

Unknown 1.9-2.3GHz Isolator

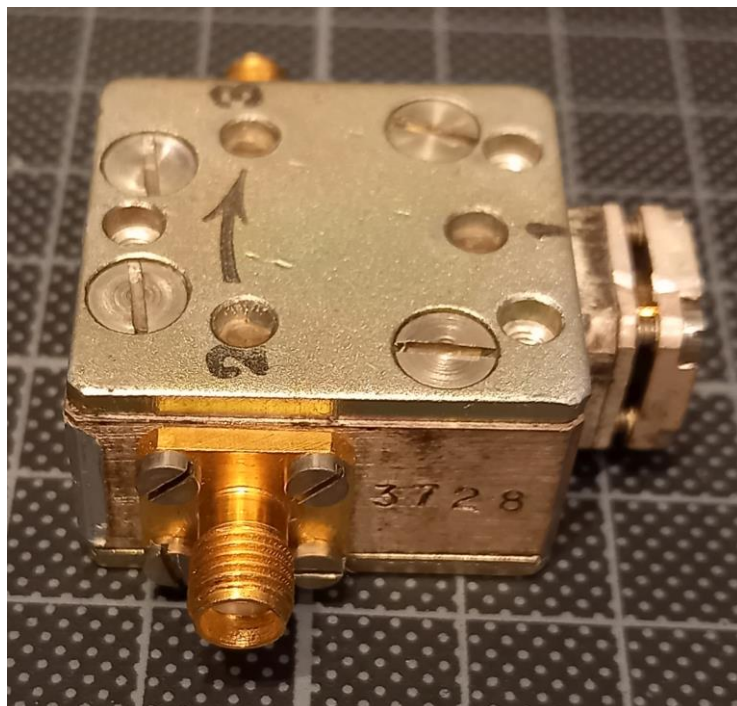
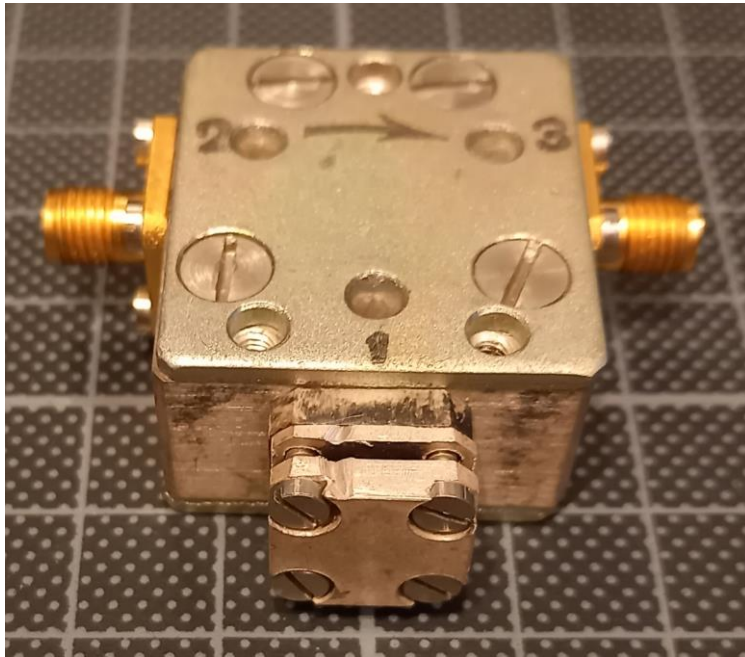
Matthias, DD1US, January 22nd 2022

