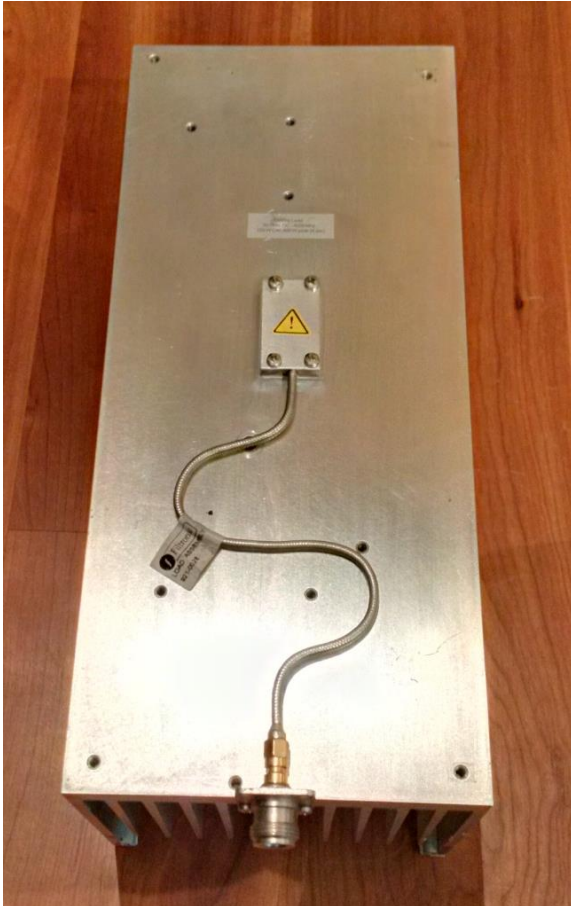


Dummy Load Filtronics 921-0028 50 Ohm 150 W

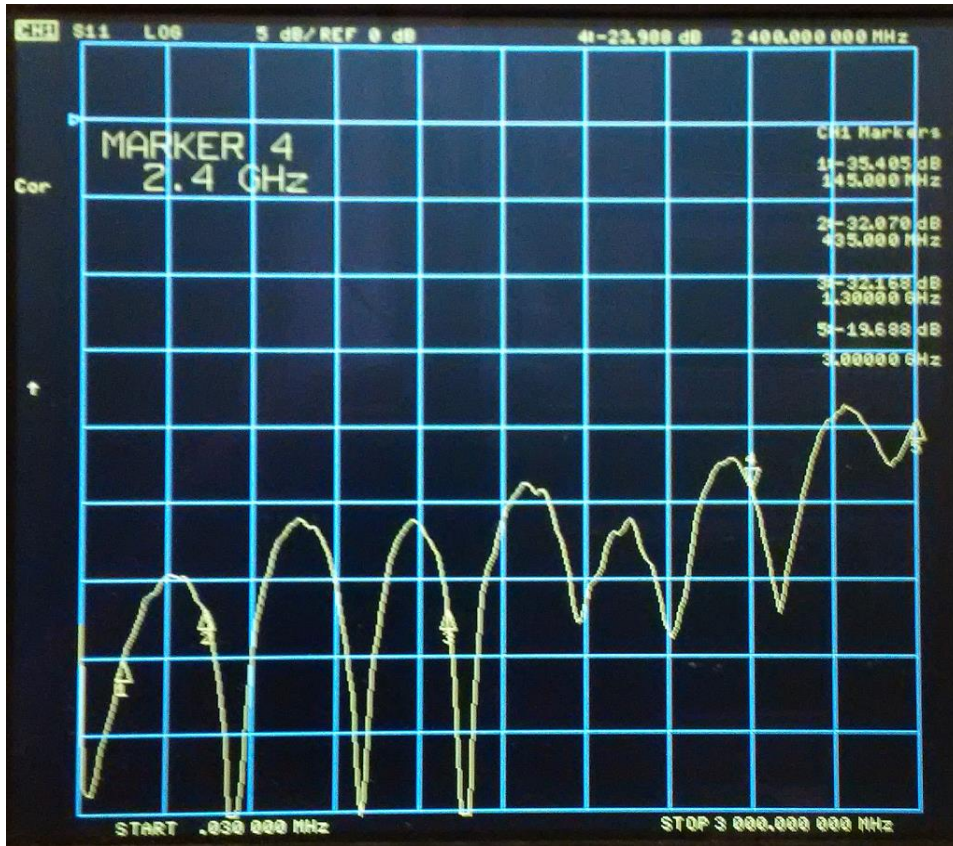
Matthias, DD1US, May 23rd 2020, rev 1.0

Searching for a cost-effective solution to test and tune 2.4 GHz PAs I also characterized a dummy load based on a 50 Ohm 150W load assembly from Filtronics with the part number 921-0028. This dummy load module has a semiflex pigtail with a SMA-plug as the input. I mounted it on a suitable heatsink and used a SMAf-Nm bulkhead adapter screwed to the heatsink to avoid mechanical stress to the module.

