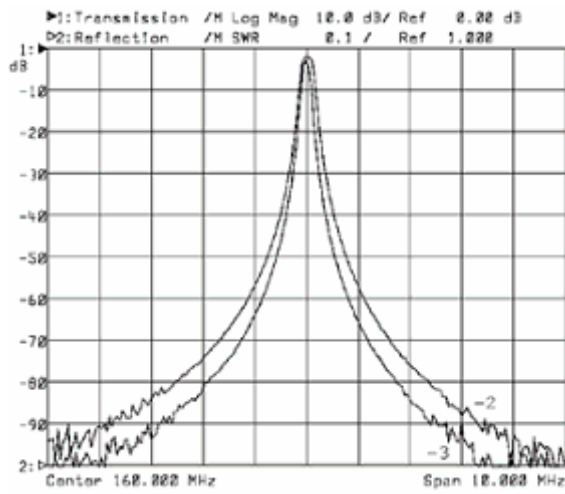


PF8-1V



PF8-2V

PF8-3V





140-174 MHz Bandpass filters PF10-1V, PF10-2V

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru

PF10-1V



PF10-2V



Electrical specifications

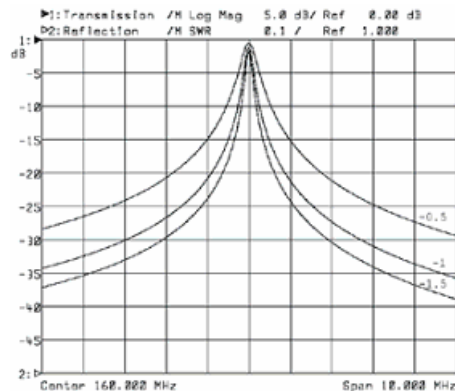
Model	PF10-1V	PF10-2V
Operating Frequency band, MHz		140-174
Insertion loss (adjustable), dB	0,5-3	1,3-3
Impedance, Ohm		50
Attenuation		see fig.
VSWR, not more than		1,2
Input power, not more, W		not more than 300
Temperature Range, °C		from -30 to +60
Cavity electrical length		1/4λ

Mechanical specifications

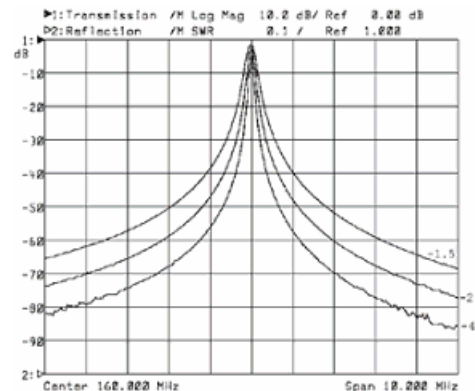
Model	PF10-1V	PF10-2V
Diameter, mm (ins.)		257 (10")
Weight, kg	3,85	8,4
Connector		N-female
Mount to rack	optional	24"
Length/Width/Depth, mm	800x257x257	800x630x264

10" diameter cavity can be used as very high-Q filter (850 @ -1.0 dB) in various number of applications. It can be used in reception, as well as in transmission section consisting of filters PF10-1V and PF10-2V. This cavity acts as main component of low-loss transmitter combiners also.

Typical selectivity characteristics



PF10-1V



PF10-2V



140-174 MHz Bandpass filters PF12-1V, PF12-2V

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru



Electrical specifications

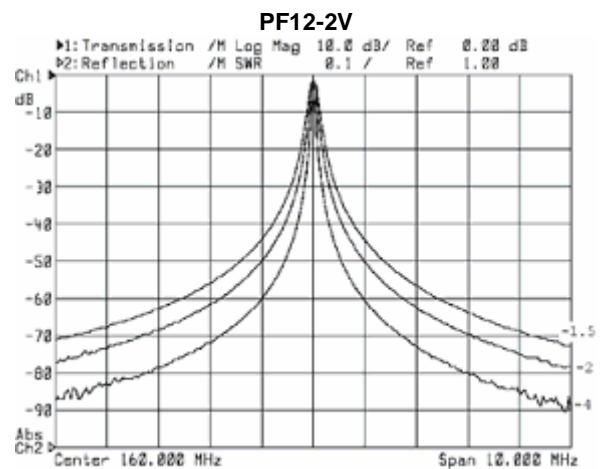
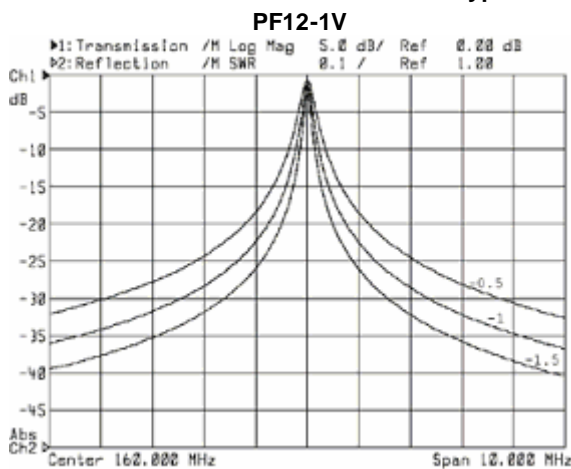
Model	PF12-1V	PF12-2V
Operating Frequency band, MHz		140-174
Insertion loss (adjustable), dB	0,5-3	1,3-5
Impedance, Ohm		50
Attenuation		see fig.
VSWR, not more than		1,2
Input power, not more, W		not more than 350
Temperature Range, °C		from -30 to +60
Cavity electrical length		1/4λ

