

RTX COH2438.75 B74.5 L1.2 A60S Bandpassfilter

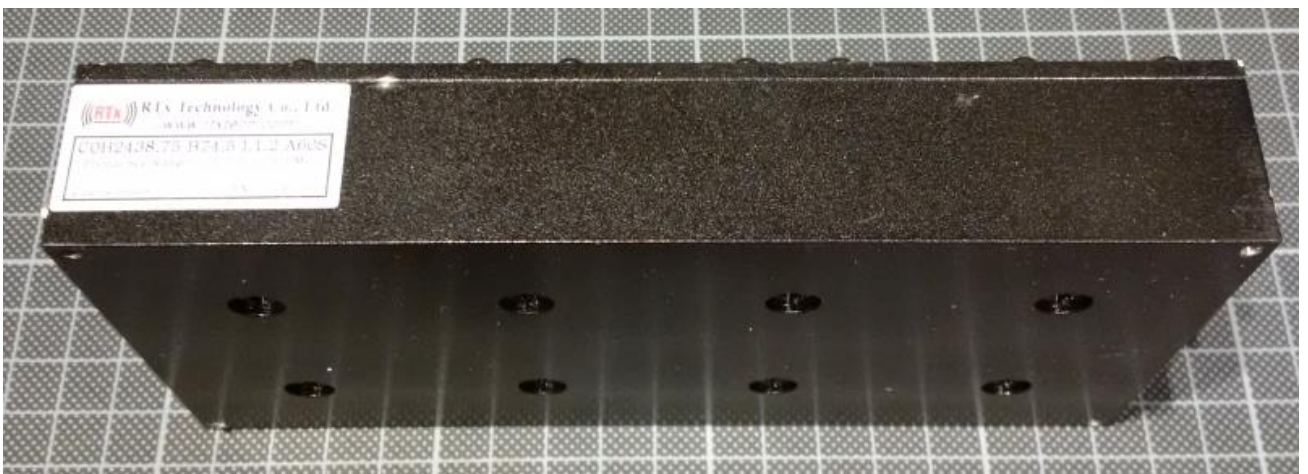
Matthias, DD1US, March 31st 2019

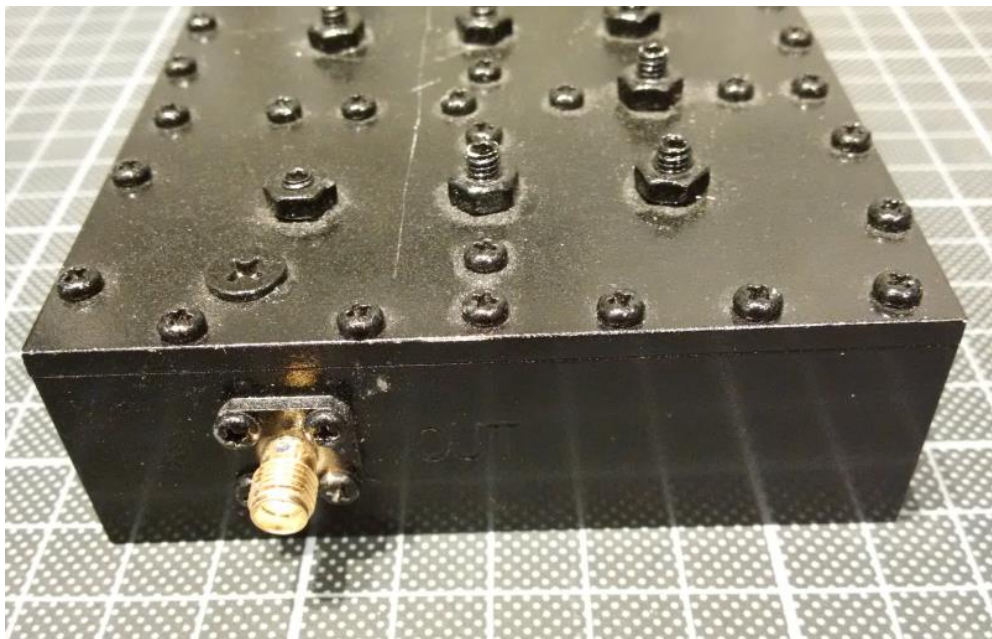
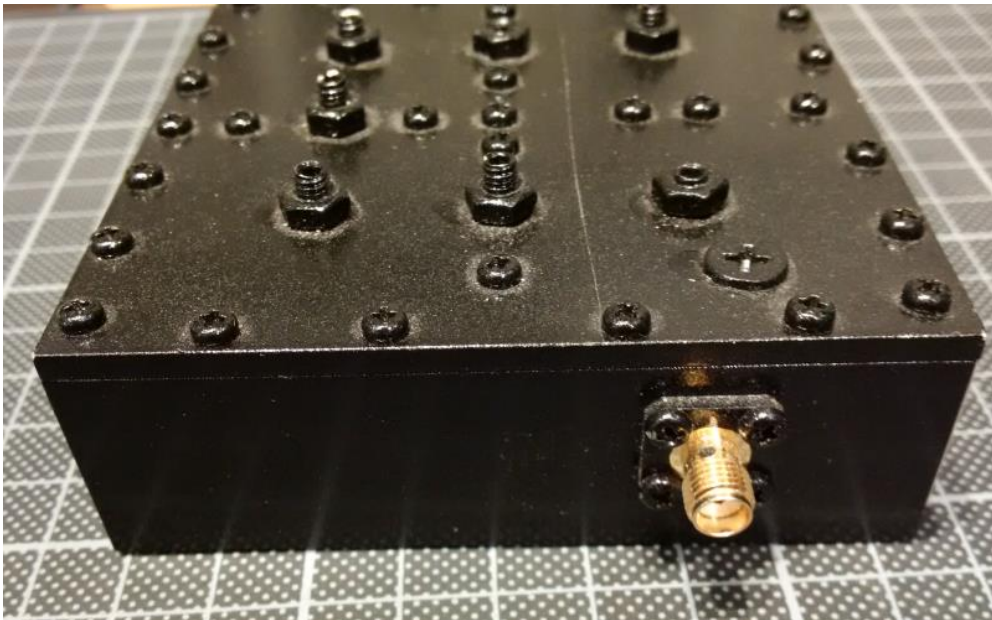
Hello,