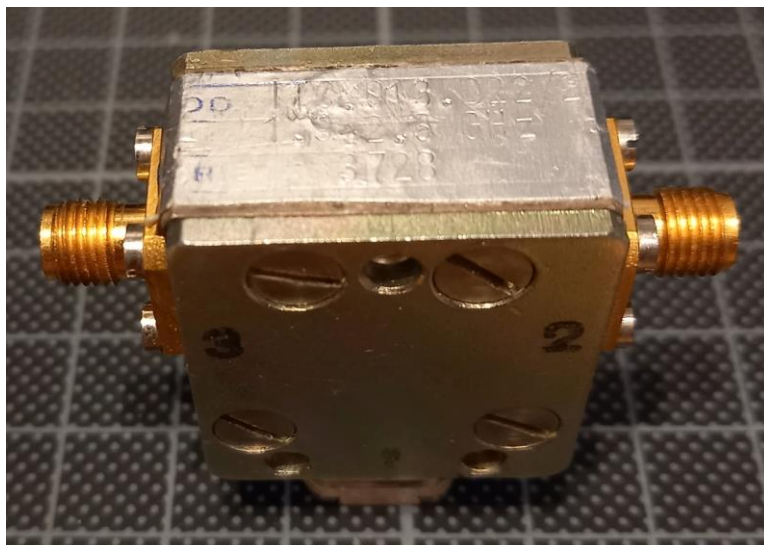
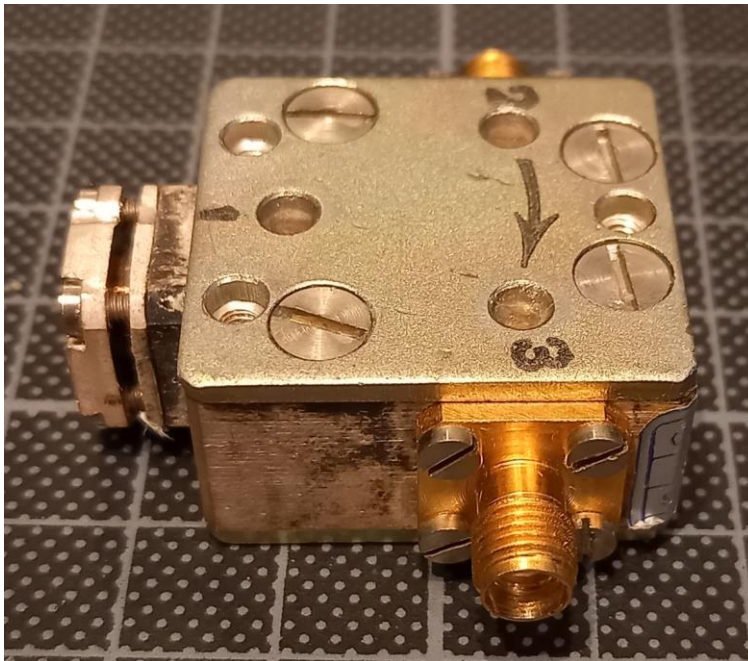
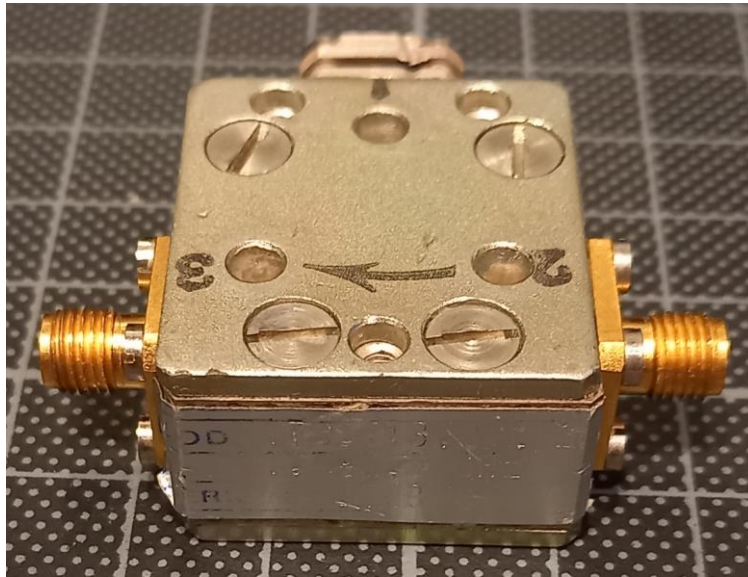
Hello,

