

A Solid State Vibrator

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I thought readers might be interested in this circuit. I discovered it "in the flesh" when I acquired a Canadian W.S. 19 power supply. A previous owner had installed a solid state unit to replace the original mechanical device. I have been using the psu for several years, and I'm surprised by its simplicity and effectiveness. It uses just two 2N3055 transistors and four wire-wound ceramic resistors (3 watts apiece). It forms a multivibrator, which seems to oscillate at just the right frequency. As it has no capacitors, I am at a bit of a loss to understand how it works, but I guess it's the back-emf from the transformer which turns the transistors off after each half-cycle.

Anyway, it seems to work a treat. The previous owner had mounted the transistors (insulated) on a small heat sink, which he lodged in a convenient void under the chassis. It is a straight substitute for the mechanical vibrator, and he had wired it to the underside of the vibrator socket. One thing I like about it is that it is, of course, very easy to re-instate the original vibrator, which in fact I have done recently.

