

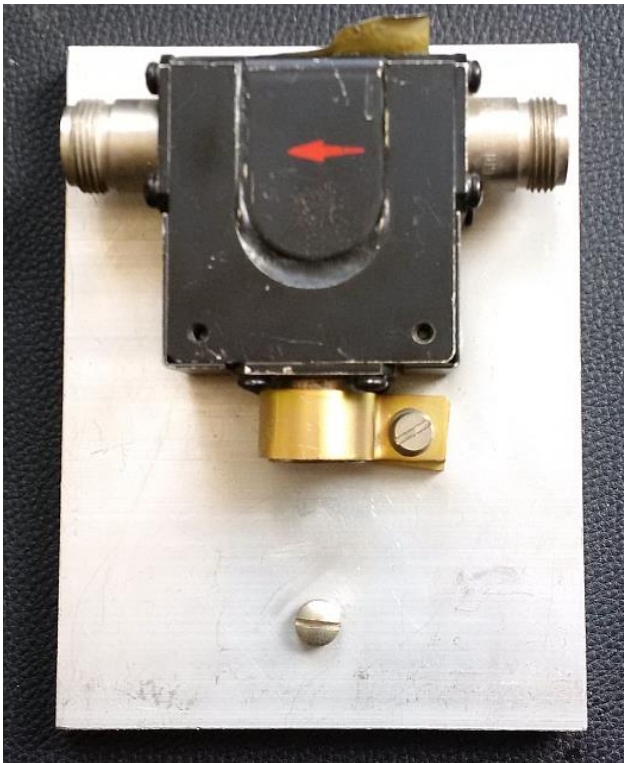
2m Isolator Melabs Model H350-153,4T

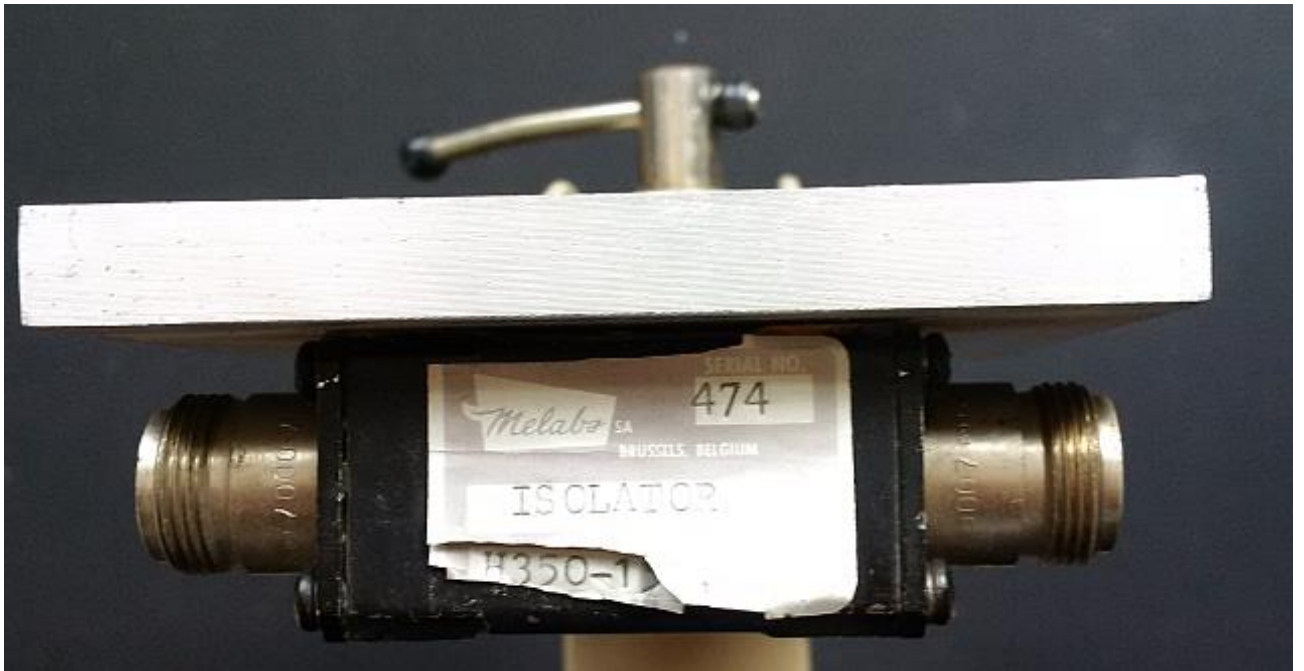
September 16th 2018, Matthias, DD1US

Hi,

Recently I found an Isolator on a fleamarket and as I was searching for an Isolator for the 2m ham radio band I decided to give it a try. It is made by Melabs SA, Brussels, Belgium and the model number printed on the device is H350-153,4T. The serial number is 474.