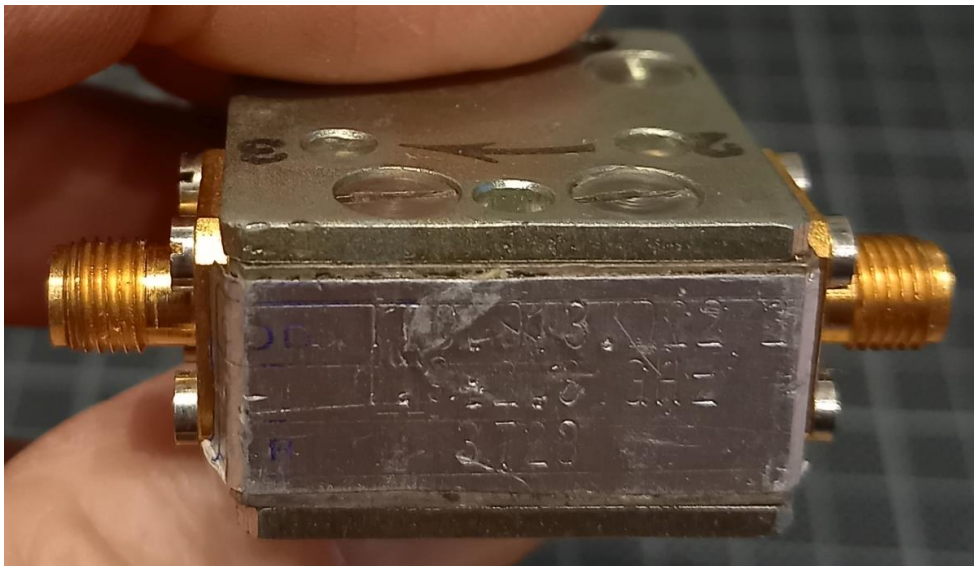
Some time ago I acquired an unknown isolator and finally found the time to characterize it. There is no supplier mentioned on the device, the label contains the following information:

Mod 17?.013.D22/2
Freq 1.9-2.3GHZ
Serial No 3728

Here are some pictures of the device:



