

EFM Synthesizers

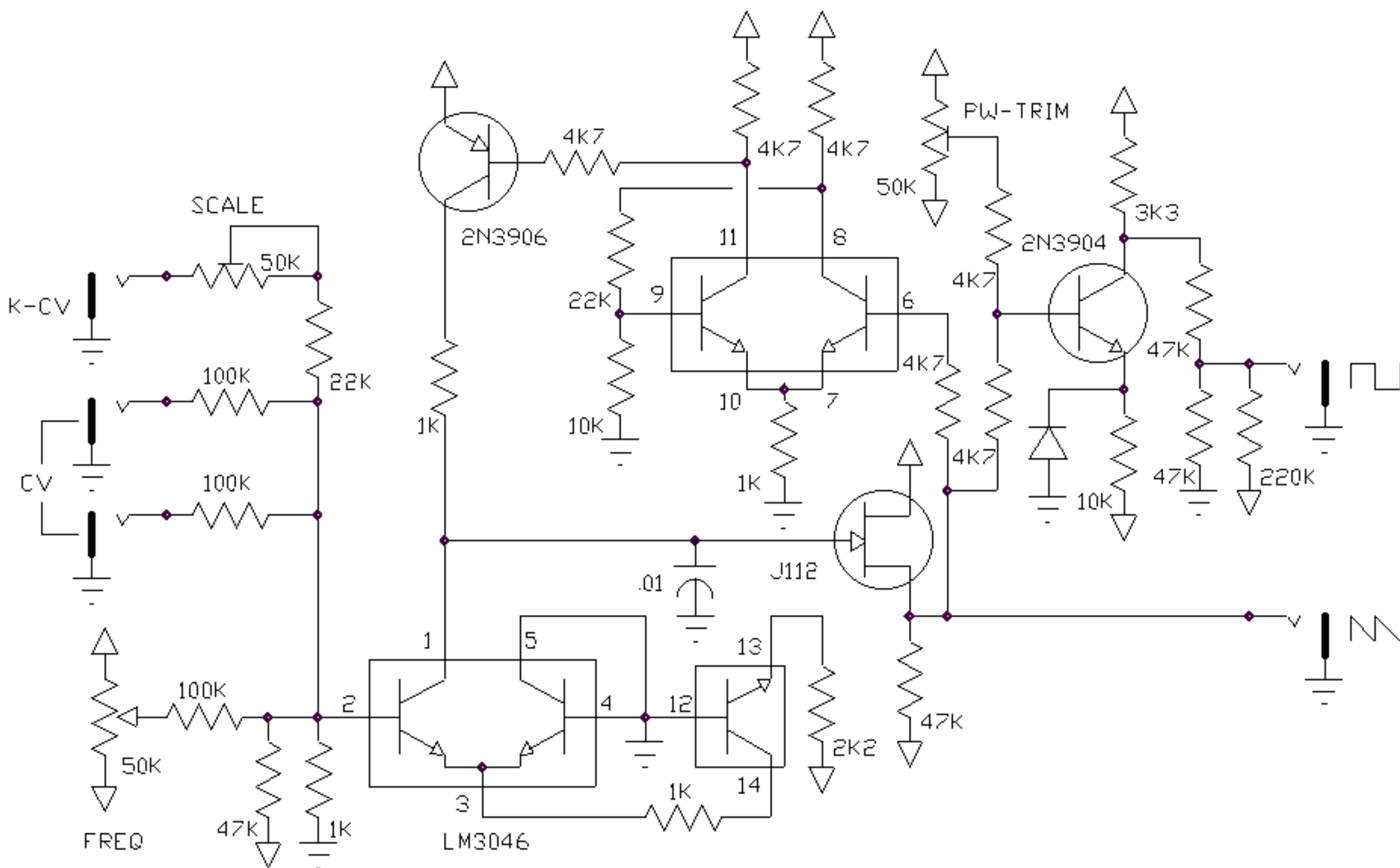
3046 VCO

The 3046 VCO is based on the popular ARP Axse oscillator. Last year I took the basic oscillator and stuffed it all in a CA3096. Then it became almost impossible to find 3096s. Oh well...that's unfortunately something we are getting more and more familiar with. We can still get 3046s from several suppliers. So....here is a 3046 version.

This tiny VCO is very stable and has nice looking wave forms. It has been radically modified from the original and can be modified even more by replacing the 12,13,14 transistor with a opamp current source. In this form it becomes possible to control this very linear vco core with a standard npn-pair exponential converter. The biggest advantage being that you can buy npn pairs (the 3046 has 2 pair), npn/pnp transistors are hard to find. For a even more stable VCO replace the 1K resistor on pin-2 of the 3046 with a 1K tempo.

The DIY PC board layout is untested.

3046 VCO - Schematic



3046 VCO - PC Board

