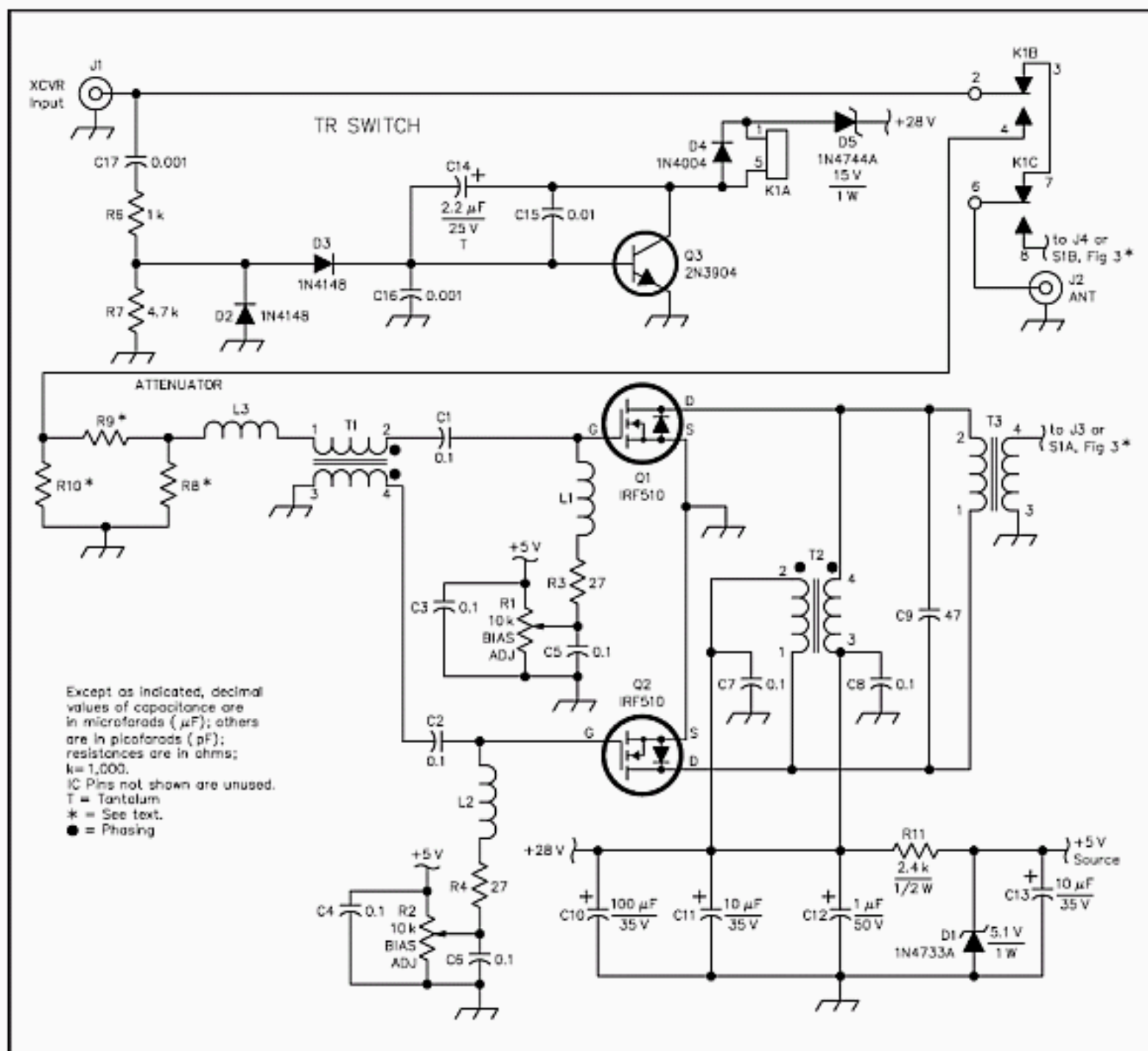


Revisiting the WA2EBY Broadband HF Amplifier

The WA2EBY amplifier first appeared in 1999 as an article in the [March](#) and April issue of QST. Part 1 was readily available on the internet but part 2 was a little more elusive. After much searching I finally located it in the ARRL archives and also at **wa2eby amplifier part 2** After studying the articles, I decided that I wanted to build one.



Electronic Parts

The circuit boards are available for \$19.50 through [Far Circuits](#) as:

BROADBAND HF AMP, USING IFR510's, 1W IN 40W OUT (2 BOARD SET) ***ARRL HB CHP 17.88***

Description: This amplifier was designed by WB2EBY. The amplifier covers 160 thru 10 meters, 1w input 40 watts out with 28vdc supply. The project consists of two PC boards, an amp and a harmonic filter board. The amp uses two IRF510 MOSFETS

The original article had a parts list that was mainly Mouser part numbers. This seemed like an easy to go so I logged in and made a [Mouser Project List](#) for the amplifier. This covered about 90% of the components. They didn't have toroids so I searched further.

