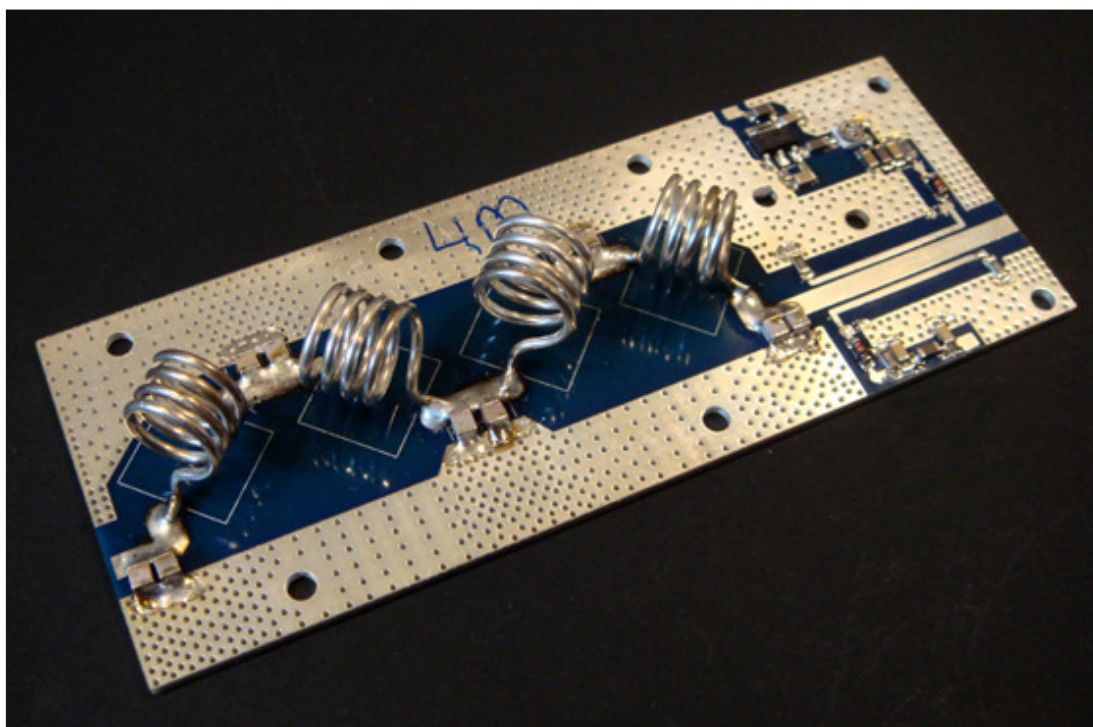


LPF 300W 4M is a Low Pass Filter for use in 4M 70 – 72 MHz Ham radio equipment. Its design is optimised for use with our 150W en 300W pallet amplifiers and can be mounted on the same heat sink as the pallet.

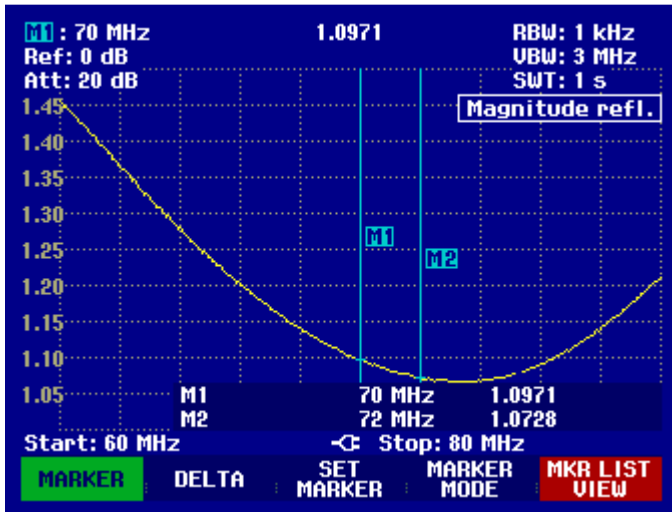
Only first class RF en Microwave components are used. TG170 silver plated PCB with silver plated copper inductors and ATC100B capacitors to minimize internal loss and best possible harmonic suppression.

As an extra feature, there is an on board VSWR (shutdown) protection circuit.