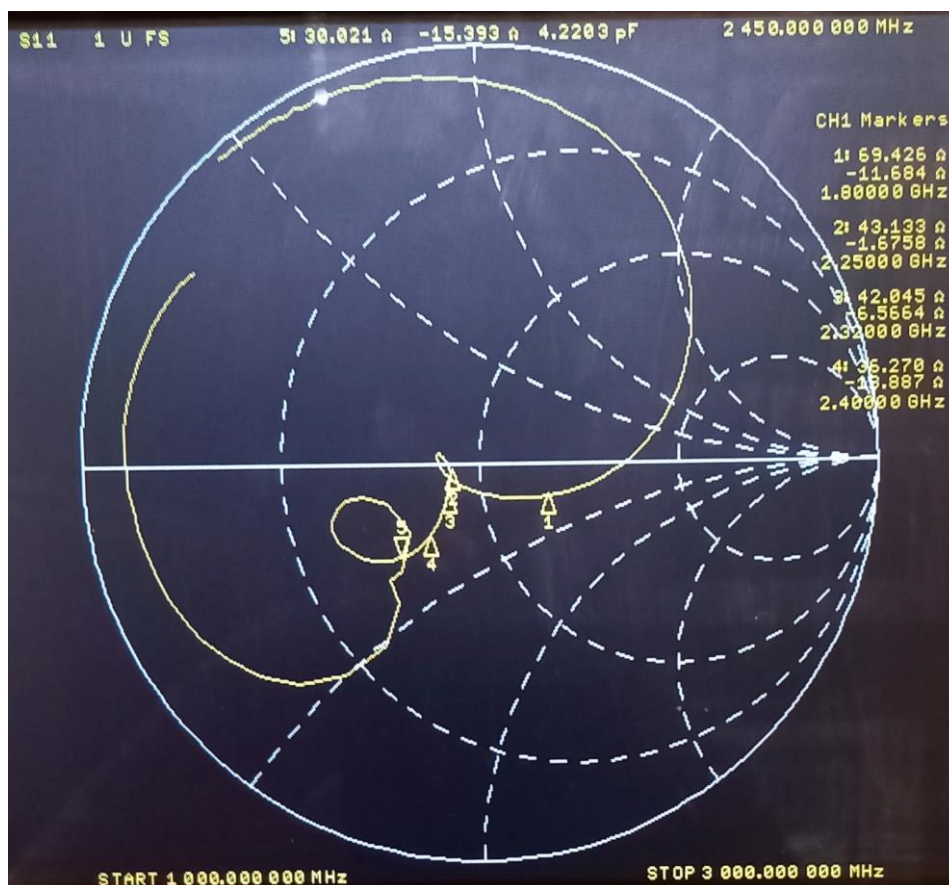
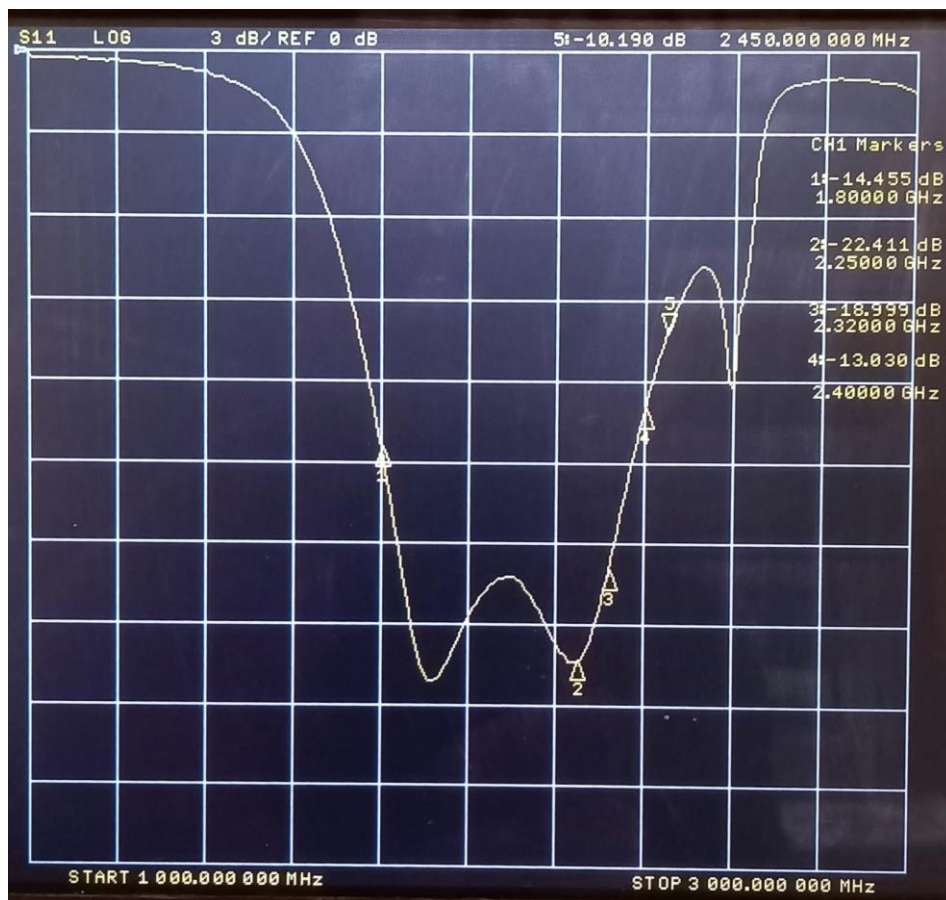




