

F-1482/GRC VHF (30 – 88 MHz) Bandpass Filter

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Filter Response and SWR Measurements:

Measurements taken June 11, 2008:

- Response curves made with Instek GSP-827TG Spectrum Analyzer/Tracking Generator (50 ohms input/output)
- SWR measured with MFJ-259B SWR Analyzer

I took all measurements by simply setting the filter frequency using the dials; I made no attempt to fine-tune the filter. However, I noted that fine tuning could be used to slightly change the response characteristics and reduce the insertion loss at a given frequency and to improve the SWR.

When the filter was setup as described above, the insertion loss varied from approximately 2 dB at the low end to 5.5 dB at the high end of the frequency range.

The SWR measurements were made by setting the filter to a particular frequency and then adjusting the SWR Analyzer frequency for minimum SWR. In all cases, the difference between the filter dial settings and meter frequency setting were no more than a few hundred kHz.

A quick check showed that the filter is bi-directional (it did not matter which end was used as input or output). However, if used with a transmitter, the input and output will have to be observed for proper operation of the built-in tuning meter.

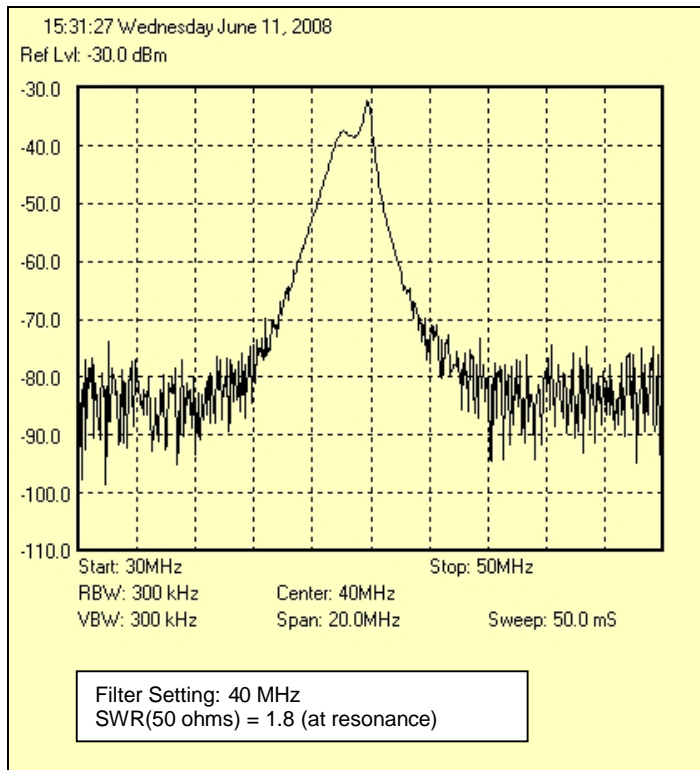
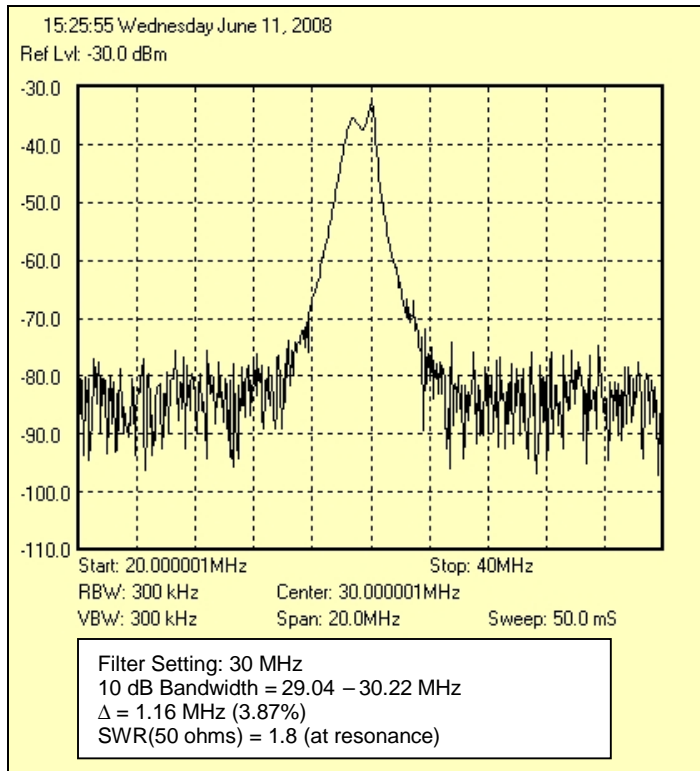
Prior to measurements, I replaced the output connector (threadless N-F connector) with a BNC-F connector but made no other modifications.

