

Fig 28. Layout of vhf power amplifier (the mounting hole for TR1 breaks the central conductor into two sections)

added base to emitter will often improve stability. Two capacitors should be used, one to each emitter lead, keeping lead lengths to an absolute minimum.

Multi-stage amplifiers should not present any particular problems. Interstage matching should be designed to match from the collector impedance of one stage to the base impedance of the following stage. It is often convenient to use two matching networks with a  $50\Omega$  intermediate impedance level.

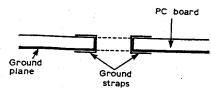


Fig 29. Earthing straps for the emitters

This enables the individual stages to be tested separately. Multi-stage amplifiers should be constructed in a single line to eliminate mutual coupling problems.

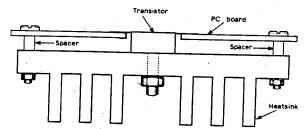


Fig 30. Mounting arrangements for pcb, transistor and heat

Alignment of reduced drive and current. The inpu adjusted for best in tometer) and the be adjusted for m have been initially stable, the drive ar alignment procedu ing levels. Stability coupled receiver f modulations. In ad the drive or supply supply current and caded Class C stag characteristic as the confused with inst

Higher powers

Higher power leve most obvious meth limit from a single

Transistors may precautions are ta devices should be The devices should mally on the same

Paralleling shou collector but shou implies using sepa for the individual common matching ments. Common-rand collector-to-codevices paralleled

Push-pull opera becomes complica the equivalent par to use with wideba operation is popu particularly 70MH

Hybrid couplers amplifier stages in are identical in terr Hybrid couplers halated from its coun result in continued Solid-state vhf brothese lines. There suitable—hybrid rand the 3dB quad couplers may be coaxial cable.

Bias units for lines For ssb operation. AB is required. 50-100mA. Lowimpedance bias un Figs 31 and 32. T power levels only. must be greater t amplifier stage.