Dr. William J. Schmidt

From: SoftwareControlledHamRadio@groups.io on behalf of glenn percy via groups.io <vk3pe=bigpond.com@groups.io>
Sent: Wednesday, August 28, 2024 2:10 AM
To: SoftwareControlledHamRadio@groups.io
Subject: Re: [SoftwareControlledHamRadio] Bandpass Filters

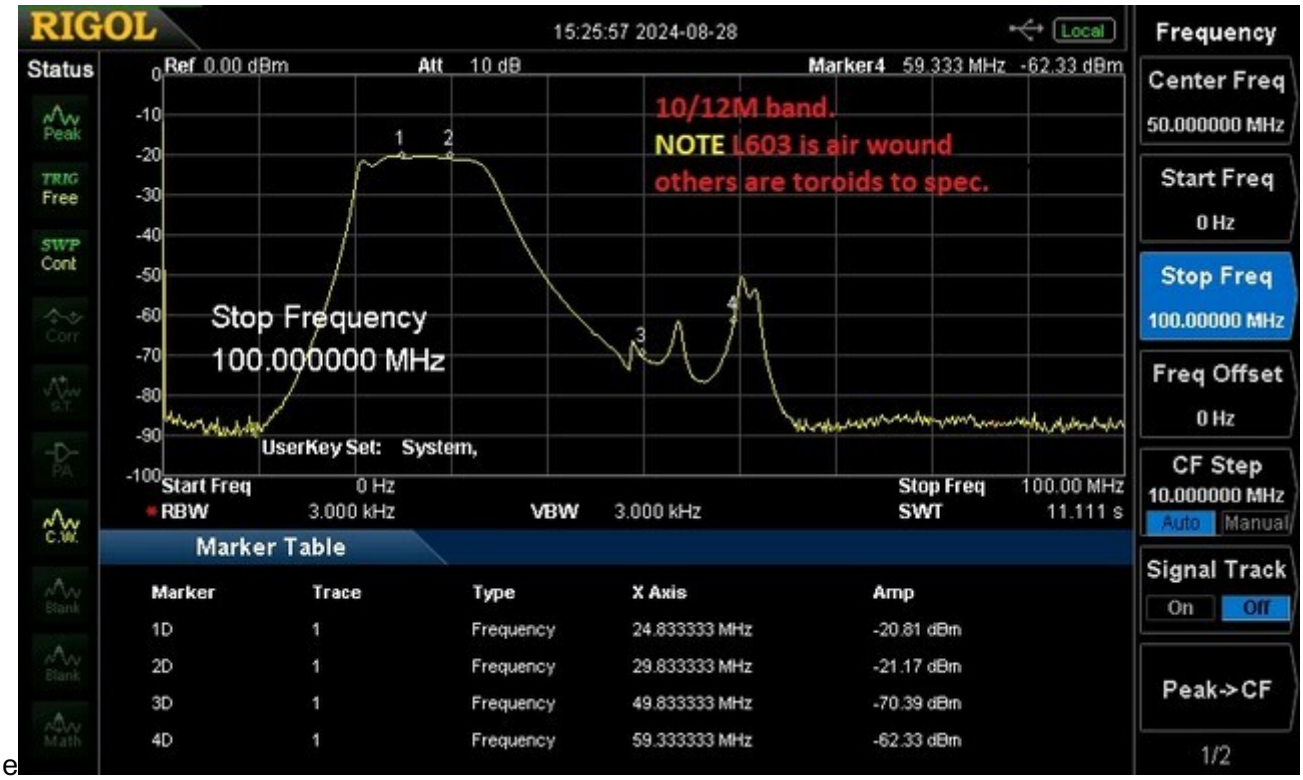
Dave
Are you able to sweep down to say -50 0r -60dB range? Would like to see your results compared to mine at the lower levels.

I loaded up the 12/10M band today and swept it. I'm using pre-measured toroids giving similar **Turns** to what you experienced in your attachment. BUT L503 is air wound.