Mechanical specifications

Model	PF12-1V	PF12-2V
Diameter, mm (ins.)		308x308 (12"x12")
Weight, kg	8	16,2
Connector		N-female/ 7/16DIN
Length/Width/Depth, mm	800x270x270	800x630x270

This is the most "cavity" resonator, manufactured by our company. Initially designed for aircraft range 118-136 MHz low-loss transmitter combiner, it has "settled down" in commercial range, also. It is successfully used for filtration of paging transmitters signals and receiving lowest loss during channel multiplexing of trunking repeaters with low frequency separation, due to its highest Q-factor (900 @ -1.0 dB).

Typical selectivity characteristics





300-360 MHz Bandpass filters PF4-1A, PF10-1A

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru

PF4-1A



PF4-2A



PF10-1A



PF10-2A



Electrical specifications

Model	PF4-1A	PF10-1A
Operating frequency band, MHz		300-360
Insertion loss (adjustable), dB		0,5-3
Impedance, Ohm		50
Attenuation		see fig.
VSWR, not more than		1,2
Input power, not more, W		not more than 300
Temperature range, °C		from -30 to +60
Cavity electrical length		1/4λ

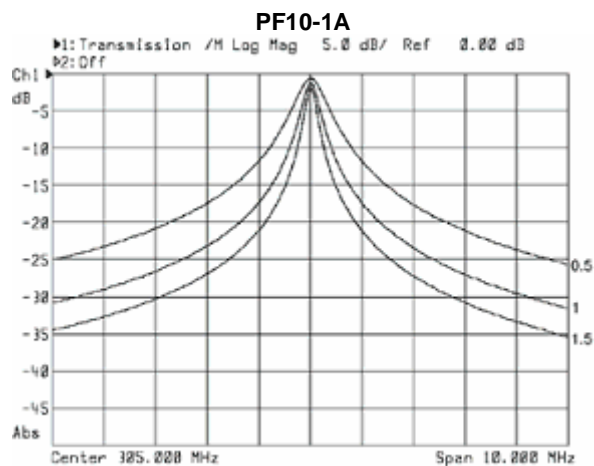
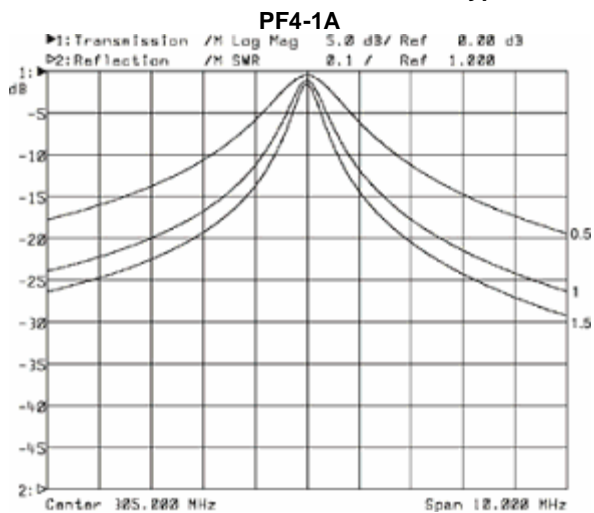
Mechanical specifications

Model	PF4-1A	PF10-1A
Diameter, mm (ins.)	116 (4")	257 (10")
Weight, kg	1,3	2,4
Connector		N-female
Mount to 19-inch rack		optional
Length/Width/Depth, mm	400x110x110	400x255x255

Using PF10-1A filters in antenna section of radio stations and repeaters you will raise selectivity of their receivers, lower influence of out-of-band interference, escape effect of UHF blanking by nearby radio transmitters and desensitization, and eliminate intermodulation interference, also. Filters, installed in transmitters circuit, lower stray emission level and prevent intermodulation

products occurrence. Recommended to use if equipment is installed in locations with high density of transmitting devices.