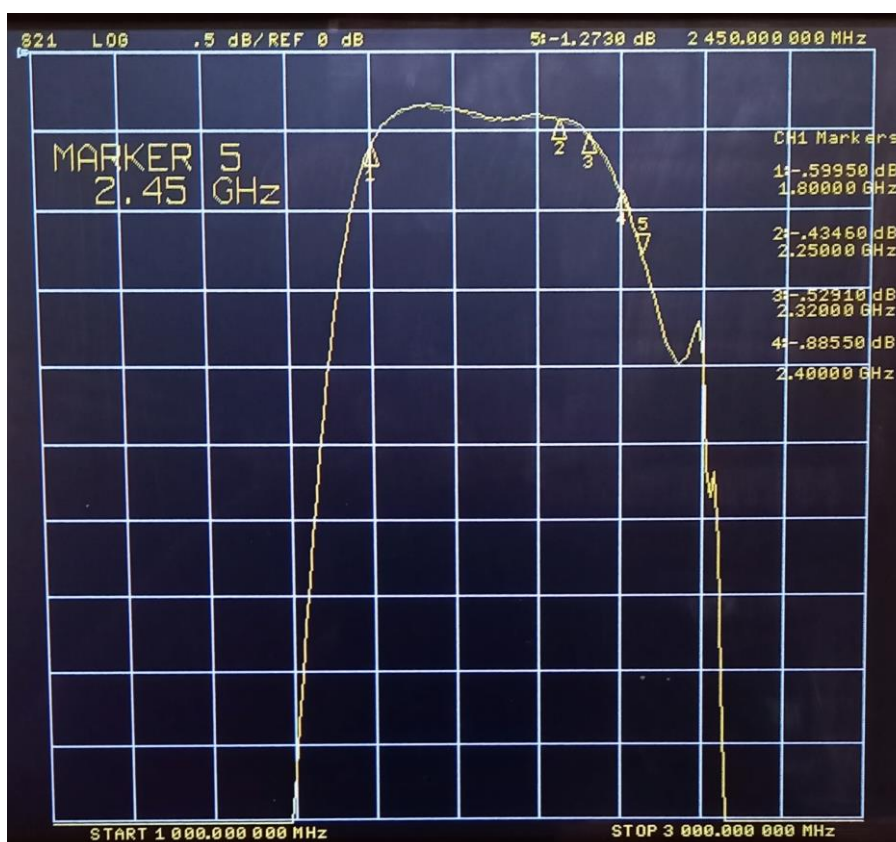
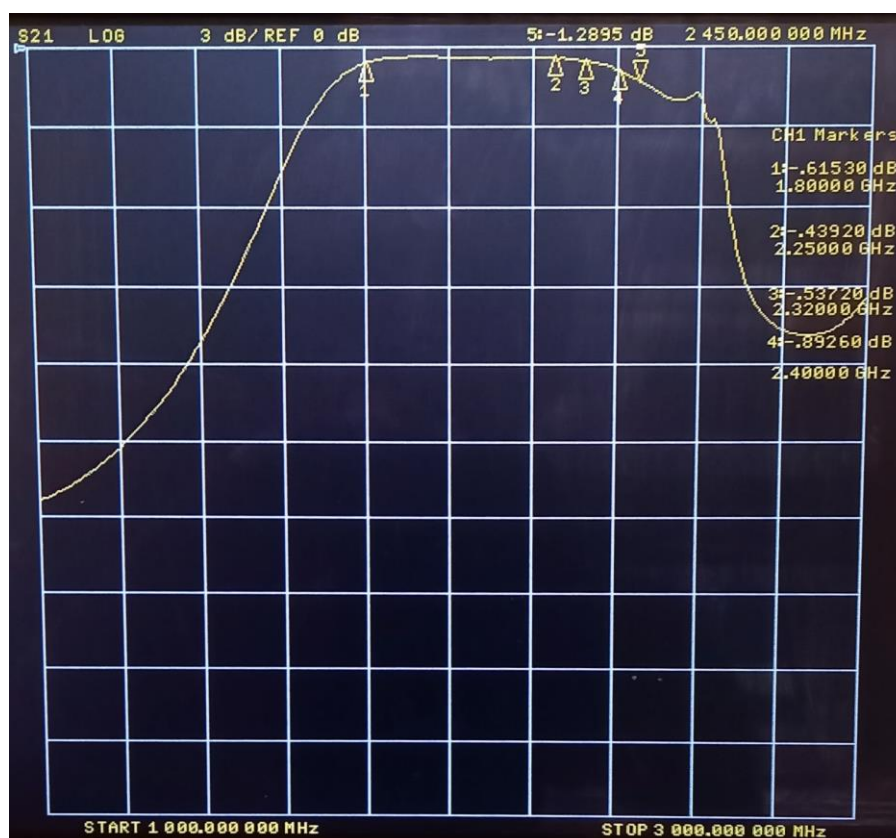
The isolator is housed in a solid metal case and female SMA connectors are used at the input and output ports.