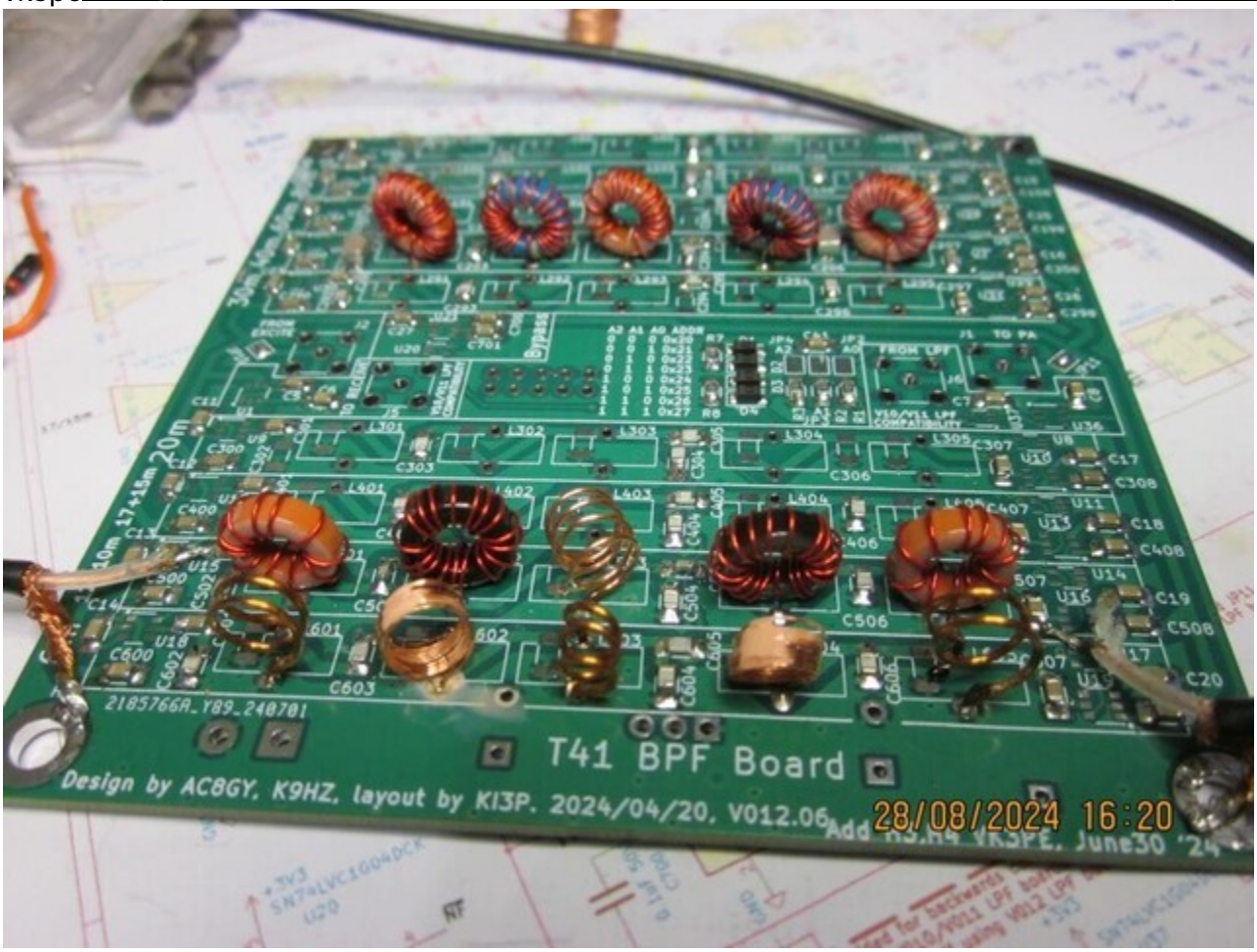
I haven't re-swept the 6M band, but you can see what I think is termed 'suck-out' on the 12/10M sweep at low levels in the range of -40 to -50dB or so. See graph. I suspect the influence is from the two adjacent airwound coils as you can see. Ideally all adjacent coils should be at right angles. Run out of time today to fiddle with that.

As a matter of interest in this case, the biggest contributor to getting a 'flat' response was adjustment of L503. Had to open it up slightly to lift the upper end of 10M band to low loss range.

Glenn


RIGOL
15:25:57 2024-08-28
Local
Status
Ref 0.00 dBm
Att 10 dB
Marker4 59.333 MHz -62.33 dBm
10/12M band.
NOTE L603 is air wound
others are toroids to spec.
Stop Frequency
100.000000 MHz
UserKey Set: System,
Start Freq 0 Hz
Stop Freq 100.00 MHz
RBW 3.000 kHz
VBW 3.000 kHz
SWT 11.111 s
Marker Table
Marker Trace Type X Axis Amp
1D 1 Frequency 24.833333 MHz -20.81 dBm
2D 1 Frequency 29.833333 MHz -21.17 dBm
3D 1 Frequency 49.833333 MHz -70.39 dBm
4D 1 Frequency 59.333333 MHz -62.33 dBm
Frequency
Center Freq
50.000000 MHz
Start Freq
0 Hz
Stop Freq
100.00000 MHz
Freq Offset
0 Hz
CF Step
10.000000 MHz
Auto
Manual
Signal Track
On
Off
Peak->CF
1/2

vk3pe


T41 BPF Board
Design by AC8GY, K9HZ, layout by KI3P. 2024/04/20, V012.06
28/08/2024 16:20

On Tue, Aug 27, 2024 at 01:41 PM, D Solt wrote:

dave, n3ds

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