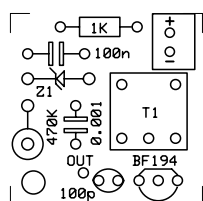
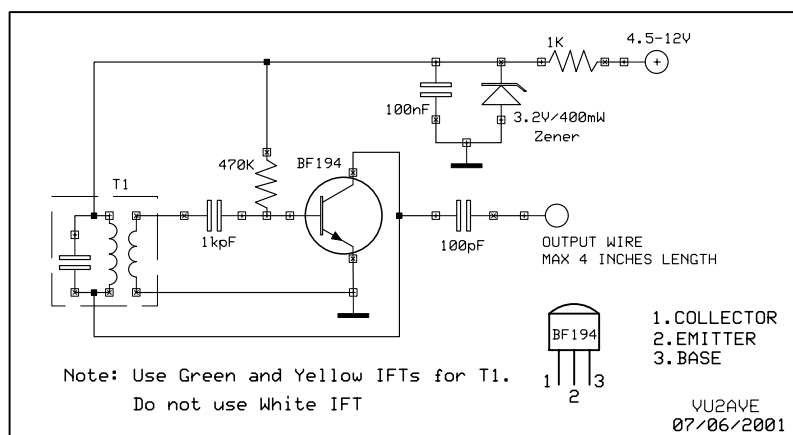
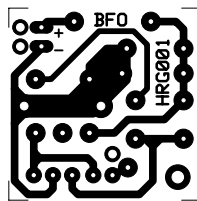


## 455KHz Beat Frequency Oscillator



Component Side View



Print side view

Suggested PCB layout (can be wired on a general purpose pcb, but follow the suggested component placement and wiring)

It is a good idea for Short Wave Listeners (SWL) to listen HAM conversation. It will enable them to understand more about how HAMs work on radio. You can use a BC (Broadcast Commercial) Receiver to listen 40M band (7MHz) amateur radio activities. This Band can be easily tuned in a BC receiver. A Beat Frequency Oscillator (BFO) is required for listening to Morse code and SSB transmissions through a BC Receiver. A simple circuit is given above, which can be assembled at a cost of Rs. 12/- approximately. A radio technician or your local ham could help you out in assembling the BFO. Place the BFO inside the Receiver to get optimum results. Fix the circuit board in the receiver and put the output 4" wire close to the IF Transformer and fix it there with some glue or insulation tape. Remember don't connect the output wire anywhere in the receiver. Either you can use the receiver power or an external battery with a voltage specified in the circuit. Put a switch on positive line to the BFO so that you can switch it off to listen to an AM mode station. Tune to a CW station on your receiver; Switch on the BFO; Adjust the BFO's IFT core for a good audio beat-note in the Receiver. If the BFO is not oscillating, then reverse the base-winding connections.