Typical selectivity characteristics





400-490 MHz Bandpass filters PF8-1U, PF8-1UL

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru

PF8-1U



PF8-2U

PF8-1UL

PF8-2UL



Electrical specifications

Model	PF8-1U	PF8-2U	PF8-1UL	PF8-2UL
Operating frequency band, MHz			400-490	
Insertion loss (adjustable), dB	0,5-3	1-5	0,5-3	1-5
Impedance, Ohm			50	
Attenuation			see fig.	
VSWR, not more than			1,2	
Input power, not more, W			not more than 300	
Temperature range, °C			from -30 to +60	
Cavity electrical length		1/4λ		3/4λ

Mechanical specifications

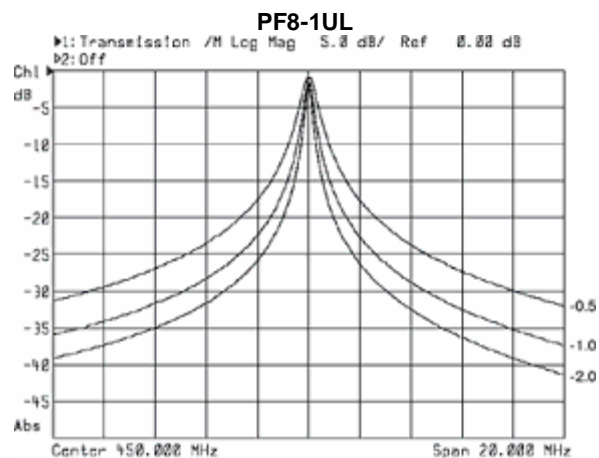
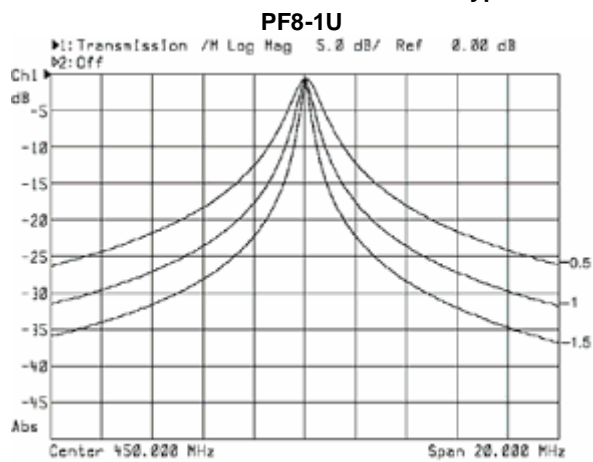
Model	PF8-1U	PF8-2U	PF8-1UL	PF8-2UL
Diameter, mm (ins.)			206 (8")	
Weight, kg	1,7	4,1	3,25	7,2
Connector			N-female	
Mount to 19-inch rack	optional	yes	optional	
Length/Width/Depth, mm	360x206x206	360x480x210	800x206x206	800x480x210

Using PF8-U series filters in antenna section of radio stations and repeaters you will raise selectivity of their receivers, lower influence of out-of-band interference, escape effect of UHF blanking by nearby radio transmitters and desensitization, and eliminate intermodulation interference, also.

Filters, installed in transmitters circuit, lower stray emission level and prevent intermodulation products occurrence. Recommended to use if equipment is installed in locations with high density of transmitting devices.

PF8-2U and PF5-3U filter represents two and three PF8-1U filters connected in series and combined by metal brackets. They have higher characteristics at corresponding loss.