Here are some pictures of the unit which is attached to an aluminium plate for cooling.



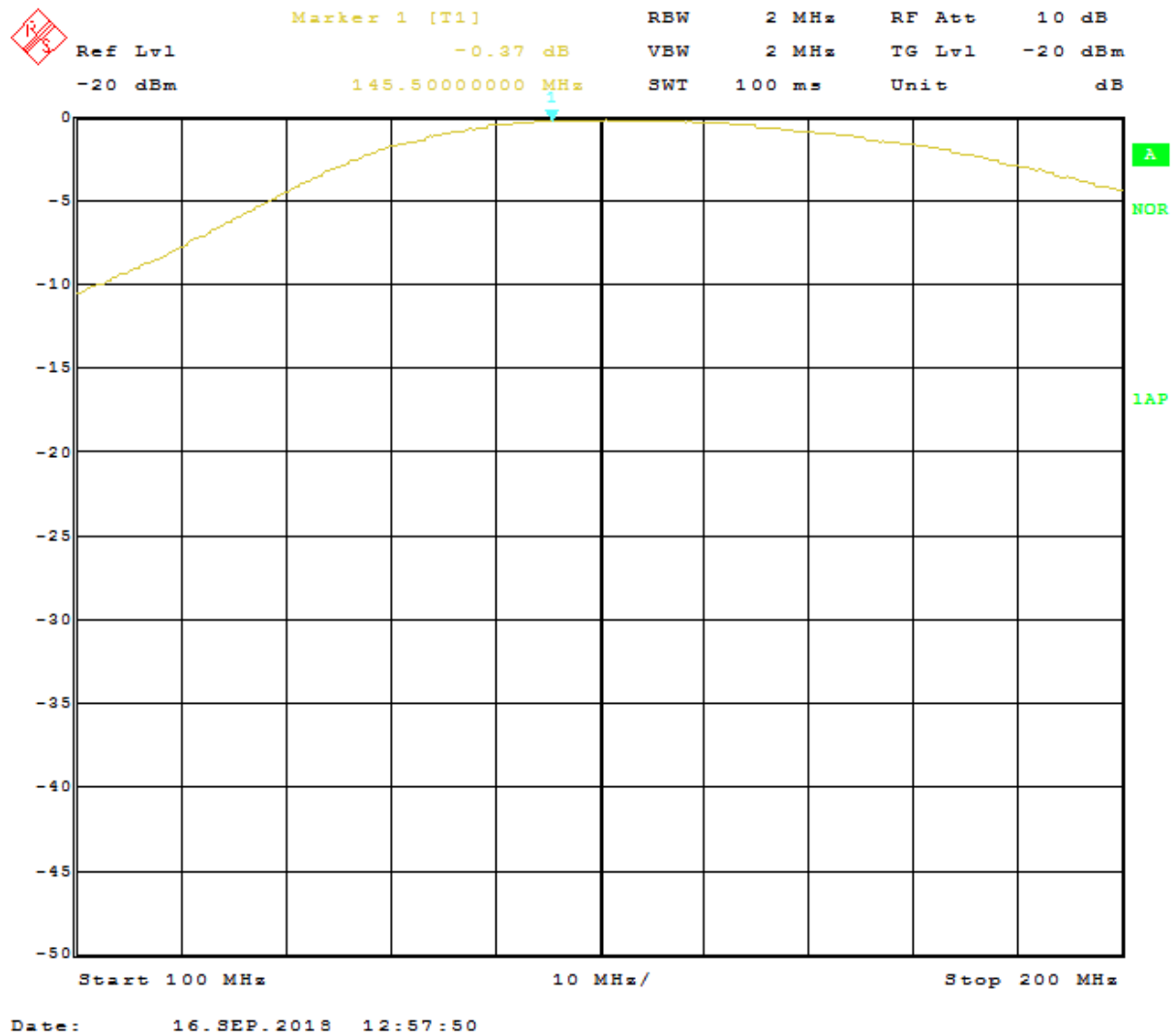


The input and output ports are equipped with 50 Ohms N-jacks.



Next I performed some measurements at the device measuring the transfer S_{21} and isolation S_{12} characteristics in the frequency range 100 – 300 MHz.

