



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

Bandpass/bandreject filters

| Model | Short description | Band, MHz | Price, EUR |
|-------------|---|-----------|------------|
| PRF4-2LB(L) | Dual Cavity, 4", N-fem., -75 dB @ Δf BP/BR=1,5 MHz | 30-40 | 971 |
| PRF4-2LB(H) | Dual Cavity, 4", N-fem., -75 dB @ Δf BP/BR=1,5 MHz | 38-48 | 787 |
| PRF5-1V | Single Cavity, 5", N-fem., -35 dB @ Δf BP/BR=0,7 MHz | 140-174 | 182 |
| PRF5-2V | Dual Cavity, 5", N-fem., -75 dB @ Δf BP/BR=0,6 MHz | 140-174 | 384 |
| PRF8-1V | Single Cavity, 8", N-fem., -35 dB @ Δf BP/BR=0,6 MHz | 140-174 | 254 |
| PRF8-2V | Dual Cavity, 8", N-fem., -75 dB @ Δf BP/BR=0,5 MHz | 140-174 | 529 |
| PRF10-1V | Single Cavity, 10", N-fem., -35 dB @ Δf BP/BR=0,4 MHz | 140-174 | 301 |
| PRF10-2V | Dual Cavity, 10", N-fem., -75 dB @ Δf BP/BR=0,3 MHz | 140-174 | 615 |
| PRF4-1U | Single Cavity, 4", N-fem., -35 dB @ Δf BP/BR=5 MHz | 400-490 | 175 |
| PRF4-2U | Dual Cavity, 4", N-fem., -75 dB @ Δf BP/BR=5 MHz | 400-490 | 360 |
| PRF8-1U | Single Cavity, 8", N-fem., -35 dB @ Δf BP/BR=2,6 MHz | 400-490 | 244 |
| PRF8-2U | Dual Cavity, 8", N-fem., -75 dB @ Δf BP/BR=2,6 MHz | 400-490 | 499 |



140 - 174 MHz
Bandpass/bandreject filters
PRF5-1V, PRF8-1V, PRF10-1V

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

PRF5-1V



PRF5-2V



PRF8-1V



PRF8-2V



PRF10-1V



PRF10-2V



Electrical specifications

| Model | PRF5-1V | PRF5-2V | PRF8-1V | PRF8-2V | PRF10-1V | PRF10-2V |
|-------------------------------|---------|---------|---------|---------|----------|----------|
| Operating frequency band, MHz | | | | 140-174 | | |

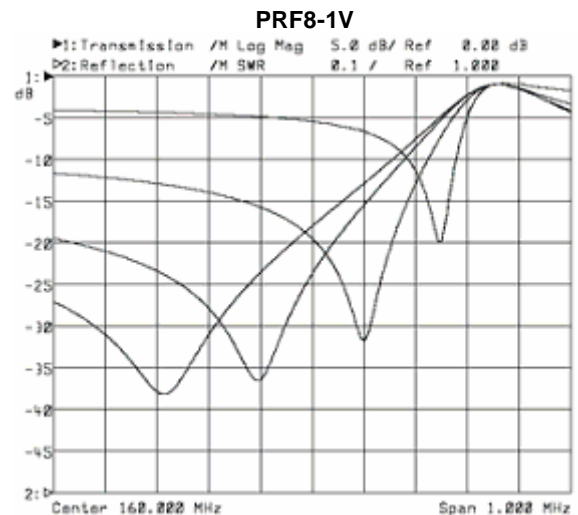
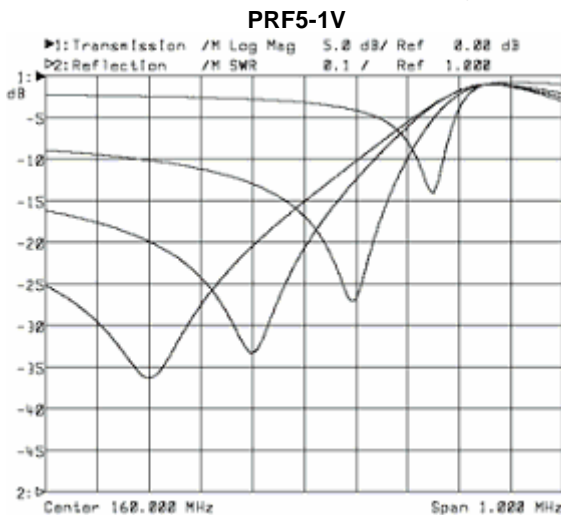
| | | | | | | |
|---|----------------|----------------|----------------|-------------------|----------------|----------------|
| Insertion loss (adjustable), dB | 0,5-3 | 1-3 | 0,5-3 | 1-3 | 0,5-3 | 1-3 |
| Impedance, Ohm | | | | 50 | | |
| Rejection level, ΔfBP/BR dB | -35dB @ 0,7MHz | -75dB @ 0,6MHz | -35dB @ 0,6MHz | -75dB @ 0,5MHz | -35dB @ 0,4MHz | -75dB @ 0,3MHz |
| VSWR, not more than | | | | 1,5 | | |
| Input power, not more, W | | | | not more than 300 | | |
| Temperature range with garanted stabilization, °C | | | | from -30 to +60 | | |
| Cavity electrical length | | | | 1/4λ | | |