Typical selectivity characteristics





400-490 MHz Bandpass filters PF10-1U, PF10-1UL

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru

PF10-1U



PF10-2U



PF10-1UL



PF10-2UL



Electrical specifications

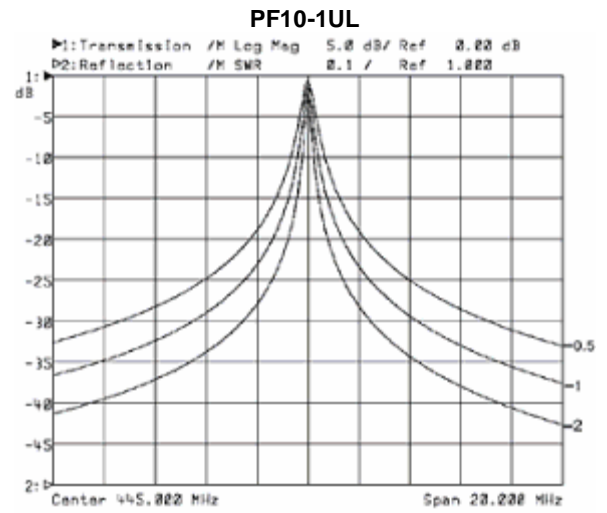
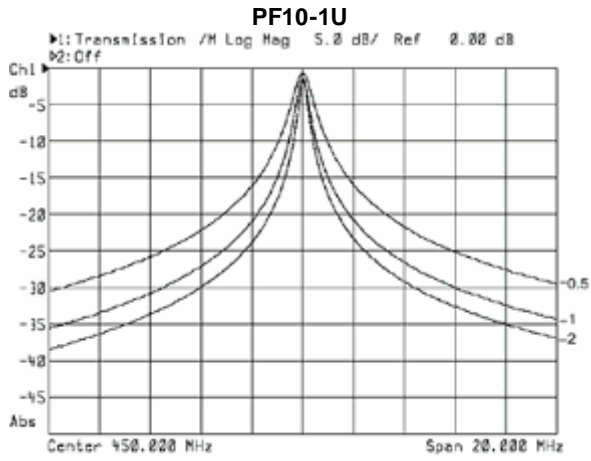
Model	PF10-1U	PF10-2U	PF10-1UL	PF10-2UL
Operating Frequency band, MHz			400-490	
Insertion loss (adjustable), dB	0,5-3	1-5	0,5-3	1-5
Impedance, Ohm			50	
Attenuation			see fig.	
VSWR, not more than			1,2	
Input power, not more, W			not more than 300	
Temperature range, °C			from -30 to +60	
Cavity electrical length		1/4λ		3/4λ

Mechanical specifications

Model	PF10-1U	PF10-2U	PF10-1UL	PF10-2UL
Diameter, mm (ins.)		257 (10")		257 (10")
Weight, kg	2,1	4,9	3,85	8,4
Connector			N-female	
Mount to rack	optional	24"	optional	24"
Length/Width/Depth, mm	360x257x257	360x630x264	800x257x257	800x630x264

Using PF10-U series filters in antenna section of radio stations and repeaters you will raise their receivers' selectivity, lower influence of out-of-band interference, escape effect of UHF blanking by nearby radio transmitters and desensitization, and eliminate intermodulation interference, also. PF10-U series filter has higher Q-factor, then 8-inch filters.

Typical selectivity characteristics





144-146 MHz Bandpass filters for EME PF5- 2HAM-200, PF5-3HAM-400

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru



PF5-2HAM-200



PF5-3HAM-400

Electrical specifications

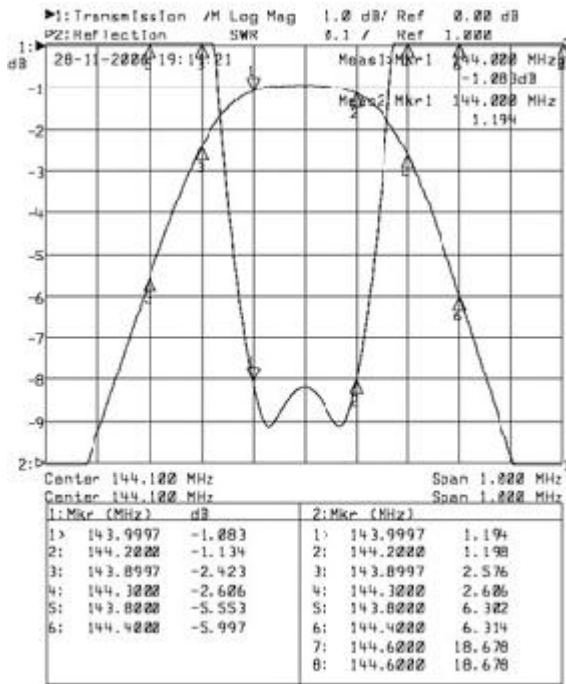
Model	PF5-2HAM-200	PF5-3HAM-400
Operating frequency band, MHz	144-146	144-146
Insertion loss (adjustable), dB	1-5	1,5-6
Max. frequency bandwidth, kHz	200	400
Impedance, Ohm	50	50
Attenuation	see fig.	see fig.
VSWR, not more than	1,2	1,2
Input power, not more, W	not more than 300	not more than 300
Temperature range, °C	from -30 to +60	from -30 to +60
Cavity electrical length	1/4λ	1/4λ