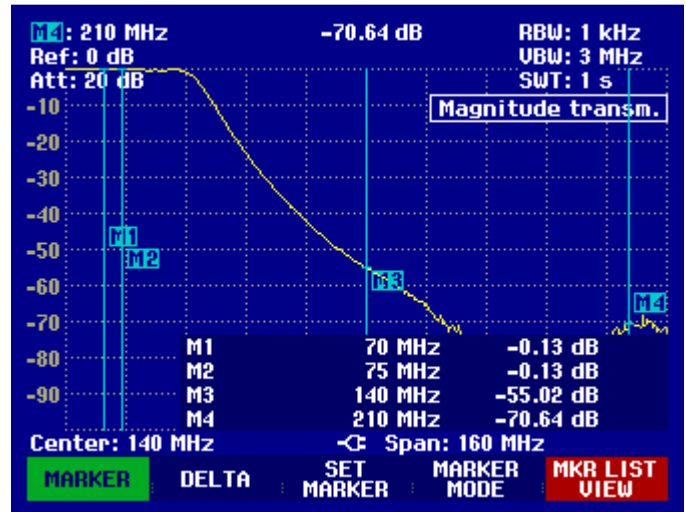


ELECTRICAL SPECIFICATIONS	min	typ	max	
Power handling	300	325	350	W
Input impedance		50		ohm
Output impedance		50		ohm

Spectrum measurements



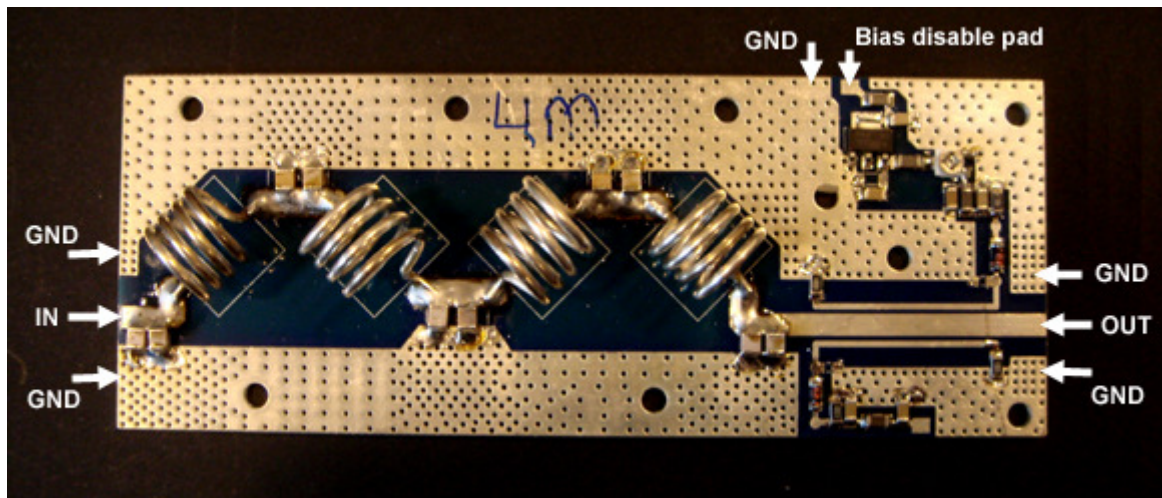
Input VSWR



Pass band / harmonic measurement

Screenshots from R&S FSH3.23 with vector option enabled. For input return loss measurement, R&S@FSH-Z2 VSWR Bridge has been used. All measurements with frequency cut cables.

