

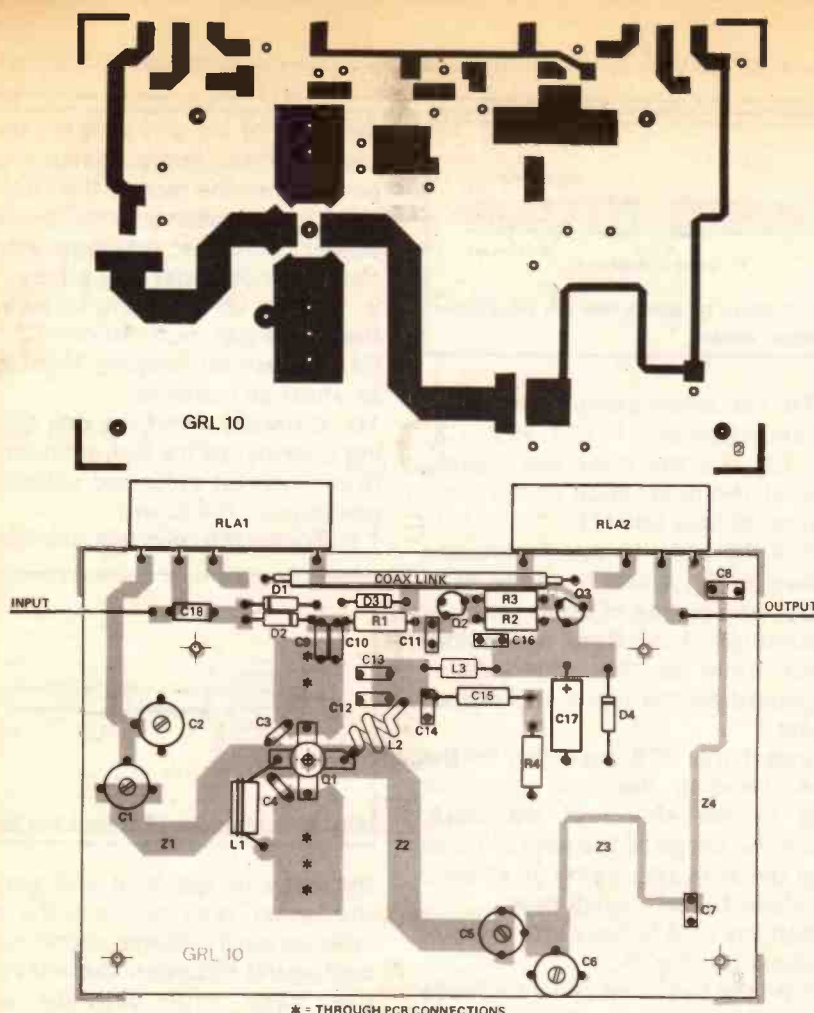


Fig. 6 Top: PCB foil pattern. Bottom: the component overlay.

Specification

Power gain(2 W1 /P)	7.2 dB
Output power (13.8 V) 2 W input	10 W(min)
Saturated power output	14 W
Supply voltage	10-16 V(13.8 V nom)
Input/Output impedance	50 R
Bandwidth	430-440 MHz
Supply current	2 amps at 12 W
Dimensions	119 x 94 x 34 mm

In Use

The input power should not be greater than 2.5 watts and the output power must not be allowed to be above 14 watts for more than a short period.

The RF switching operates from an input level of about 0.5 W upwards so if your transceiver has a low power position then you may find this will not switch the amplifier.

COMPONENTS LISTING

RESISTORS

R1, 2	2k2
R3	4k7
R4	10R

all 0.25 W 5 % carbon film.

CAPACITORS

C1, 2, 5, 6	2-22 p foil trimmer
C3, 4	15 p
C7	10 p
C8	4 p7
C9, 12	470 p
C10	1 n0
C11, 14, 16	100 n mono
C13	4 n7
C15	100 n polycarbonate
C17	22 u 16 V electro. axial
C18	1 p0

INDUCTORS

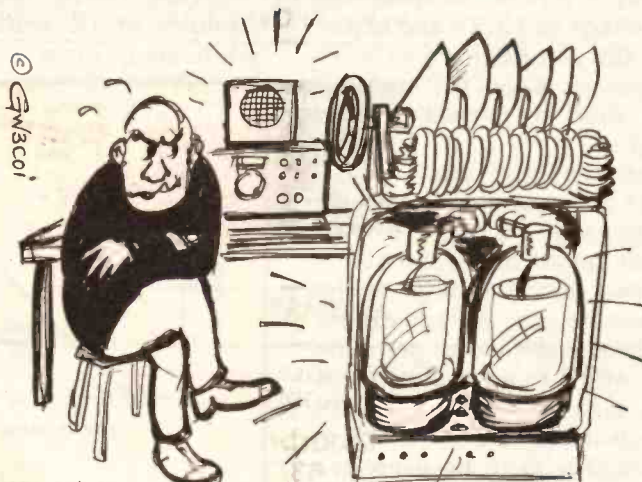
L1	2 turns, 33 swg (0.25 mm) en. copper on FX1242.
L2	2 turns, 5 mm dia, 18 swg, (1.2 mm) tinned copper, spaced at 1 wire dia.
L3	18 swg (1.2 mm) tinned copper wire through FX1242.

SEMICONDUCTORS

Q1	PT8811
Q2	MPSA13
Q3	BC640
D1, 2	0 A91 / 0 A90 / 0 A47
D3	1 N4148
D4	1 N5404

MISCELLANEOUS

2 OM1 relays (RL1, 2); 2 BNC sockets; 2 FX1242 ferrite beads; 4 6 BA 1/2" screws; 4 6 BA nuts; 16 6 BA plain washers; 1" x 4 1/2" brass strip; a grommet; 10 cm LR95; 15 cm 18 swg tinned copper wire; 10 cm 33 swg en. copper wire; 1 m of black 16 / 0.2 mm, 1 m or red 16 / 0.2 mm; an in line fuse holder; and a 1 1/4" 2 A QA fuse; a die cast box and a PCB.



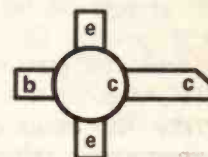
"... YOU WANT UP 1/2 AN S POINT WITH THE LINEAR"



MPSA13



BC640



PT8811
(FROM TOP)

Fig. 7 Base connections of the transistors.