Mechanical specifications

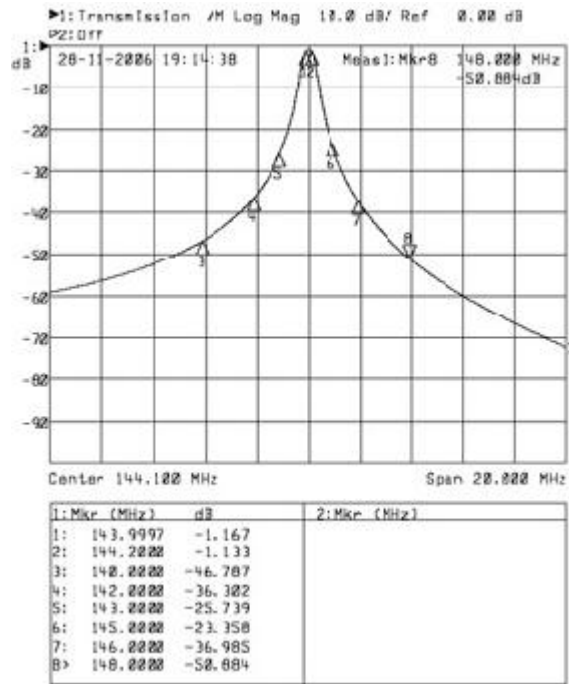
Model	PF5-2HAM-200	PF5-3HAM-400
Diameter, mm (ins.)	128 (5")	128 (5")
Weight, kg	4.4	6.25
Connector	N-female	N-female
Mount to 19-inch rack		present
Length/Width/Depth, mm	800x480x140	800x480x140

Usually in conditions of large megacities and even in rural territories if there are near established base station of land mobile radio noises level are very high. At communications with reflection from the Moon, when power of a signal are very weak a important aspect is a signal to noise ratio. This we can achieve only then if use high selective filters. These filters made by coaxial cavities. We bring to your attention filters, assembled from 5,8 and 10 inches cavities.

Typical selectivity characteristics PF5-2HAM-200

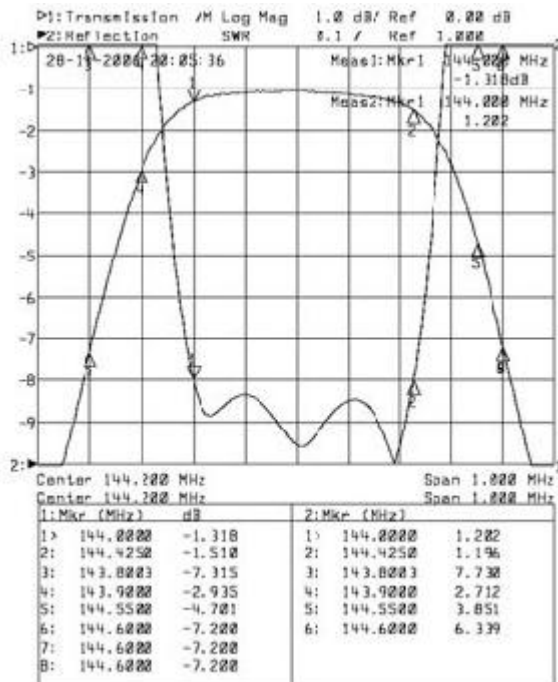


Span 1 MHz

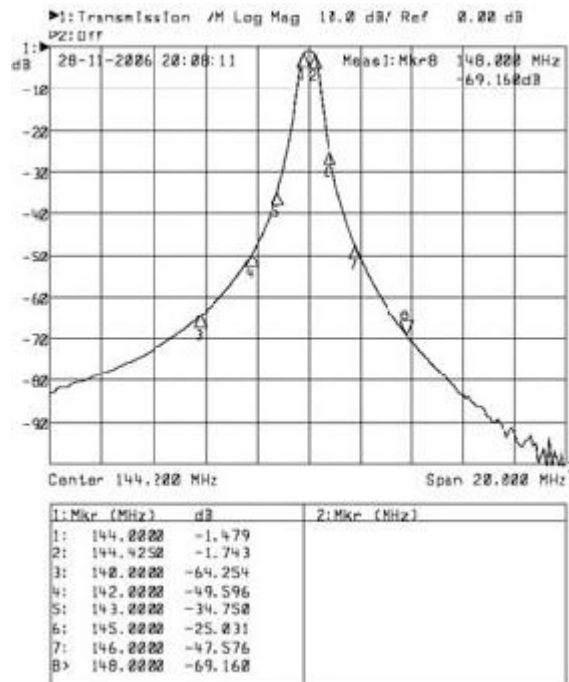


Span 20 MHz

Typical selectivity characteristics PF5-3HAM-400



Span 1 MHz



Span 20 MHz



144-146 MHz Bandpass filters for EME PF8- 2HAM-100, PF8-2HAM-250, PF8- 3HAM-300

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19, 462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru



