

# Bandpass Filters

BPF Series



BPF-A



BPF-U

## ○ Features & Benefits

- Low Insertion Loss
- Designed for Adjacent Channel Use
- Excellent Rejection of Undesired Signals Outside Passband

The BPF Series are professional quality, VHF/FM & UHF bandpass filters. These filters provide extremely high rejection of out of band signals and adjacent channels. The BPF-A utilizes a high-Q, six-stage bandpass filter and two phase cancellation traps to provide excellent rejection of out of band signals. The BPF-U passes a single UHF channel and offers excellent rejection of all channels outside the bandpass of the filter. These filters provide exceptional selectivity with minimum insertion loss. The BPF-A is housed in a single height, 1.75" high, rack mountable, aluminum chassis. The BPF-U is housed in a rugged, die-cast case that can be antenna or flat surface mounted.

## ○ Specifications

RF	BPF-A	BPF-U
Frequency Range MHz:	54-216	470-806
Channels dB:	VHF & FM	UHF
Bandpass Response dB:	±0.75 (2-6) ±0.75 (FM) ±1.00 (7-13)	±0.2 (14-69)
Lower Adjacent Audio dB:	-60	NA
Upper Adjacent Video dB:	-60	NA
Lower Alternate (-9 MHz) dB:	-40	-17
Upper Alternate (+9 MHz) dB:	-50 (2-6) -45 (14-22,7-13)	-17
FM Filter		
@ 82 MHz dB:	-30	NA
@ 114 MHz dB:	-22	NA
@ Channel 6 dB:	-70	NA
Insertion Loss:	3.5 (2-6) 3.0 (FM) 8.0 (14-22) 8.0 (7-13)	1.8 (14-69)
Impedance - All Ports Ohm:	75	75
Input Return Loss dB:	13 (2-6,14-22,7-13)	14 16 (FM)
Output Return Loss dB:	13 (2-6, 14-22, 7-13)	14 16 (FM)
<b>Mechanical</b>		
Dimensions (WxHxD)		
in:	19.0 x 1.75 x 6.13	6.38 x 3.13 x 2.63
mm:	483 x 44 x 156	162 x 80 x 67
Weight		
lbs:	3.0	2.0
kg:	1.36	0.91
<b>Connectors</b>		
RF Input:	"F" Type, Female	"F" Type, Female
RF Output:	"F" Type, Female	"F" Type, Female

## ○ Ordering Information

Model	Stock No.	Description
BPF-A ✱	4414	Single Channel VHF/FM Bandpass Filter 54-216 MHz
BPF-U	4805	Single Channel UHF Bandpass Filter 470-806 MHz

# Bandpass Filters

## BPF-Z and MXF Series



BPF-Z

The BPF-z is a low cost, professional quality, VHF bandpass filter. This unit is designed to provide an additional level of bandpass selectivity when used in adjacent channel configurations. The BPF-z features high-Q filters and phase cancellation traps that provide excellent adjacent channel rejection. Trap adjustments can be made at the factory for improving the rejection characteristics of the filter. These adjustments are then locked in place to prevent inadvertent changes. The BPF-z is designed to work in conjunction with Blonder Tongue's low cost Single Channel VHF Strip Amplifier (ZSCA).

### ○ Features & Benefits

- Rack Mountable - 1 EIA (1.75") Rack Space
- Single Channel VHF Bandpass Filter
- Sharp Skirt Selectivity
- Superior Adjacent Channel Rejection

### ○ Specifications

#### RF

Frequency Range: 54-88 & 120-216 MHz  
 Channels: VHF  
 Bandpass Response  
 2-6:  $\pm 0.75$  dB  
 A-1:  $\pm 0.80$  dB  
 7-13:  $\pm 1.20$  dB  
 Selectivity  
 Lower Adjacent Audio: -55 dB  
 Upper Adjacent Video: -50 dB  
 Lower Alternate (-9 MHz): -35 dB  
 Upper Alternate (+9 MHz): -45 dB  
 Insertion Loss  
 2-6: 3.5 dB  
 A-1: 5.0 dB  
 7-13: 7.0 dB  
 Impedance - All Ports: 75 Ohm

#### Mechanical

Dimensions (WxHxD):  
 19.0 x 1.75 x 3.5 in.  
 483 x 44 x 89 mm  
 Weight: 2.0 lbs., 0.91 kg  
 Connectors (Rear Panel)  
 RF Input: "F" Type, Female  
 RF Output: "F" Type, Female

#### Controls (Front Panel)

Lower Aural Trap Adjust: Controls  
 Upper Visual Trap Adjust: Controls

MXF



MXF-B



The MXF Series are professional quality, modular VHF/FM bandpass filters. This filter system consists of the MXF-B mounting base and up to 8 MXF bandpass filter modules. Filters are available for all of the standard broadcast TV channels (2-13) and two FM bands (88-108 MHz and 92-108 MHz). The MXF System may be used to separate channels from a single broadband antenna or combine two groups of four non-adjacent channels. Two filters are available for adding FM onto a system; FM-A for systems that include TV channel 5 and FM-B for systems that include TV channel 6. The MXF filter modules mount onto the MXF-B mounting base and can also be used as stand-alone filters.

### ○ Features & Benefits

- Modular Bandpass Filters
- VHF and FM Coverage
- Applications Include Filtered Channel Combiner and Separator

### ○ Specifications

#### RF

Frequency Range:: 54-108 & 174-216 MHz  
 Channels: VHF, FM  
 Selectivity @  $\pm 9$  MHz: -10 dB  
 Insertion Loss:  
 MXF: 0.6 (2-6) dB, 1.1 (FM),  
 1.1 (7-13) dB  
 MXF-B: 0.9 (2-6) dB, 1.5 (FM),  
 1.4 (7-13) dB  
 Impedance - All Ports: 75 Ohm  
 Input & Output Return Loss:  
 17 (2-6), 8 (FM), 17 (7-13) dB

#### Mechanical

Dimensions (WxHxD)  
 MXF: 2.00 x 2.00 x 2.00 in  
 51 x 51 x 51 mm  
 MXF-B: 9.75 x 4.00 x 5.38 in  
 248 x 102 x 137 mm  
 Weight:  
 MXF: 0.25 lbs, 0.11 kg.  
 MXF-B: 4.0 lbs, 1.82 kg.

#### Connectors

RF Input & Output:  
 MXF: "F" Type, Male  
 MXF-B: "F" Type, Female

### ○ Ordering Information

Model	Stock No.	Description
BPF-Z	4419B	Single Channel VHF Bandpass Filter 54-216 MHz
MXF *	3437	Modular Single Channel VHF/FM Bandpass Filter 54-216MHz, CHANNELS: 2-6, FMA, FMB, 7-13
MXF-B *	3438	Modular Filter, Base Use with # 3437