I recently acquired a bandpass filter from RTX Technology Co. with the part number COH2438.75 B74.5 L1.2 A60S. I did not find the exact specifications on the internet but as the part number suggests it has a center frequency of 2438.75 MHz and a bandwidth of 74.5 MHz.

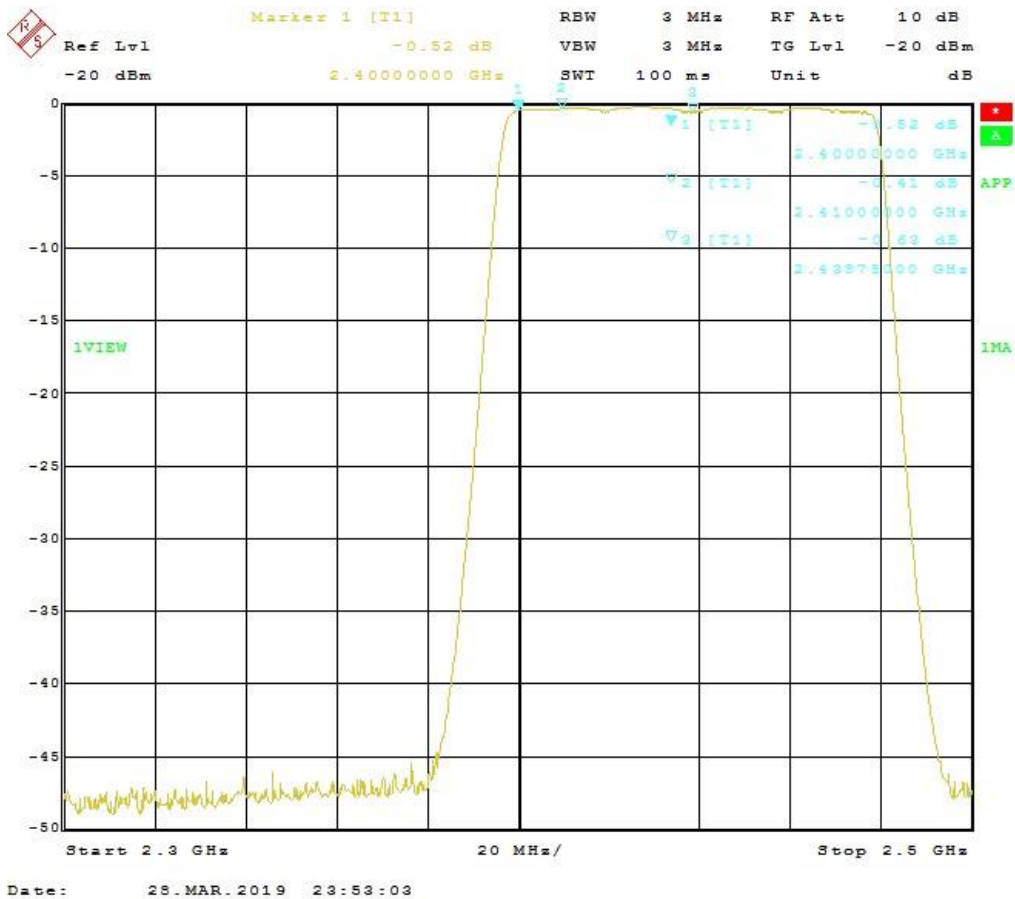
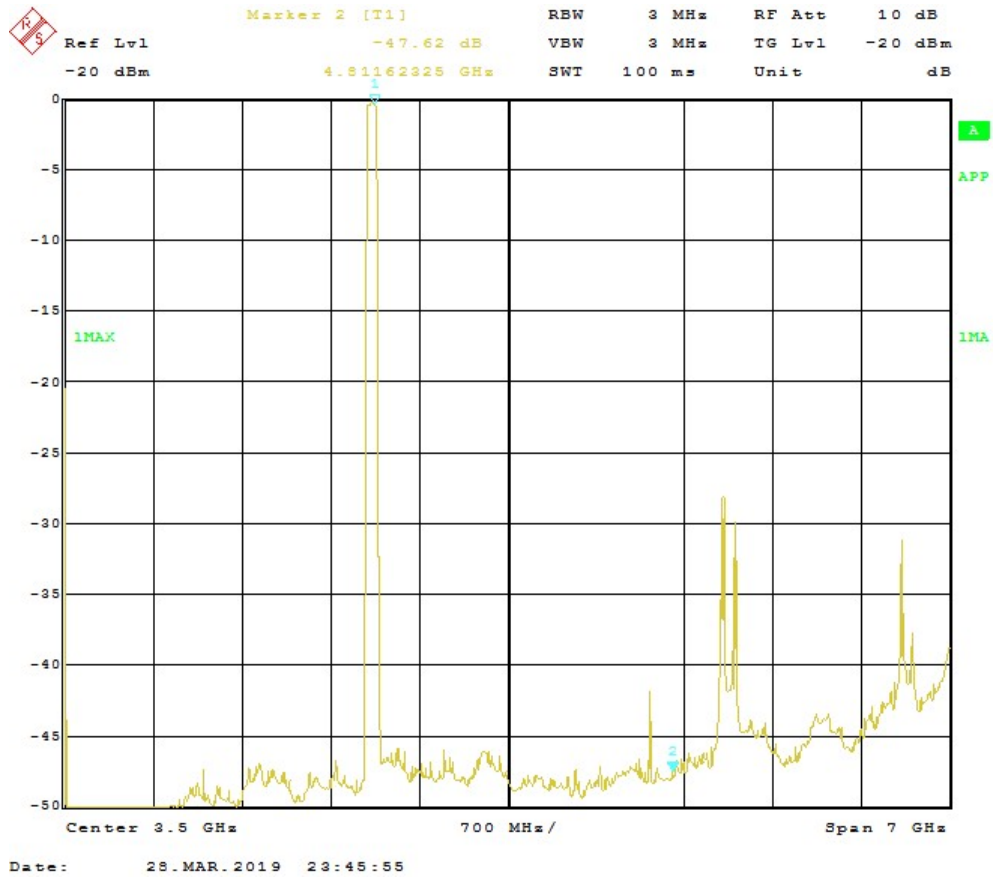
It turns out that it works very nice for the transmit frequency range of QO-100. For those of you who might be searching for a TX filter for Qatar OSCAR 100 / Eshail-2 this might be an interesting solution.

