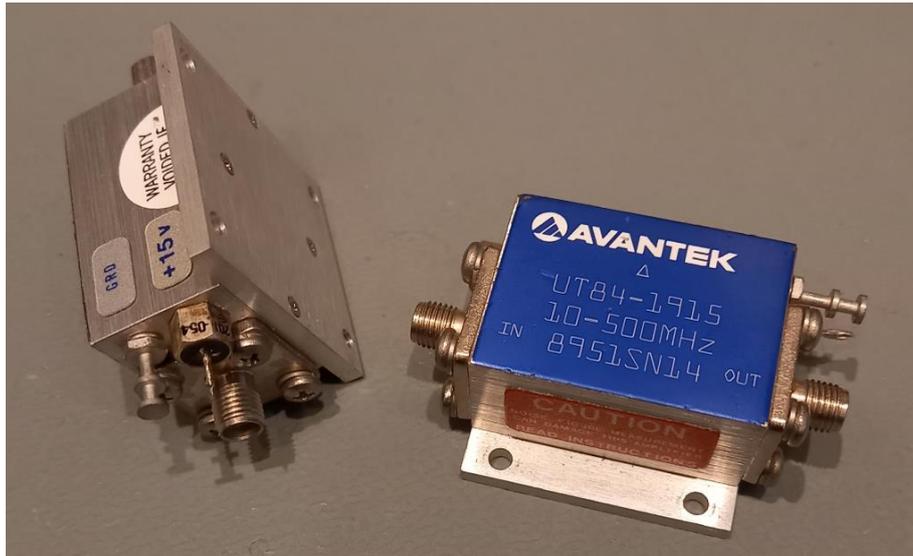


Wideband Amplifier AVANTEK UT84-1915 10-500MHz

Matthias, DD1US, April 3rd 2021 rev 1.0

Some weeks ago, a friend found some nice wideband amplifiers, which were apparently hardly used. I also bought two units. They are from AVANTEK; the part number is UT84-1915. On the label of the amplifiers a frequency range of 10-500MHz and a supply voltage of 15V are stated. They are housed in a professional aluminium encasing with SMA connectors for the RF input and RF output. Here are some pictures of my units:

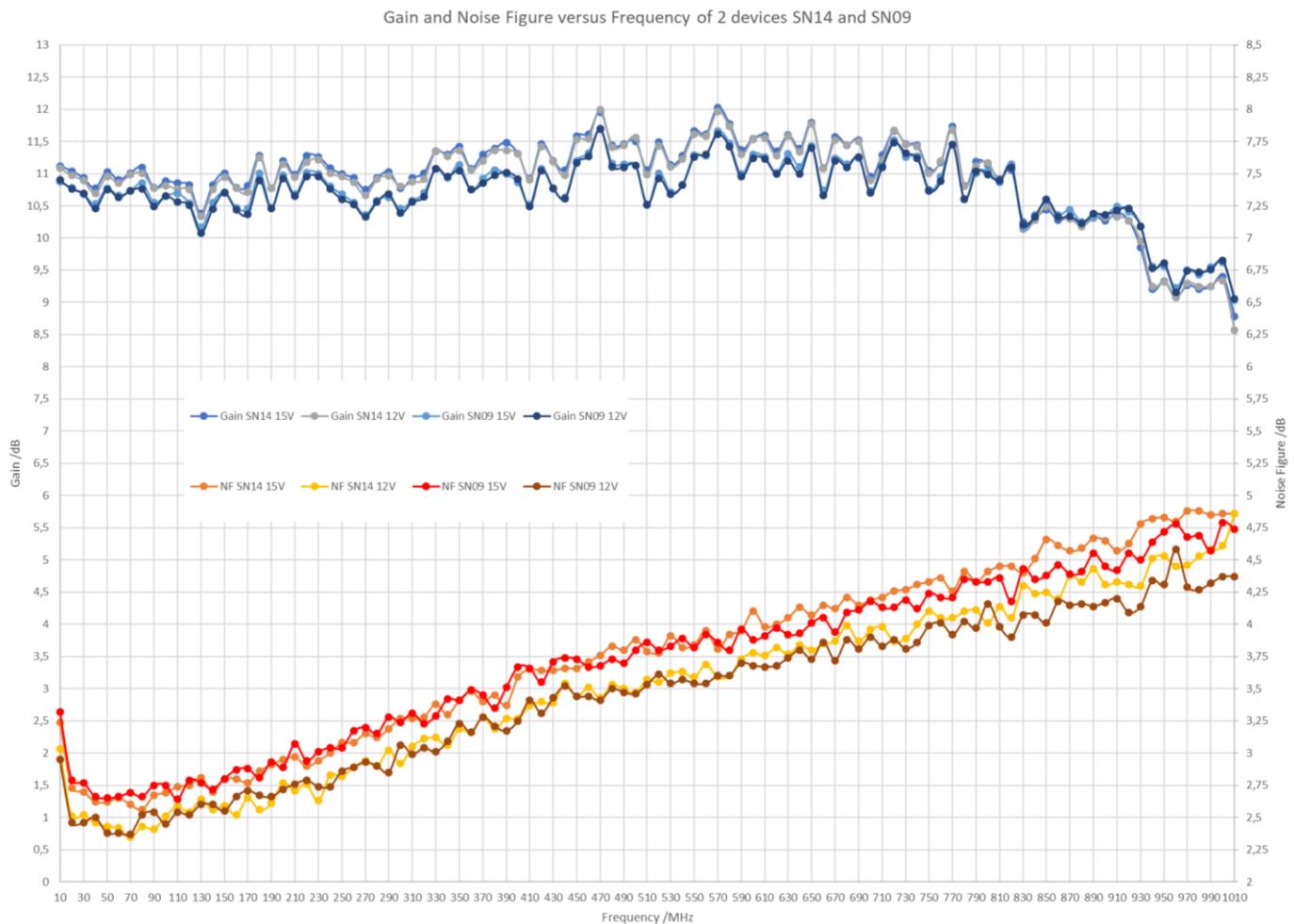




On the internet, I found no data at all for this type of amplifier. I assume based on the label that they were produced end of in 1989.

My friend measured the input 1dB compression point at 145 MHz to be +10dBm. The current consumption at a supply voltage of +15V is 60mA.

I conducted the subsequent measurements in a frequency range from 10 MHz up to 1010 MHz with a step size of 10 MHz. I measured gain and noise figure of both units at supply voltages of 12V and 15V.



As you can see both units have almost same results with respect gain and noise figure versus frequency. The gain is about +11dB and quite flat in the frequency range 10 to 800 MHz. The noise figure increases from about 3dB to 4.5dB over the same frequency range.

Reducing the supply voltage from 15V to 12V reduces the gain by about 0.2dB and improves the noise figure by about 0.25dB.

I am always grateful to get feedback and will be happy to answer questions. I am especially searching for a datasheet or other data on these devices.

Please send them to the Email address, which you will find below.

Best regards

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