PF8-2HAM-100, PF8-2HAM-250



PF8-3HAM-300

Electrical specifications

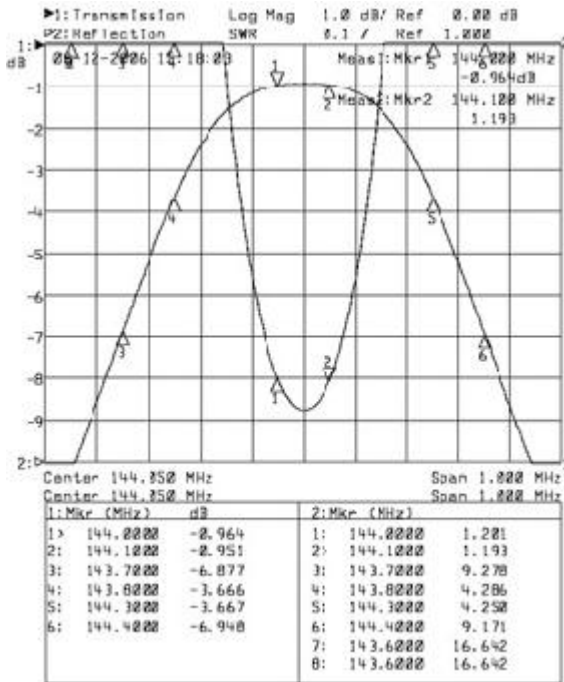
Model	PF8-2HAM-100	PF8-2HAM-250	PF8-3HAM-300
Operating frequency band, MHz	144-146	144-146	144-146
Insertion loss (adjustable), dB	1-5	1-5	1,5-6
Max. frequency bandwidth, kHz	100	250	300
Impedance, Ohm	50	50	50
Attenuation	see fig.	see fig.	see fig.
VSWR, not more than	1,2	1,2	1,2
Input power, not more, W		not more than 300	
Temperature range, °C		from -30 to +60	
Cavity electrical length	1/4λ	1/4λ	1/4λ

Mechanical specifications

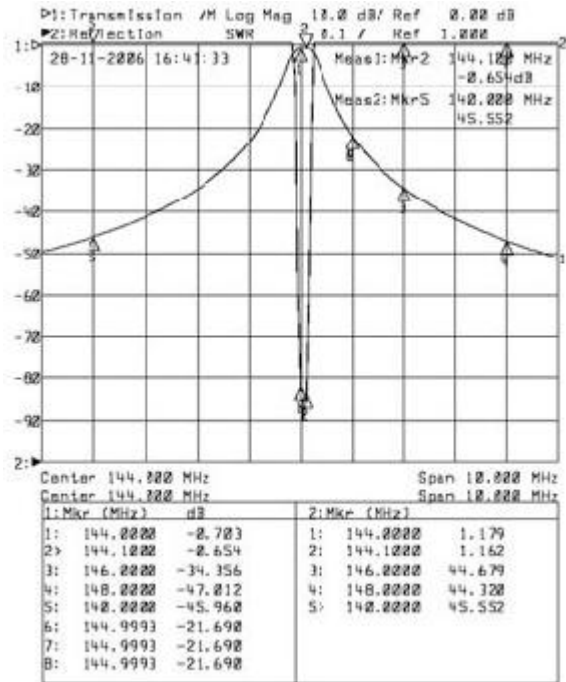
Model	PF8-2HAM-100	PF8-2HAM-250	PF8-3HAM-300
Diameter, mm (ins.)		206 (8")	
Weight, kg	7.2	7.2	10.5
Connector	N-female	N-female	N-female
Mount to 19-inch rack		present	
Length/Width/Depth, mm	800x480x210	800x480x210	800x480x420

Usually in conditions of large megacities and even in rural territories if there are near established base station of land mobile radio noises level are very high. At communications with reflection from the Moon, when power of a signal are very weak a important aspect is a signal to noise ratio. This we can achieve only then if use high selective filters. These filters made by coaxial cavities. We bring to your attention filters, assembled from 5,8 and 10 inches cavities.