Connections LPF



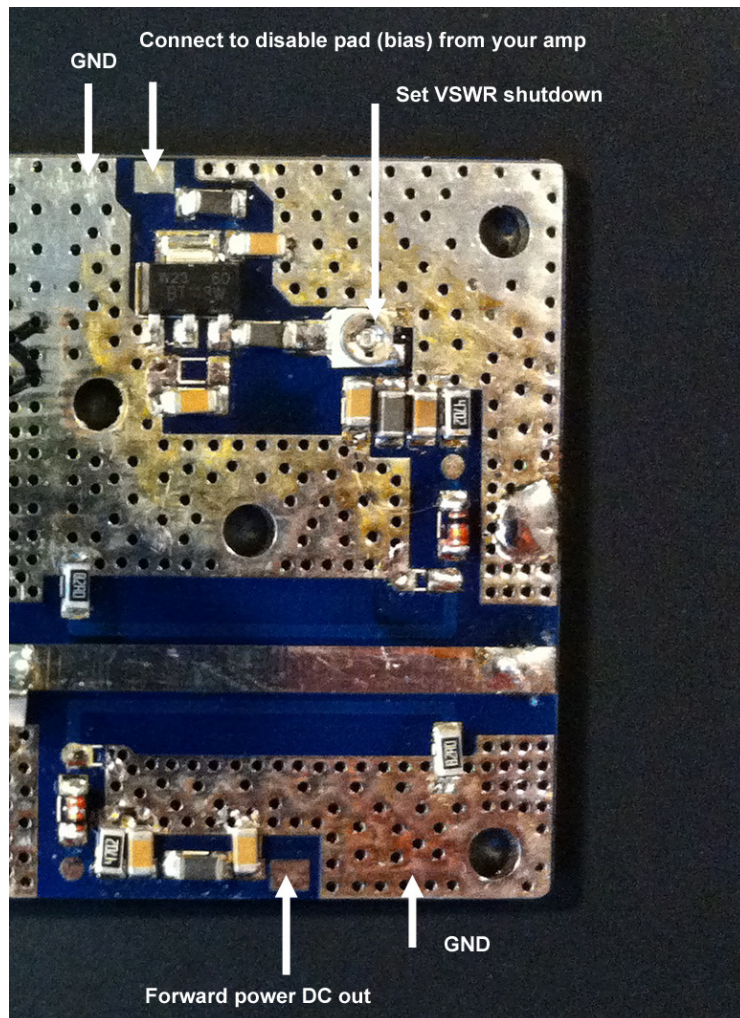
IN, connect inner conductor of 50 Ohm Teflon coax to this point. For best result use 17.5CM Teflon Coax length between your amplifier and LPF

GND, connect outer conductor of 50 Ohm Teflon coax to this point.

Out, connect inner conductor of 50 Ohm Teflon coax to this point. Connect a 17.5CM Teflon Coax length from the output to the output connector of the enclosure. Without this coax, the VSWR Bridge will not function!

GND, connect the outer conductor of 50 Ohm Teflon coax to this point.

Connections VWSR PCB



How to adjust the VSWR point

To adjust the shutdown function of the VSWR Bridge, you have to switch the input and output of the LPF. Then power on the AMP to 35-40W output (about 15% of the amps max output power). Then set the variable resistor that it will start to lower the DC of the bias of your Amplifier. (A voltmeter is required)

If the variable resistor is set, power off your amplifier and switch the in en out of the filter again. Now your VSWR protection is active.

NOTE: THIS IS ONLY A SIMPLE SHUTDOWN; WE CANNOT GIVE ANY WARRENTY THAT YOUR AMP WILL BE PROTECTED IN ALL CASES!

IMPORTANT NOTICE

FMBROADCASTPARTS RESERVE THE RIGHT TO MAKE CHANGES TO THE PRODUCT(S) OR INFORMATION CONTAINED HEREIN WITHOUT NOTICE. FMBROADCASTPARTS ASSUMES NO RESPONSIBILITY FOR ANY ERRORS WHICH MAY APPEAR IN THIS DOCUMENT. WARRANTY INFORMATION APPLICABLE TO THE PRODUCT IDENTIFIED HEREIN IS AVAILABLE UPON REQUEST. NOTHING CONTAINED HEREIN SHALL CONSTITUTE A WARRANTY, REPRESENTATION OR GUARANTEE OF ANY KIND. FMBROADCASTPARTS EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND/OR IMPLIED INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, AND OF FITNESS FOR A PARTICULAR PURPOSE, USE OR APPLICATION.

WARNING

FMBROADCASTPARTS PRODUCTS ARE NOT INTENDED FOR USE IN LIFE SUPPORT APPLIANCES, DEVICES OR SYSTEMS. USE OF A FMBROADCASTPARTS PRODUCT IN ANY SUCH APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

No part of this document may be copied or reproduced in any form or by any means without the prior written consent of FMbroadcastparts.