Some additional information on this filter may be obtained from:

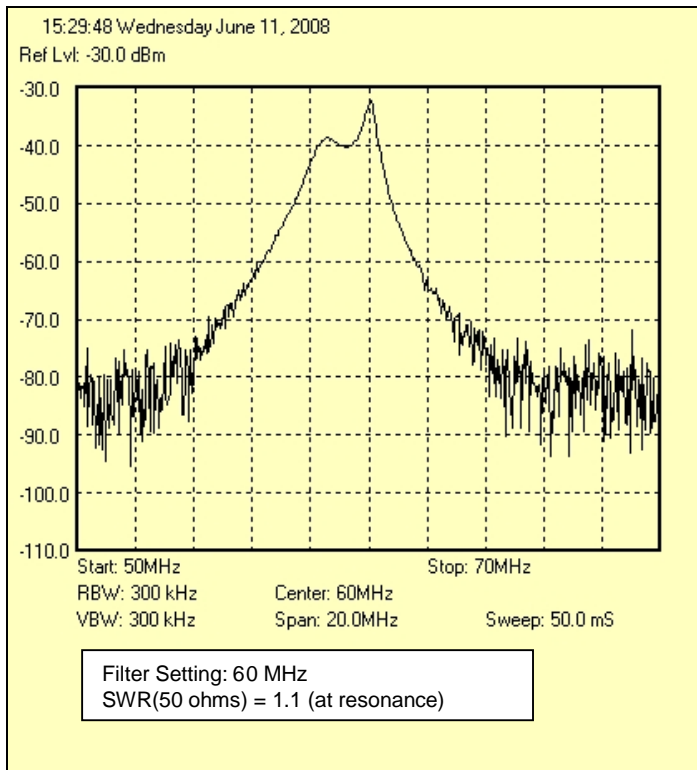
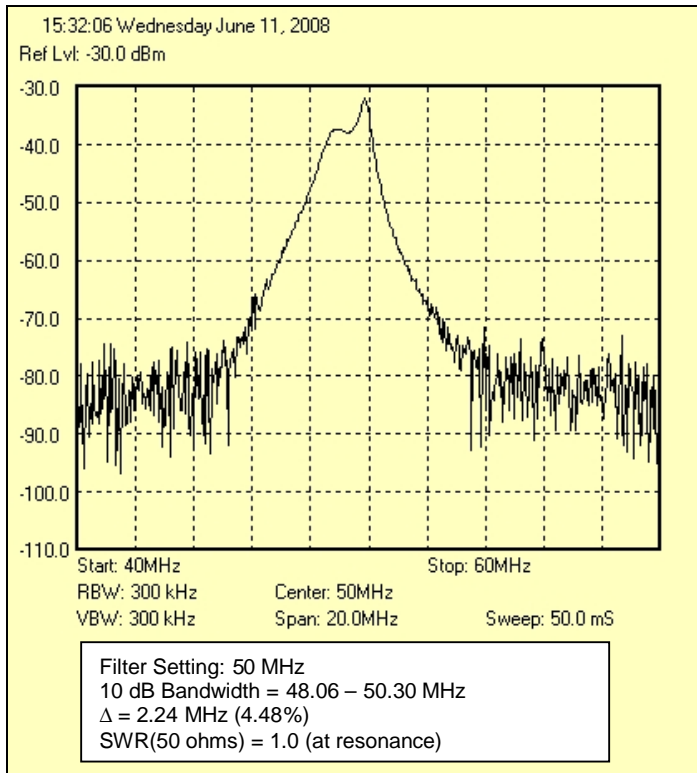
<http://www.radiosky.com/filter.html>