Typical selectivity characteristics PF8-2HAM-100

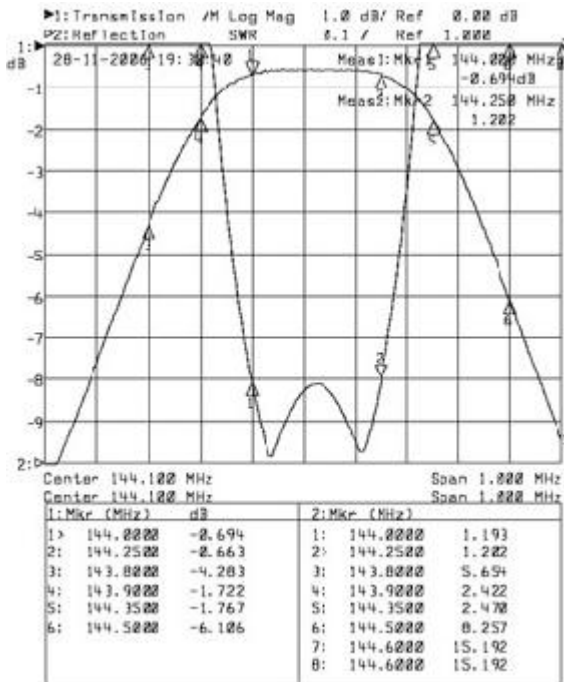


Span 1 MHz

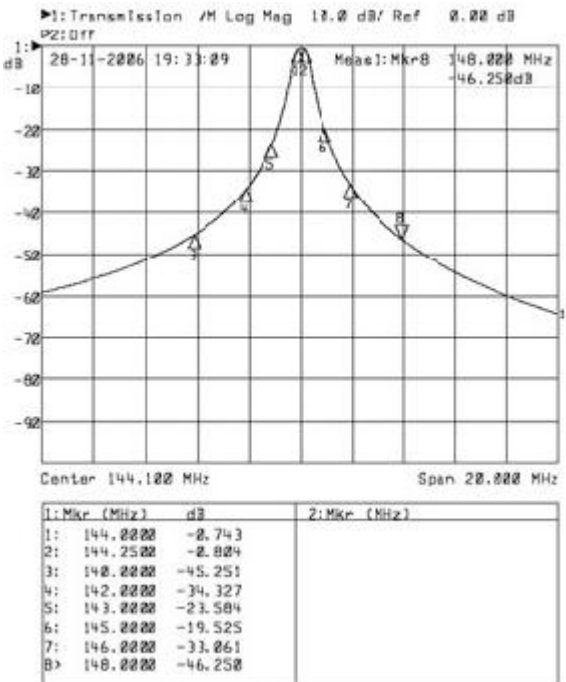


Span 10 MHz

Typical selectivity characteristics PF8-2HAM-250

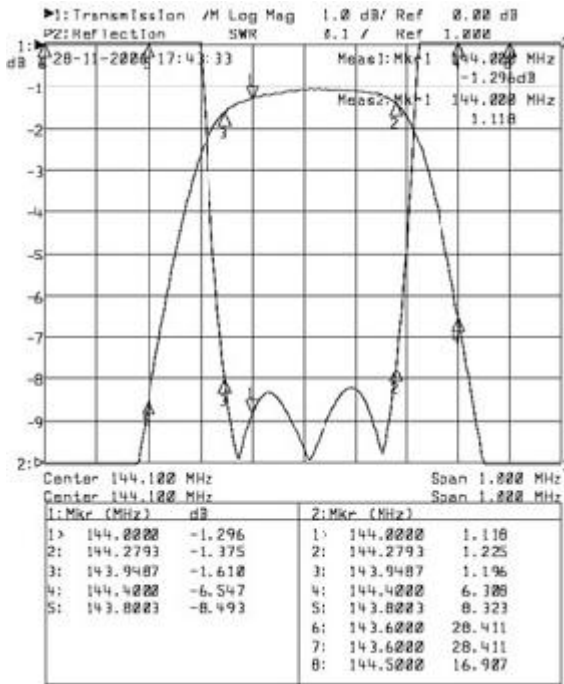


Span 1 MHz

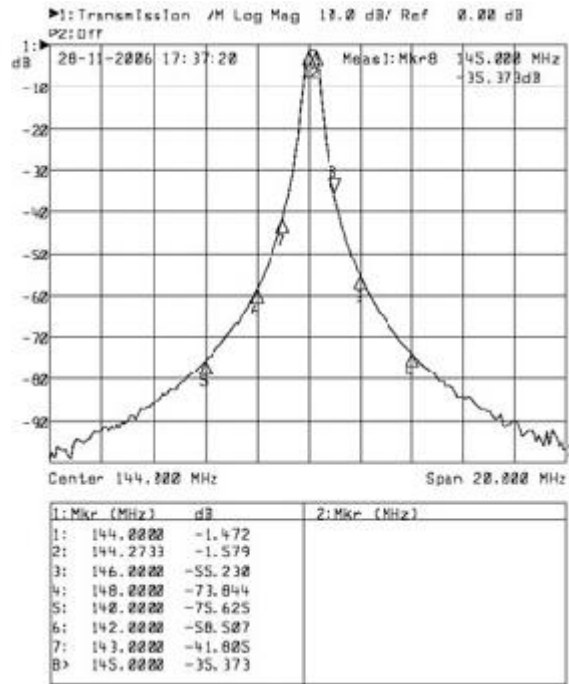


Span 20 MHz

Typical selectivity characteristics PF8-3HAM-300



Span 1 MHz



Span 20 MHz



144-146 MHz Bandpass filter for EME PF10- 2HAM-100

107497, Moscow Chernicinsky pr-d 7/1
Tel.: (495) 775-43-19,462-44-14
Tel./fax: 462-44-14
E-mail: radial@radial.ru
www.radial.ru



Electrical specifications

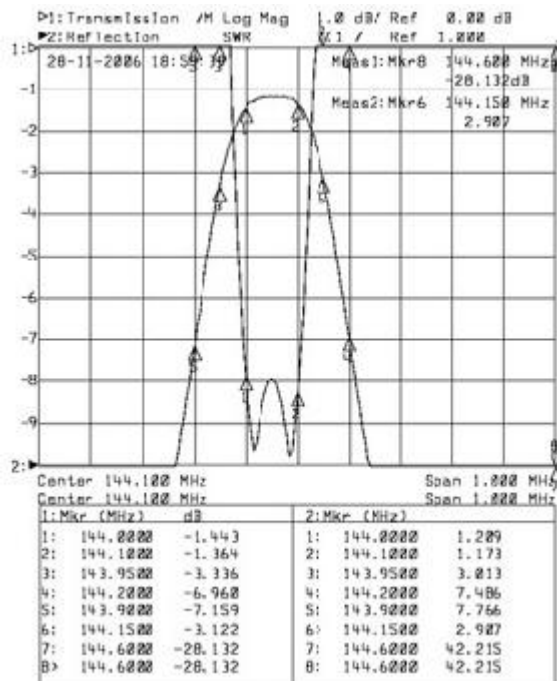
Model	PF10-2HAM-100
Operating frequency band, MHz	144-146
Insertion loss (adjustable), dB	1-5
Max. frequency bandwidth, kHz	100
Impedance, Ohm	50
Attenuation	see fig.
VSWR, not more than	1,2