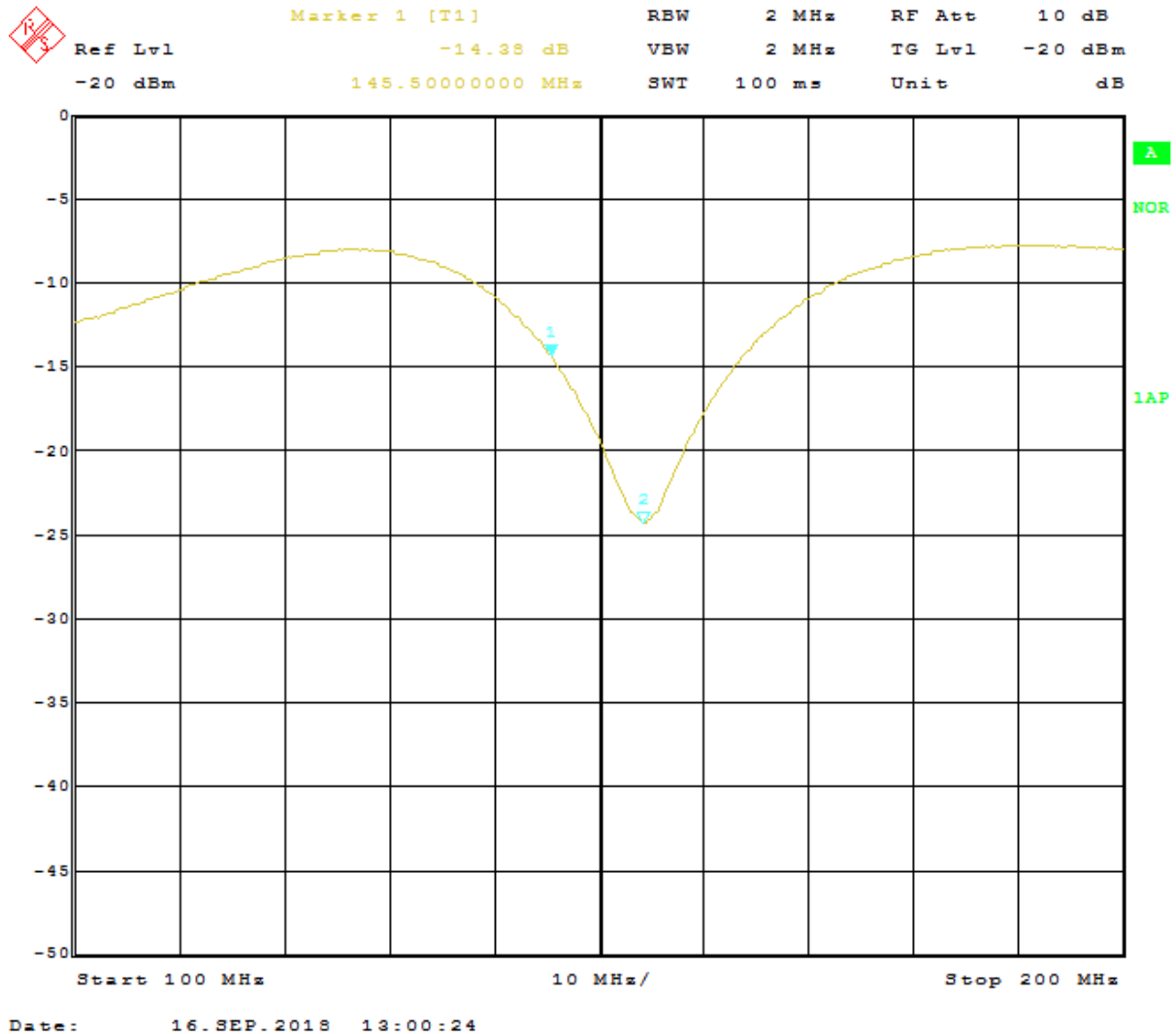
Transfer Characteristic S21:



The center frequency of the transfer curve is $F_c = 154.3$ MHz with the minimum insertion loss $IL = 0.3$ dB.

At the 2m ham radio band I measured at $F = 145.550$ MHz an insertion loss of $IL = 0.37$ dB.

Isolation S12:



The maximum isolation is achieved at $F_c = 154.3$ MHz with the maximum isolation of $Isol = 24.2$ dB.

At the 2m ham radio band I measured at $F = 145.550$ MHz an isolation $Isol = 14.2$ dB.

I have not yet tried open and retune the device. If anyone has experience with such a unit I appreciate any information. Please send it to my Email address below.

Kind regards

Matthias DD1US

Email: dd1us@amsat.org

Homepage: www.dd1us.de