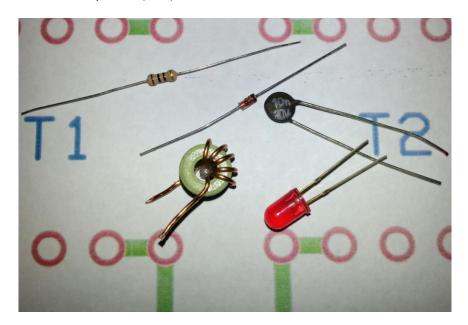
Simple RF Current Meter for ATU

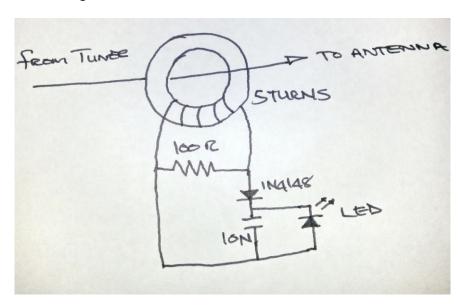
By ZS6KMD Kevin Mc Donald

This month we present a project that is a simple add on for that "home brew" ATU you built a while back. A simple and effective through-line RF current sensor using a minimum of components.

What you will need is a small ferrite bead, about 10cm of thin enamelled wire, a signal diode (1N4148), a ceramic disc capacitor (10N), an LED and a 100 ohm resistor.



Wind five turns of the wire more or less evenly spaced onto the ferrite bead, solder the 100 ohm resistor across the two ends close to the ferrite bead (see diagram and image). Solder the diode to one side of the resistor taking care of the annotation. Solder the LED across the end of the diode and the unused end of the coil again taking care of the annotation of the LED. Solder the 10N ceramic capacitor between the legs of the LED.



To install this in your ATU, feed the antenna wire from the tuning capacitor to the antenna socket through the middle of the ferrite bead. Glue it in place close to the socket with some hot melt glue.

Tune up your antenna and the LED will glow brightest when the SWR is lowest or current radiated is highest.



There you have it, a simple project but a very useful one for use out in the field where an SWR meter may not be available or practical.

Have fun 73 de ZS6KMD