

VF-H2500-8D/VF-H4000-8x/VF-H8000-8x High Band VHF Band Pass Filters

Features

- Operating frequency range 174 to 230 MHz
- Fully band tunable
- Cross coupled filter design
- Can be configured for 6, 7, or 8 MHz bandwidths
- Available for analog or digital masks
- Power handling capability of up to 8 kilowatts
- Temperature compensated design



The VF-H2500-8D/VF-H4000/VF-H8000-8x is a compact, eight section, high band VHF band pass filter that is adjustable for operating frequency, bandwidth, and mask slope. The filter can be configured to meet the requirements any standard digital or analog mask. This is a temperature compensated filter it maintains emissions compliance and an excellent input match from "cold start" and with variations in ambient temperature.

All ERI filter and RF component products are manufactured and precision tested for optimum electrical and mechanical performance.

Specifications

Application	ATSC 1.0 or ATSC 3.0		
Band:	High Band VHF (174 to 216 MHz)		
RF Channels:	7 to 13		
Channel Bandwidth	6 MHz		
Passband (Extended)	±2.69 MHz		
Poles	6		
Model Number	VF-H2500-8D	VF-H4000-8x	VF-H8000-8x
Power Handling (average)	2.5 kW	4.0 kW	8.0 kW
	7dB Crest Factor ATSC1.0 (10 dB for 3.0)		
Cooling	Convection		Forced Air
Standard Connectors	7-16 DIN, female	x=2 1-5/8-inch or x=3 3-1/8-inch EIA flanged male	
	Alternate input and output connectors are optionally available		

Electrical Specifications

VSWR (Passband)	1.10:1, maximum over $F_c \pm 2.69$ MHz	
Loss	F_c	0.25 dB
	±2.69 MHz	0.45 dB
Rejection	±3.25 MHz	18.00 dB
	±9.00 MHz	64.00 dB
Group Delay	400 nsec, maximum over $F_c \pm 2.69$ MHz	

Mechanical Specifications

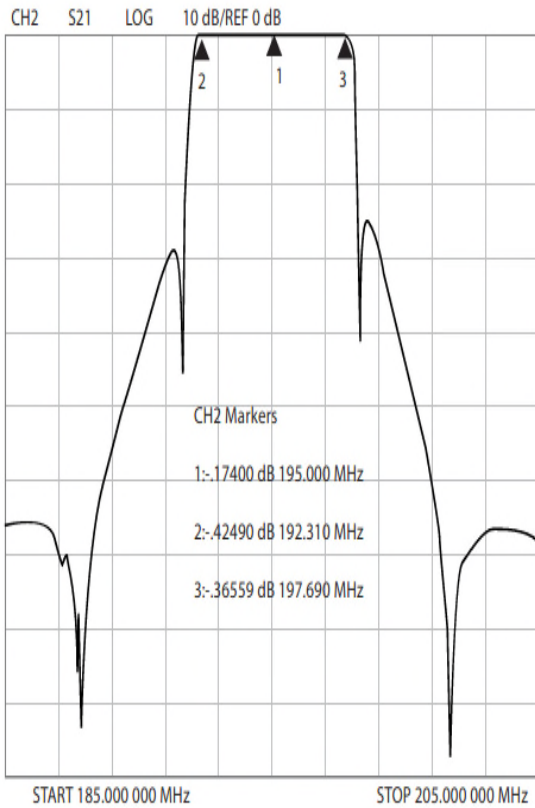
Length	29.2 in	(742 mm)
With Forced Air Cooling	41.8 in	(1060 mm)
Width	20.4 in	(518 mm)
Height	23.5 in	(597 mm)
With Forced Air Cooling	32.5 in	(826 mm)
Weight	29.0 lbm	(13.2 kg)
With Forced Air Cooling	32.0 lbm	(14.5 kg)

Notes: (1) Available in 6, 7, or 8 MHz bandwidth configurations. (2) Typical specification; Custom specifications available on request. (3) Power Ratings dependent on tuning of filter. (4) Maximum Power Rating based on forced air cooling.