Mechanical specifications

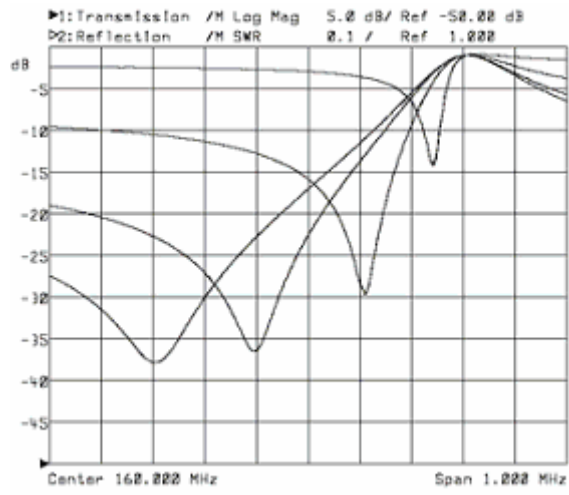
| Model | PRF5-1V | PRF5-2V | PRF8-1V | PRF8-2V | PRF10-1V | PRF10-2V |
|------------------------|--------------|----------|--------------|----------|--------------|----------------|
| Diameter, mm (ins.) | | 128 (5") | | 208 (8") | | 257 (10") |
| Weight, kg | 1,8 | 4,2 | 3,3 | 7,3 | 3,9 | 8,5 |
| Connector | | N-female | | N-female | | N-female |
| Mount to 19-inch rack | optional | yes | optional | yes | optional | yes (horizont) |
| Length/Width/Depth, sm | 80x12.8x12.8 | 80x48x14 | 80x20.8x20.8 | 80x48x21 | 80x25.7x25.7 | 80x63x26.4 |

Band pass-reject filter PRF5-1V is tuned to pass specific frequency and to reject another specific frequency simultaneously. Filter PRF5-1V with band pass-reject feature is essential if nearby interference is present. Install this filter in receiver antenna section and tune rejection in to interfering signal, and you will appreciably improve receiving conditions attenuating interference by 35 dB. Filter PRF5-2V has higher characteristics at corresponding loss. Unlike common bandreject filters, this filter has one very useful feature; it can be adjusted to passing with perfect VSWR without any difficulties, which can be only achieved by painstaking selection of tuning cable in bandreject filters.

Typical selectivity characteristics



PRF10-1V



2009



400-490 MHz Bandpass/bandreject filters PRF4-1U, PRF8-1U

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

PRF4-1U



PRF4-2U



PRF8-1U



PRF8-2U



Electrical specifications

| Model | PRF4-1U | PRF4-2U | PRF8-1U | PRF8-2U |
|---|---------|---------|-------------------|---------|
| Operating Frequency band, MHz | | | 400-490 | |
| Insertion loss (adjustable), dB | 0,5-3 | 1-3 | 0,5-3 | 1-3 |
| Impedance, Ohm | | | 50 | |
| Rejection level Δf BP/BR=5MHz, dB | 30 | 70 | 30 | 70 |
| VSWR, not more than | | | 1,5 | |
| Input power, not more, W | | | not more than 300 | |
| Temperature Range, °C | | | from -30 to +60 | |
| Cavity electrical length | | | 1/4 λ | |

Mechanical specifications

| Model | PRF4-1U | PRF4-2U | PRF8-1U | PRF8-2U |
|------------------------|-------------|-------------|-------------|-------------|
| Diameter, mm (ins.) | | 116 (4") | | 206 (8") |
| Weight, kg | 1,25 | 3,2 | 1,75 | 4,2 |
| Connector | | | N-female | |
| Mount to 19-inch rack | optional | yes | optional | yes |
| Length/Width/Depth, mm | 360x110x110 | 360x480x115 | 360x206x206 | 360x480x212 |

Band pass-reject filter PRF4-1U is tuned to pass specific frequency and to reject another specific frequency simultaneously.

Filter PRF4-1U with band pass-reject feature is essential if nearby interference is present. Install this filter in receiver antenna

section and tune rejection in to interfering signal, and you will appreciably improve receiving conditions attenuating interference by 38 dB. Filter PRF4-2U has higher characteristics at corresponding loss Band pass-reject filter PRF8-1U is tuned so as to pass specific frequency and to reject interference frequency simultaneously. If single filter will help you to eliminate strong nearby interference, then dual will enable to produce duplex repeater with separate receiving and transmitting antenna. PRF8-2V installed in these sections will provide complete isolation from transmitter carrier frequency and its noise for any antenna spacing.

Typical selectivity characteristics

