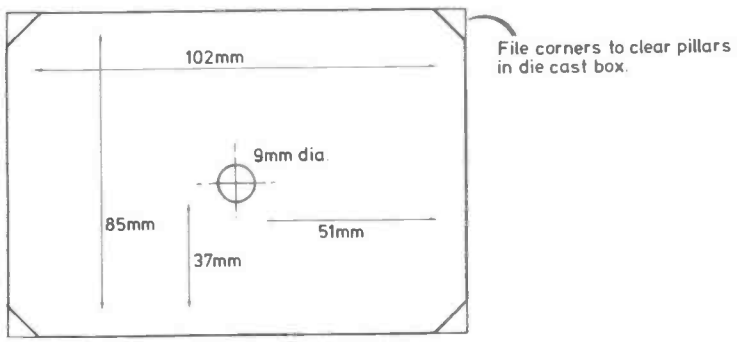


FIG. 2a. Drilling details and sizes of p.c.b.

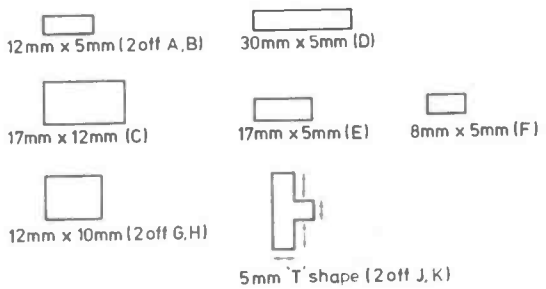


FIG. 2b. Sizes and shapes off pads.

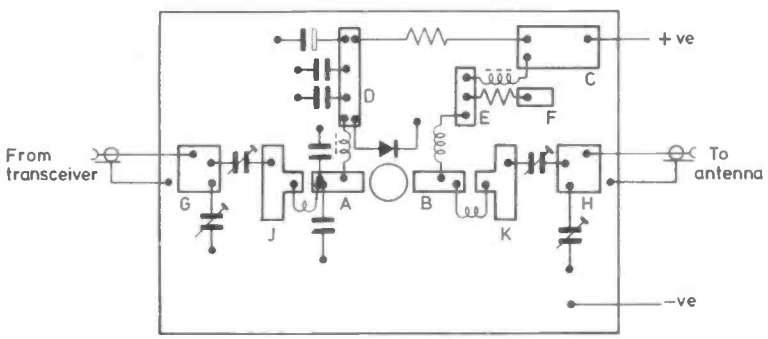


FIG. 2c. Positions of pads - fit alphabetical order - from top.

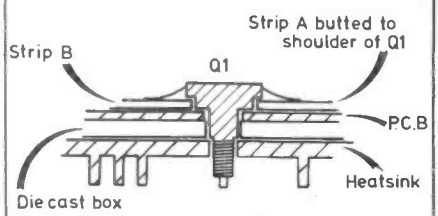
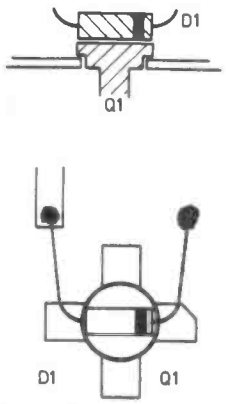


Illustration of mounting method of Q1 and strips A and B.

FIG. 3a. Q1 fitting.



Fit D1 using full length of leads then bend down into contact with top of Q1.

FIG. 3b. Details of Q1/D1 fitting.

discarded completely and L3 connected directly to the foil ground. Of the other strips and pads, note that strips A and B are in fact also 'coils', being part of the inductance requirements of the circuit and should be as accurately cut as possible. It is perhaps best to cut them oversize and then to file them to the correct size with them held inthe vice. The transistor determines the placing of these strips A and B, as they should just butt onto the transistor as in **Fig. 3.** Offer up the strips to the transistor, which has been placed in position but not fo course soldered, mark the position in pencil, remove the transistor and then and only then, commit the strips with superglue. From there it will be found best to fix the pads in alphabetical order as per **Fig 2c.** Those readers experienced in producing PCB by etching will have no difficulty in adapting the above details to their requirements.

PLEASE OBSERVE RECOMMENDATIONS regarding use of SUPERGLUE, especially if there are young children in the household.

The other two coils should be wound over suitable drill shanks and the leads on these and the ferrite beaded coils kept to a maximum length of 5mm. All other component leads should be kept as short as possible. The power transistor should be fitted last. Note that any device containing Beryllium Oxide should be treated with care and in the case of breakage, follow the suppliers or manufacturers instructions for returnand additionally make sure you wash your hands thoroughly. First fit the heatsink to the die-cast box using countersunk bolts FROM THE INSIDE so as to allow the PCB to sit flat on the base of the box over the whole of it's area. Place the PCB in position, offer up the transistor into its mounting position and tighten the nut finger tight only. Check and trim if necessary the base and collector leads to approximately 6mm from the shoulder of the transistor. The writer likes to continue the manufacturers' identification by cutting the collector strip at around 45°. Bolt the PCB through the heatsink and place the transistor in its final position with the nut finger tight again. Tighten the nut one half turn further only and then solder. Note that in the event of the PCB needing worked upon the reverse procedure should be followed. A smear of thermal compound, not too thick is advantageous in helping the heatsink perform well.

One of the side benefits of the island pad method of homebrew for the newcomer or beginner is that the circuit diagram and the circuit more nearly corresponds and is not in-