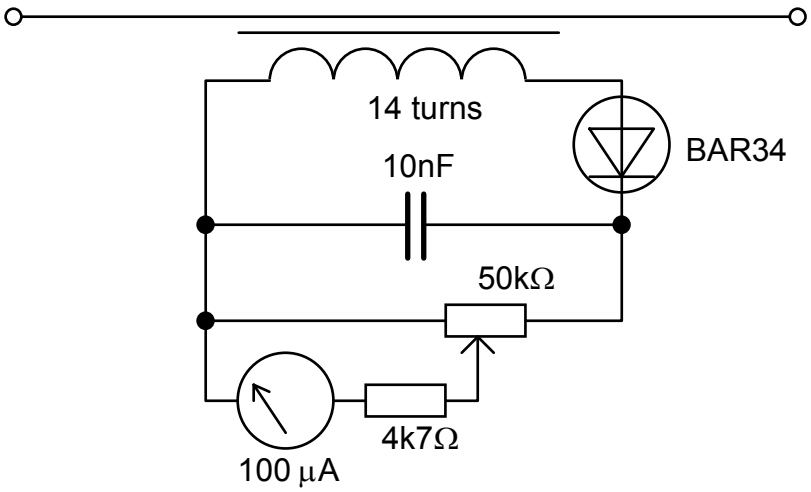
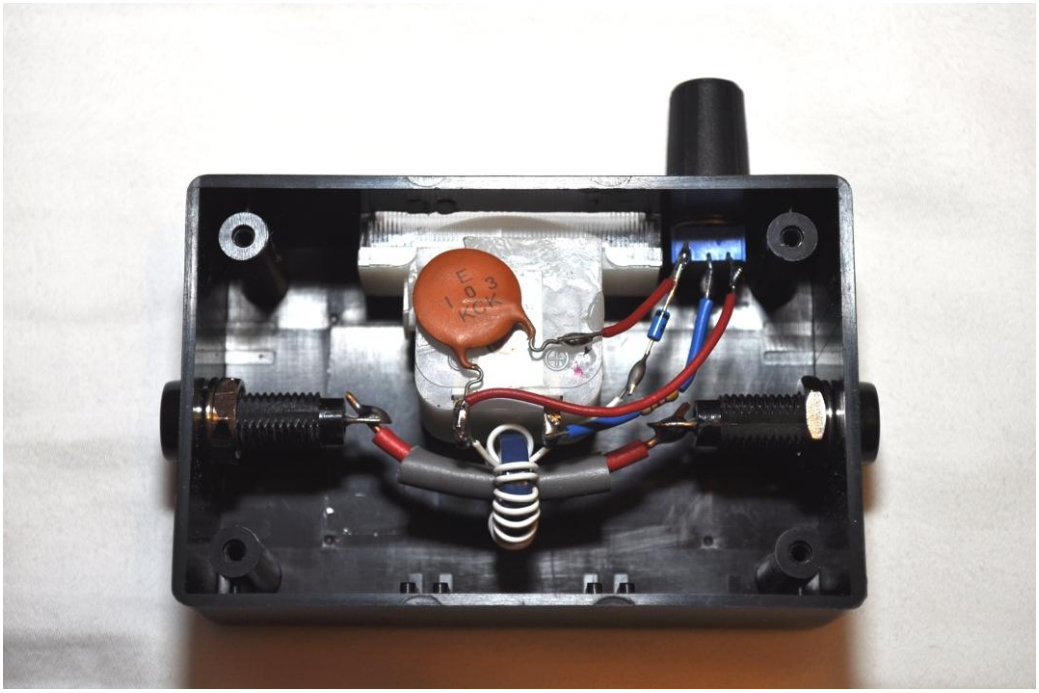
RF ammeter.

This circuit uses was designed to provide relative RF current measurements.

Circuit diagram.



The transformer was made from a 'salvaged' toroid which had been tested to ensure that it did not have too many losses at the required frequency of operation (80m and 160m).
The primary is a single conductor passing through the centre of the toroid. The secondary consists of 14 turns of insulated wire.
The RF current passing through this conductor creates an alternating magnetic field which induces an alternating voltage in the secondary of the transformer.
A BAR34 Schottley diode was used to rectify the alternating voltage from the secondary coil. (Normal silicon diodes e.g. 1N4148 may also work successfully).
The 50kΩ variable resistor acts as a sensitivity control.




0 2 4 6 8 10