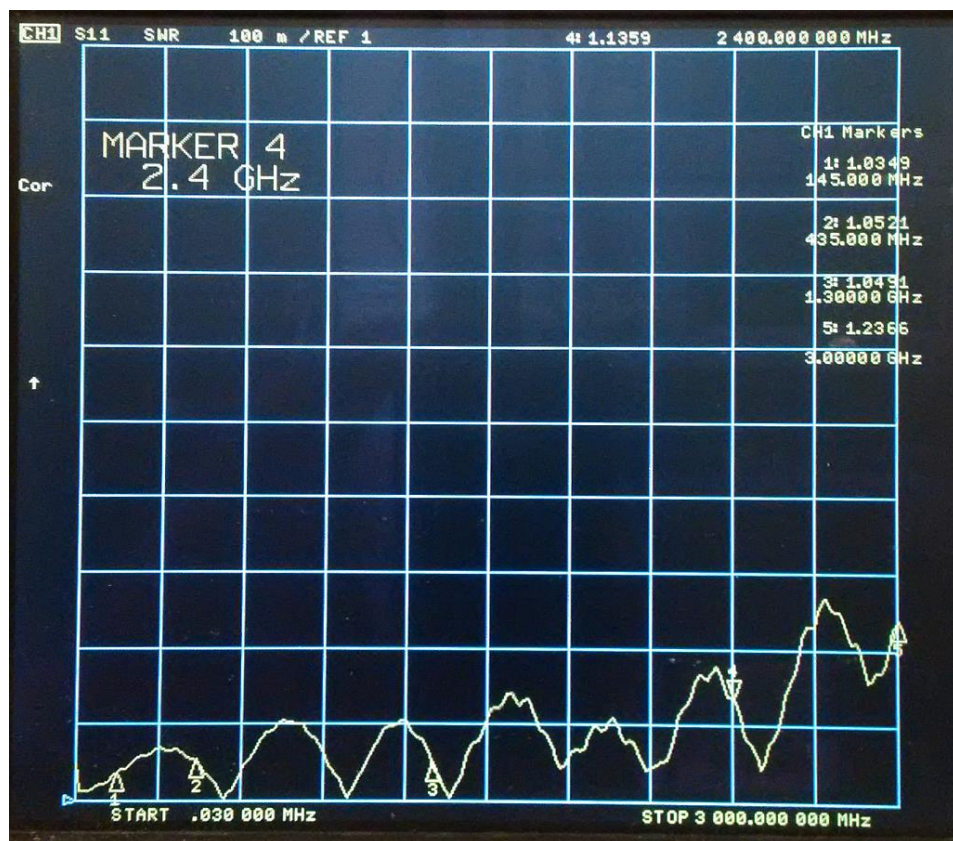
Here are some pictures of the dummy load:



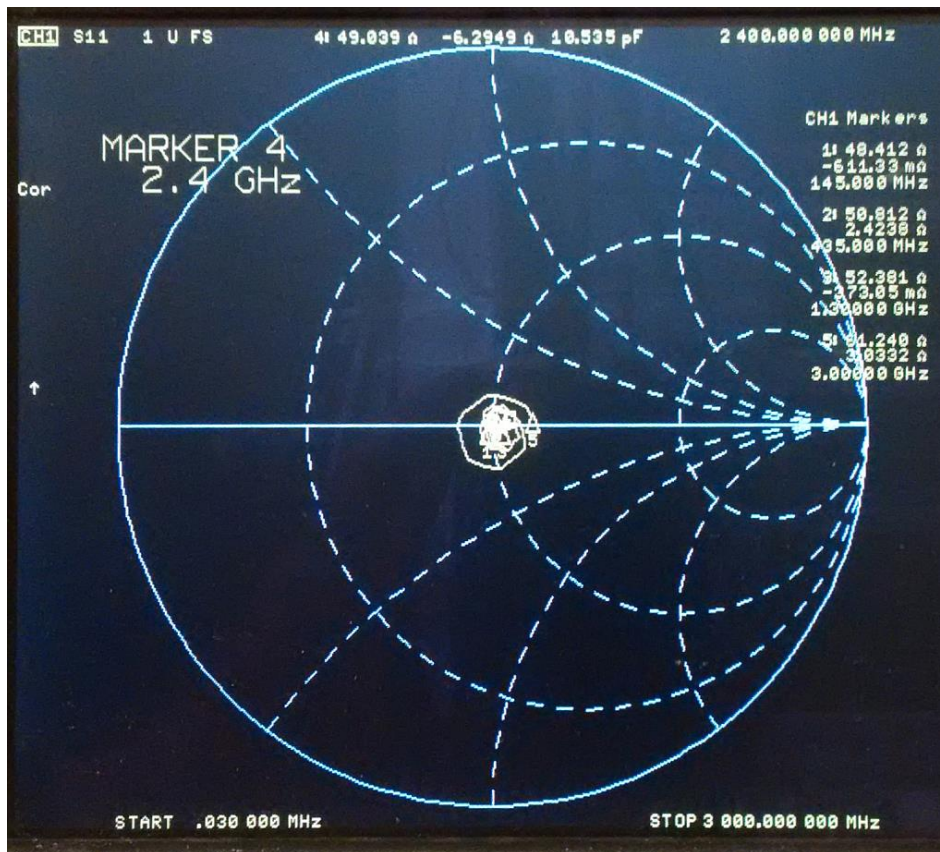
Here are the S11 measurement results of the device. The return loss is better than 30dB in the 2m, 70cm and 23cm ham radio bands. In the 13cm band the return loss is still 24dB and it drops to 20dB at 3 GHz.



S11 log magnitude



S11 SWR



S11 Smith Chart

This Filtronics Load Assembly is the basis of an excellent dummy load up to 2.4 GHz. I have not yet checked its performance in the 9cm band but there is a good chance that it will work fine there too.

I always appreciate feedback. Many thanks in advance.

Best regards

Matthias DDIUS

Email: DDIUS@AMSAT.ORG

Homepage: <http://www.ddius.de>