Toroid Parts List

Diz at [Kits and Parts](#) has offered to sell a wa2eby toroid kit for \$7.00 plus postage. This is a very reasonable way to get the toroids. It includes the following items.

8 ea T50-2
4 ea T50-6
3 ea FT50-43
1ea BN-43-3312
2 ea TO-220 insulator kits (used for the IRF510's)

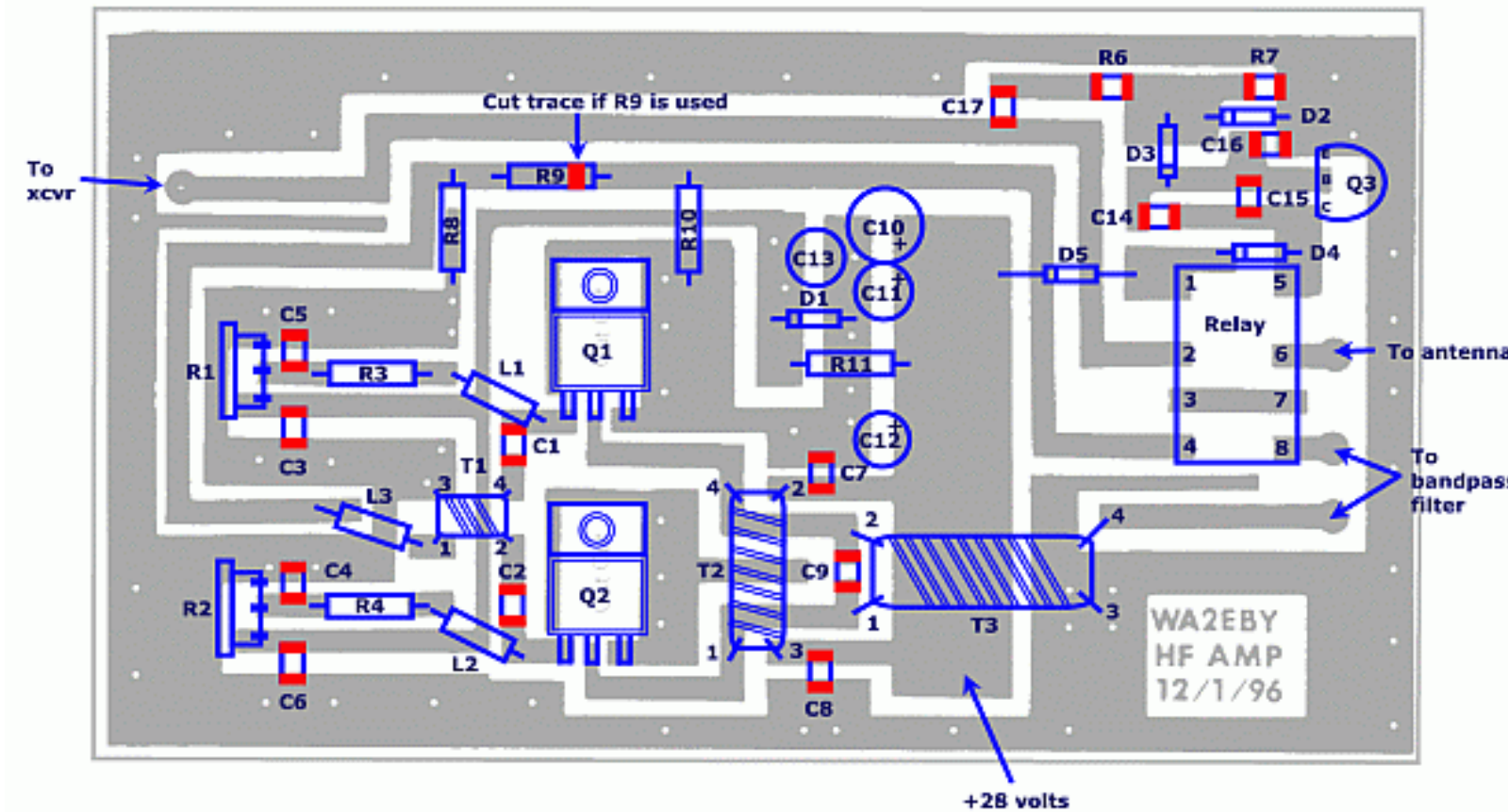
When ordering include the list of components until he has a link for the kit on his site.

Magnet Wire List

The #20 teflon wire can be purchased from many places on the internet. Do a Google search on teflon wire and check the results. One place where I found it was [West Florida Components](#) and the place I actually purchased mine from was [Bulk Wire teflon wire](#). They have a 25 foot roll for \$10.00. The advantage of purchasing from them is they also have the [#22 and #24 magnet wire](#) for about \$5.00 a roll each. If you can coordinate your build with a few friends, about \$20 will get all the wire needed for several builds.

You will need 20" of #20 teflon insulated wire, 8 feet of #24 magnet wire, 13 feet of #22 magnet wire.

The overall board layout looks like this:



Lets build it!

[Amplifier board build](#)

[Low Pass Filter Board build](#)

[Testing the filter board with a network analyzer](#)