

VF-H12500-63 Six-Section 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 12.5 kilowatts, average power
- Temperature compensated design



The VF-H12500-63 is a compact, six-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)

US RF Channels:

7 to 13

Channel Bandwidth

6 MHz

Passband (Extended)

± 2.69 MHz

Poles

6

Model Number

VF-H12500-63

Power Handling (average)

Convection Cooled 10.0 kW

Forced Air Cooling 12.5 kW

7dB Crest Factor ATSC1.0 (10 dB for 3.0)

3-1/8-inch EIA flanged, male

Standard Connectors

Electrical Specifications

VSWR (Passband)

1.08:1, maximum over $F_c \pm 2.69$ MHz

Loss

F_c

0.20 dB

Passband

0.30 dB

Rejection

± 3.00 MHz

>0.75 dB

± 3.25 MHz

>2.50 dB

± 4.00 MHz

>5.30 dB

± 5.50 MHz

>25.00 dB

± 6.00 MHz

>30.00 dB

± 9.00 MHz

>64.00 dB

Group Delay

200 nsec, maximum over $F_c \pm 2.69$ MHz

Mechanical Specifications

Length

60.0 in (1524 mm)

Width

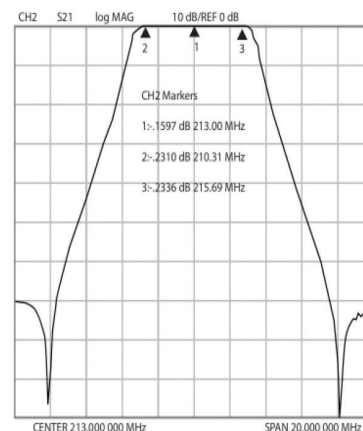
35.0 in (888 mm)

Height

37.0 in (940 mm)

Weight

160.0 lbm (72.6 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.

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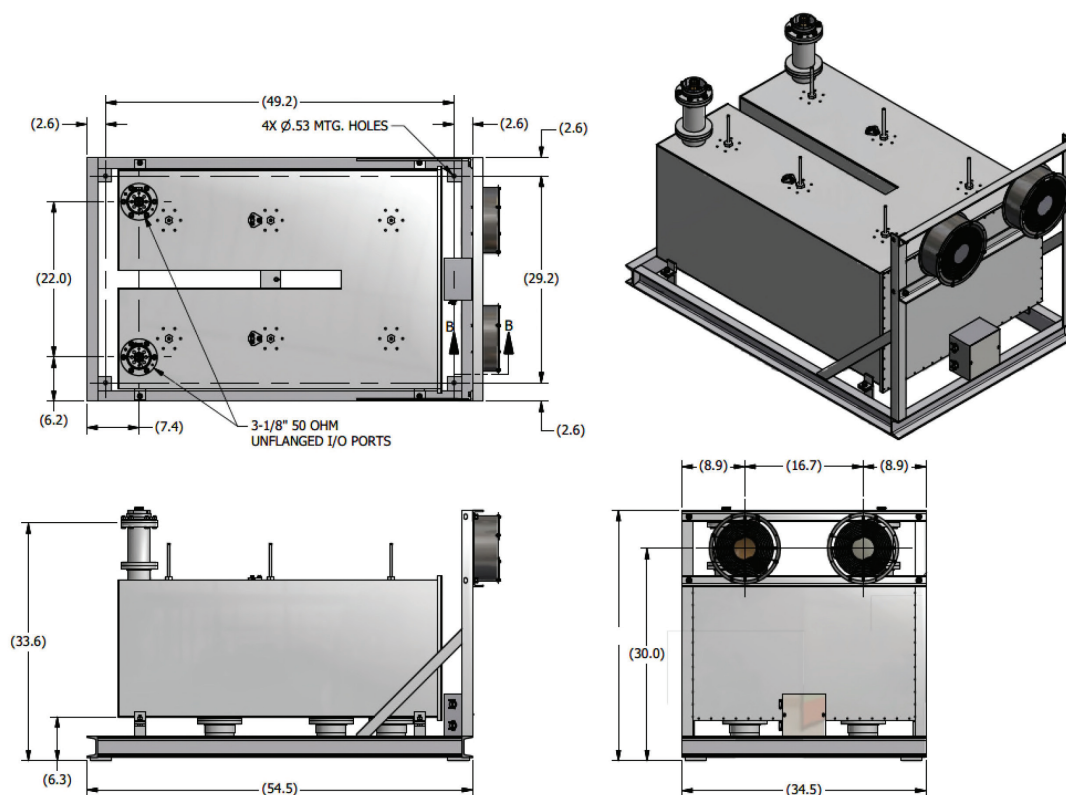


Figure 1VF-H12500-63 Six Section High Band VHF Band Pass Filter. Dimension show in inches.