

K&L 2400 MHz Highpassfilter

Matthias, DD1US, July 18th 2017

Hello,

visiting the Ham Radio Fair in Friedrichshafen I got hold of a Filter from K&L.
The type is K&L 11SH10-2400/U13000-N/N.

Here is how it looks like:



According to the nomenclature of K&L that means:

11 sections, suspended substrate stripline technology, high pass filter, 1dB cutoff frequency 2400 MHz, upper Frequency 13 GHz, N connectors.

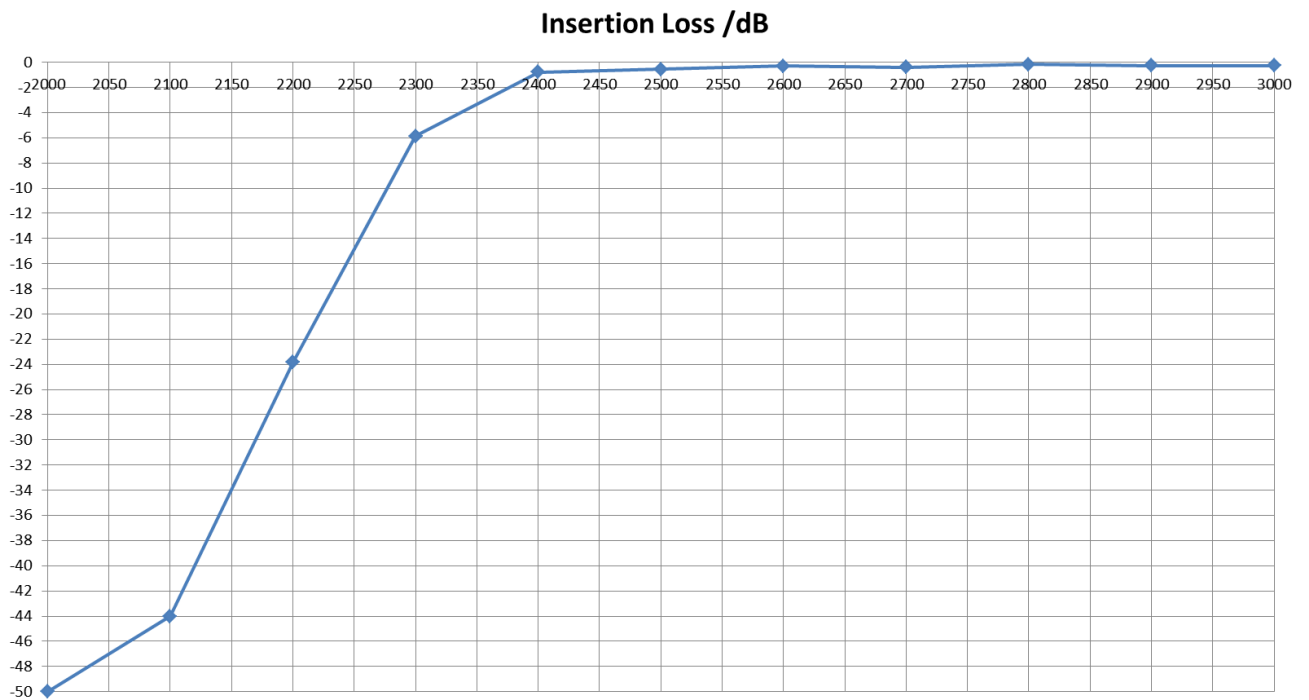
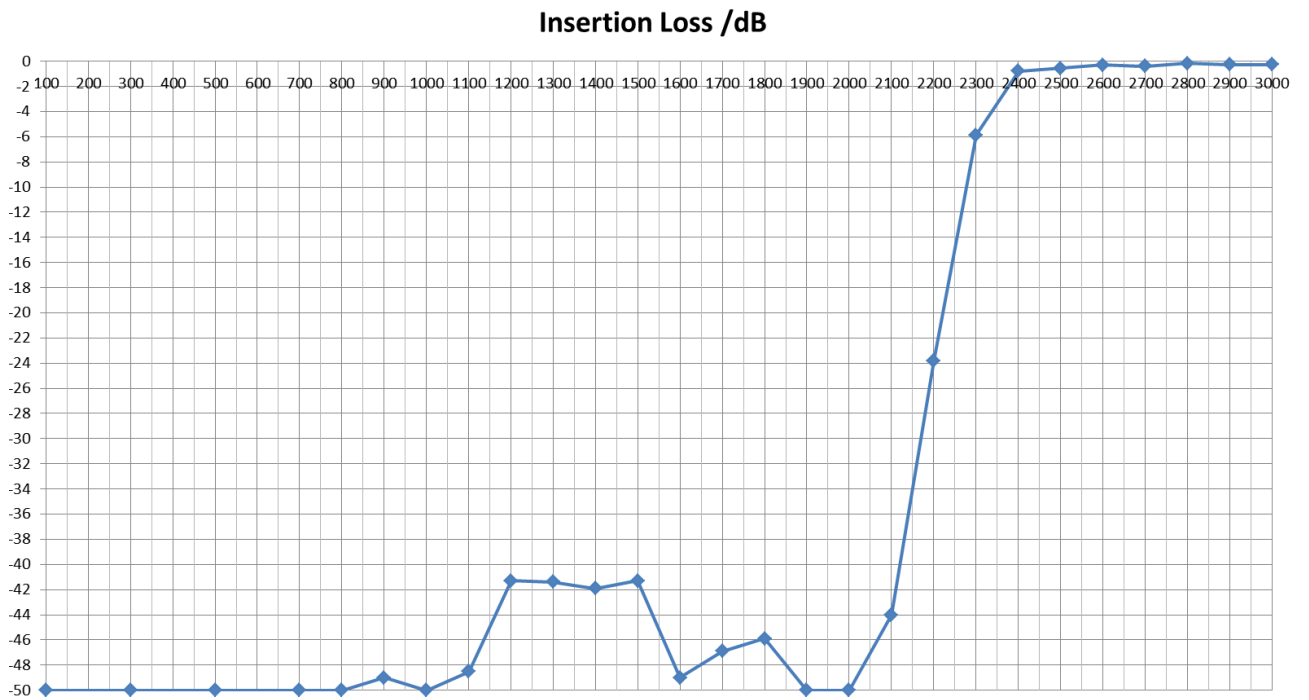
I measured the filter using a signal generator and power meter. The setup is limited to measure a maximum insertion loss of 50dB.

Here is a table of the measured data:

Frequency /MHz	Insertion Loss /dB
100	-50
300	-50
500	-50
700	-50
800	-50
900	-49
1000	-50
1100	-48,5
1200	-41,3
1300	-41,4
1400	-41,9
1500	-41,3
1600	-49
1700	-46,9
1800	-45,9
1900	-50
2000	-50
2100	-44,0
2200	-23,8
2300	-5,88
2400	-0,78
2500	-0,56
2600	-0,3
2700	-0,39
2800	-0,17
2900	-0,27
3000	-0,25

Apparently the rejection in the range between 1200 and 1500 MHz is reduced from more than 50 dB to only about 42dB.

Finally here is the transfer characteristic as a plot:



I always appreciate feedback. Many thanks in advance.

Best regards

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