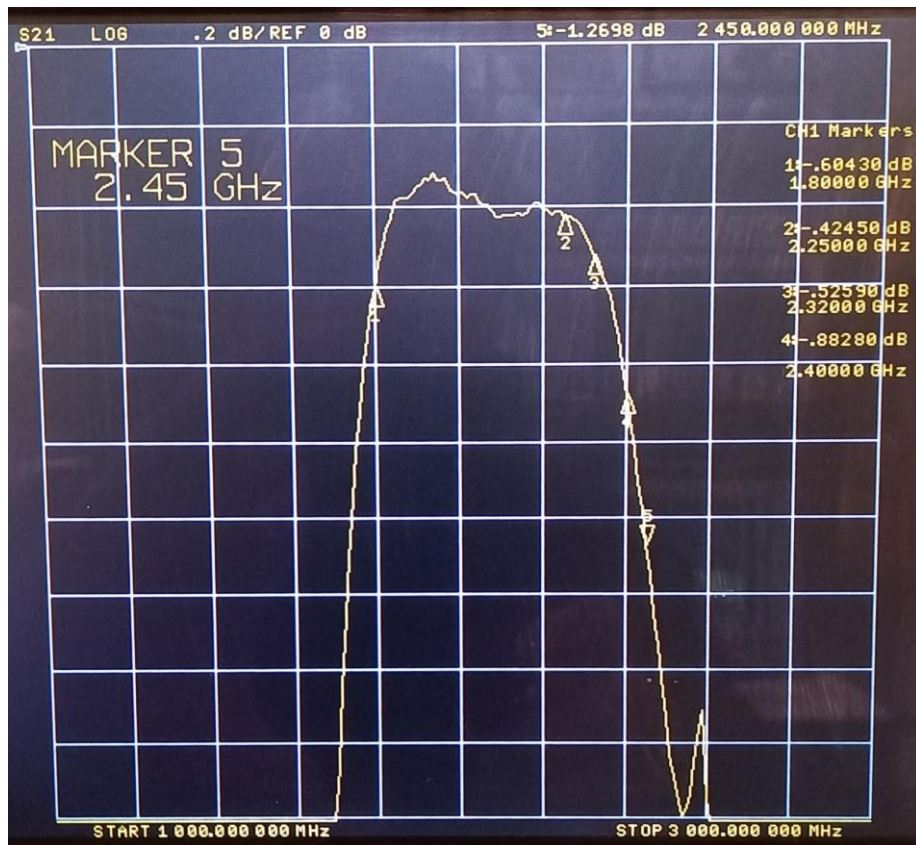
Below you will find some measurement results of this S-band isolator. All measurements were done in the frequency range 1GHz to 3GHz.

S11 input matching (return loss at 2250MHz is 22.4dB, at 2320MHz it is 19.0dB)