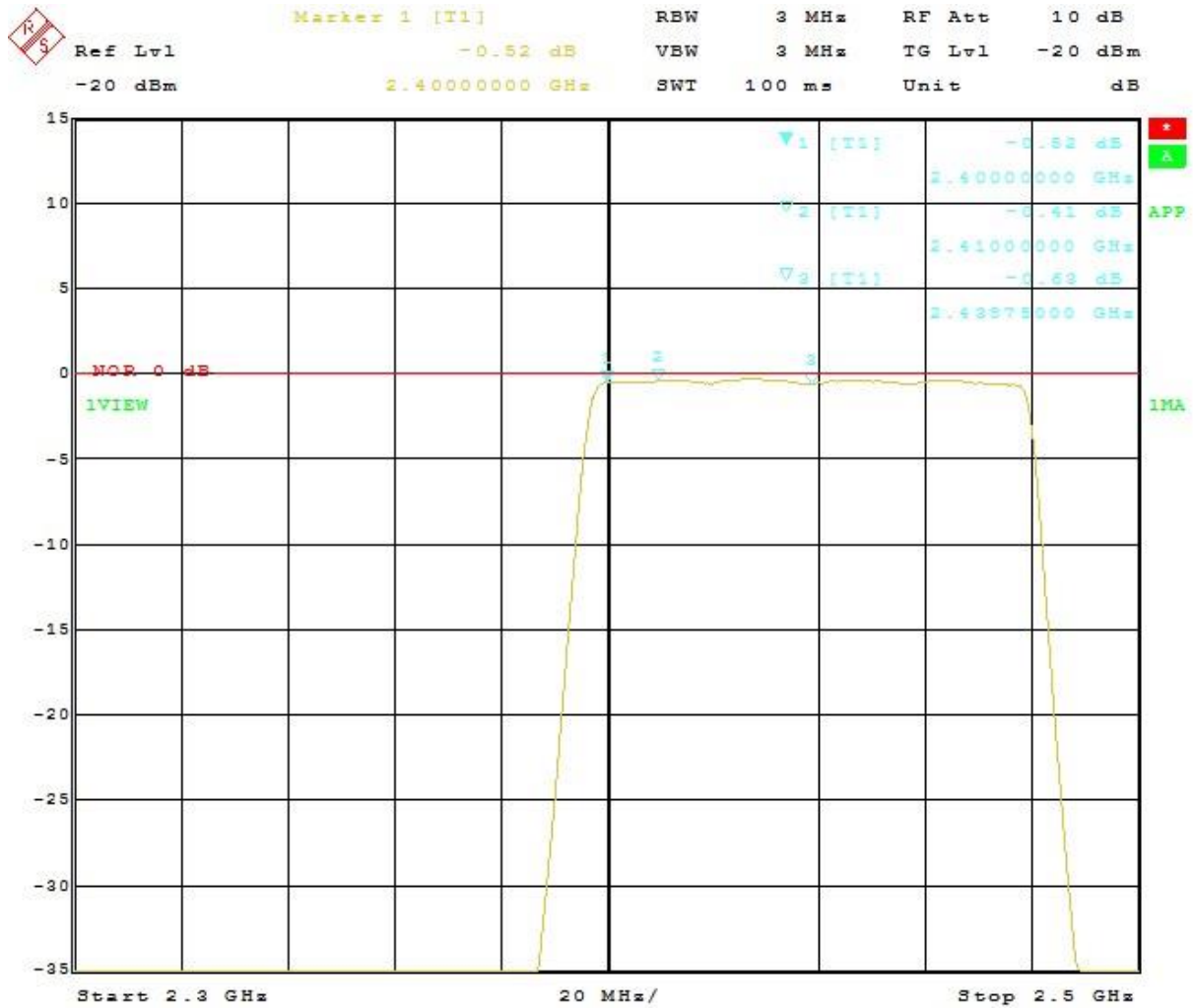
Here are some pictures of the filter:





I measured the transfer characteristic S21 using a spectrum analyzer with tracking generator. Here are the results:





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The filter characteristic is amazing. It features a very flat response in the passband and steep slopes at the edges of the passband.

Here are some measurement points:

Frequency	Insertion Loss
2391.7 MHz	20.0 dB
2396.5 MHz	2.91 dB
2400.0 MHz	0.52 dB
2410.0 MHz	0.41 dB
2428.75 MHz	0.63 dB
2480.5 MHz	3.22 dB
2484.9 MHz	20.0 dB

The suppression of the first harmonic of 2.4 GHz at 4.8 GHz, is approx. 47dB.

I always appreciate feedback. Many thanks in advance.

Best regards

Matthias DD1US

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