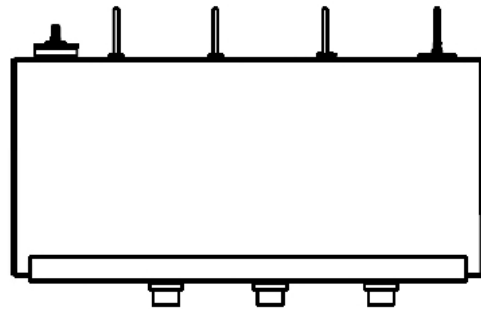
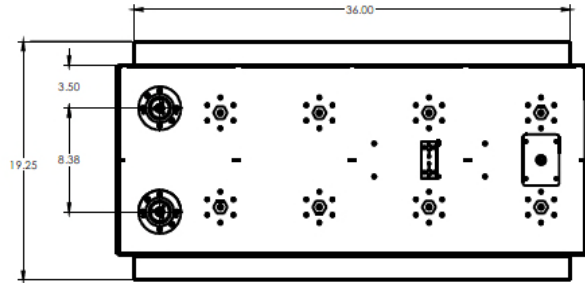
Electronics Research, Inc. • 7777 Gardner Road • Chandler, IN 47610-9219 • USA
+1 812 925-6000 (tel) • +1 812 925-4030 (fax)

Your Single Source for Broadcast Solutions™ • Call Toll-free at 877 ERI-LINE • Visit Online at www.eriinc.com

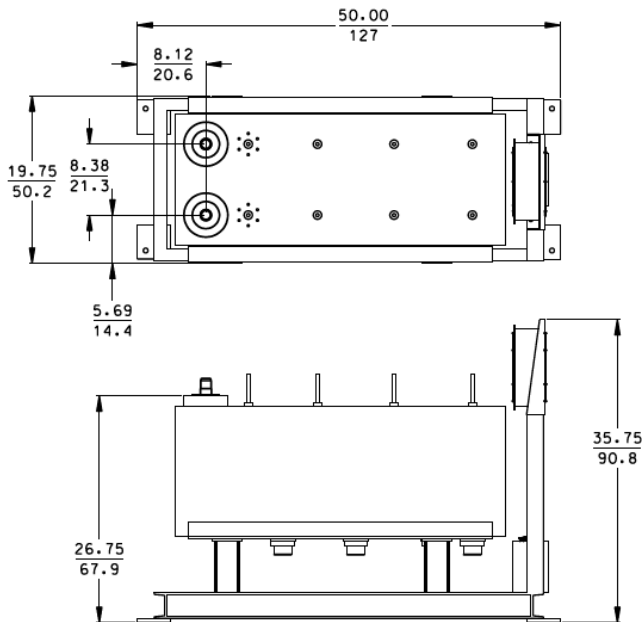
VF-H2500-8D/VF-H4000-8x/VF-H8000-8x High Band VHF Band Pass Filters



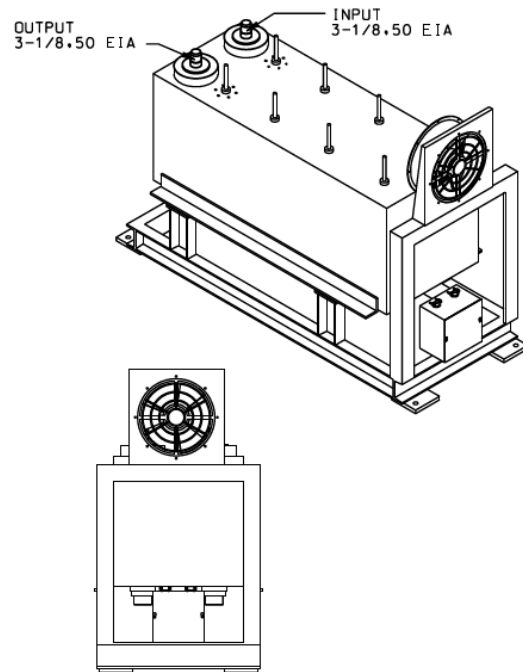
Typical Response Mask



VF-H4000-82 Outline Drawing



VF-H8000-83 Outline Drawing



Notes: (1) Available in 6, 7, or 8 MHz bandwidth configurations. (2) Typical specification; Custom specifications available on request. (3) Power Ratings dependent on tuning of filter.