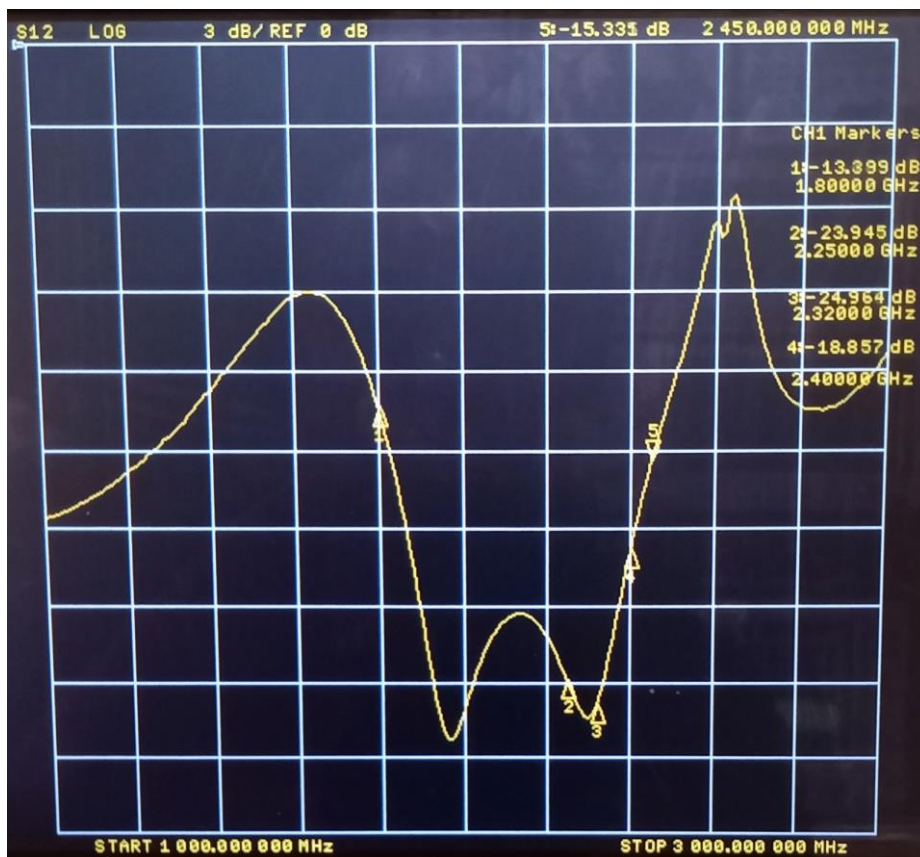


S21 forward transmission (insertion loss at 2250MHz is 0.44dB, at 2320MHz it is 0.54dB)