http://www.vmarsmanuals.co.uk/newsletter_articles/bandpassfilters.pdf

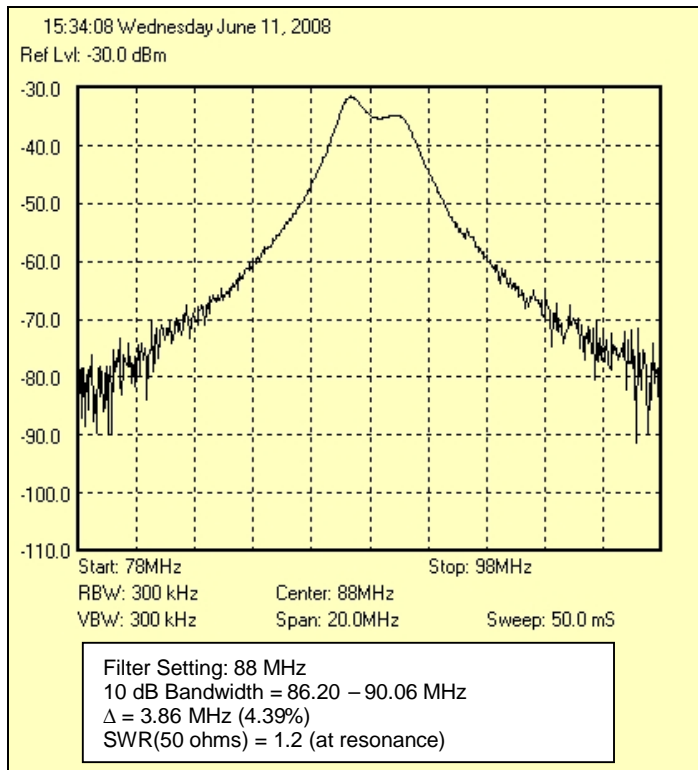
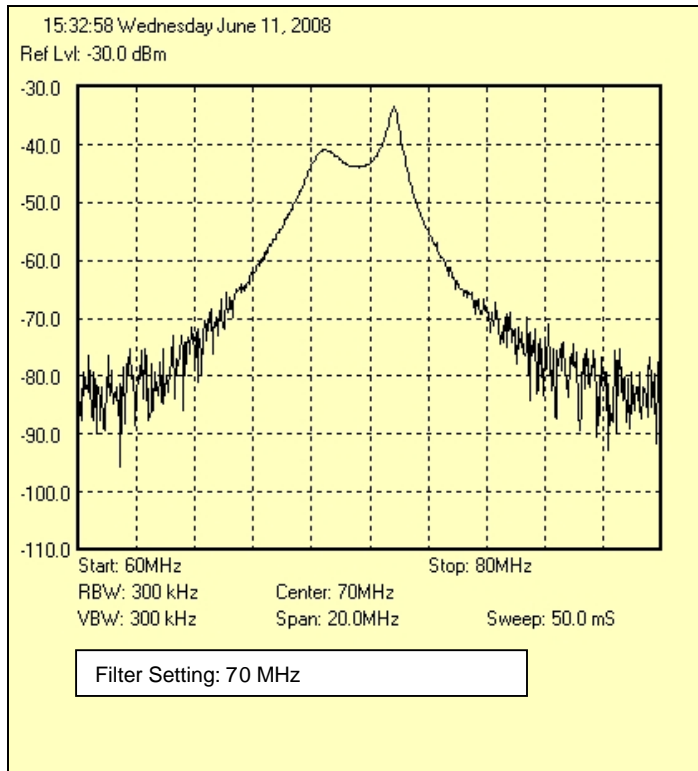
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Author: Whitham D. Reeve

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