Input power, not more, W	not more than 300
Temperature range, °C	from -30 to +60
Cavity electrical length	1/4λ

Mechanical specifications

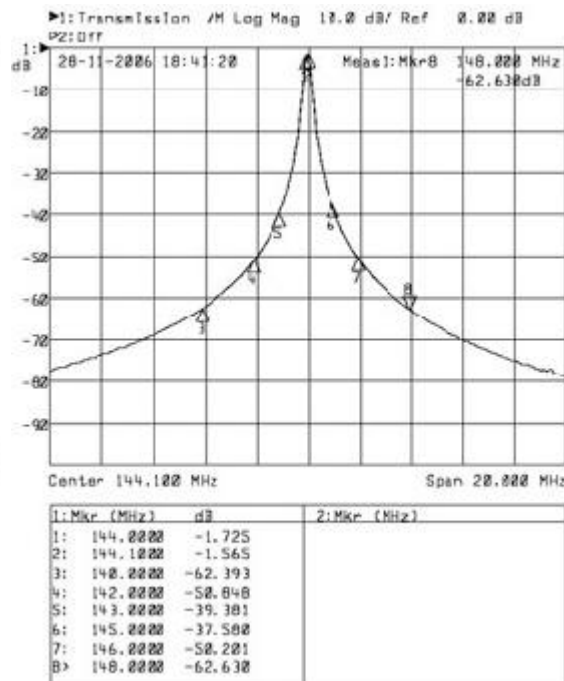
Model	PF10-2HAM-100
Diameter, mm (ins.)	257 (10")
Weight, kg	8.4
Connector	N-female
Mount to 19-inch rack	present
Length/Width/Depth, mm	800x630x264

Usually in conditions of large megacities and even in rural territories if there are near established base station of land mobile radio noises level are very high. At communications with reflection from the Moon, when power of a signal are very weak a important aspect is a signal to noise ratio. This we can achieve only then if use high selective filters. These filters made by coaxial cavities. We bring to your attention filters, assembled from 5,8 and 10 inches cavities.

Typical selectivity characteristics PF10-2HAM-100



Span 1 MHz



Span 20 MHz