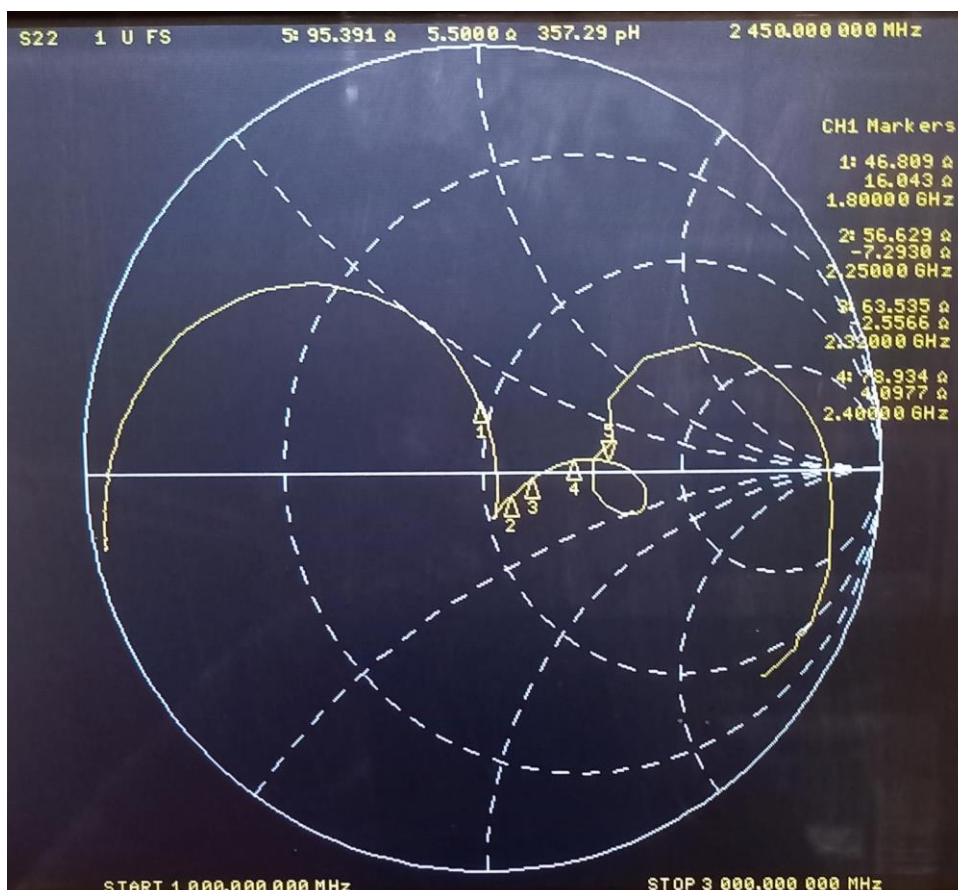
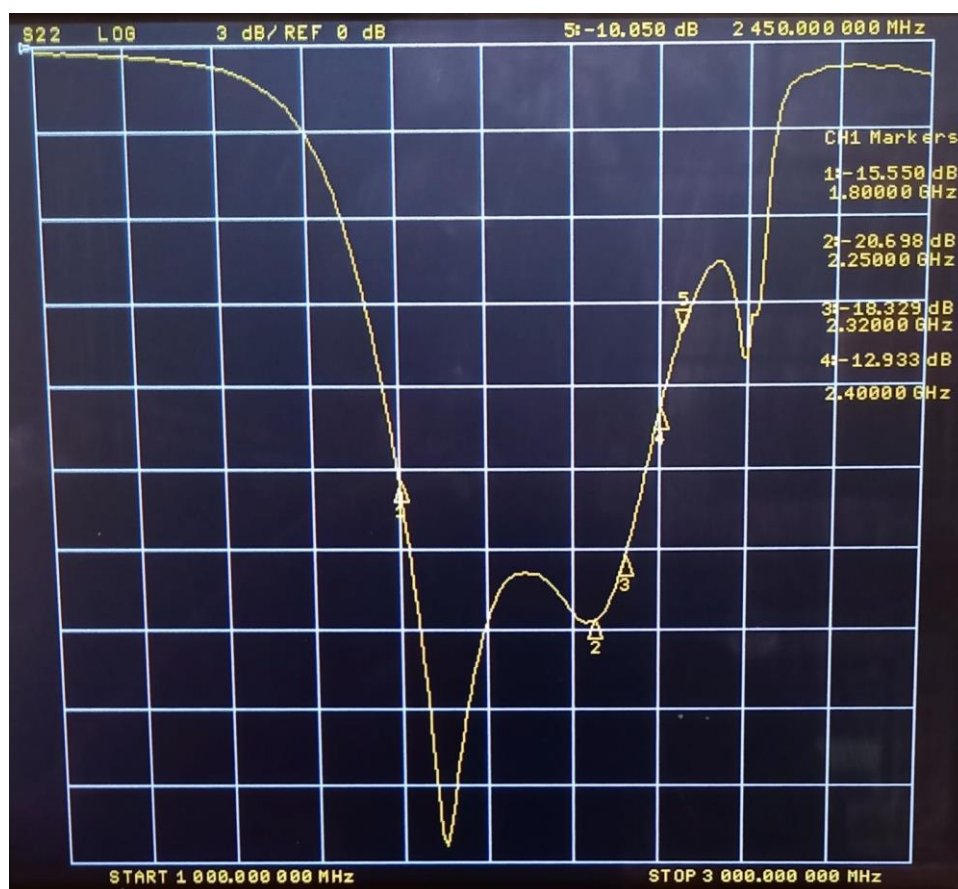




S12 reverse transmission (isolation at 2250MHz is 23.9dB, at 2320MHz it is 25.0dB)



S22 output matching (return loss at 2250MHz is 20.7dB, at 2320MHz it is 18.3dB)



The measurements results of this isolator at 2.320GHz show that it is well suited to be used at this frequency.

I did not find any data on the internet. In case you know this type and can help me with some data please send me an Email.

Also, I will be happy to answer questions and always appreciate feedback. Many thanks in advance.

Best regards

Matthias DD1US

Email: DD1US@AMSAT.ORG

Homepage: <http://www.dd1us.de>