



Figure 5. The printed circuit boards for the amplifier and the protection circuitry are delivered as a single board and must be sawn apart.

ings, we hasten to point out that we are talking about a monaural version here, so for a stereo amplifier you will have to build two of these supplies!
The 'mains switch-on delay' shown inside the dotted box in Figure 3 is not mandatory, but it is highly recommended — especially if

a toroidal transformer is used. This circuit does exactly what its name suggests, and it ensures that excessive current surges do not occur when the mains voltage is switched on. Such circuits have frequently been described in

COMPONENTS LIST Amplifier board

Resistors:

- R1 = 1M Ω
- R2 = 47k Ω
- R3,R22 = 470 Ω
- R4,R5 = 1M Ω
- R6,R7,R11,R12 = 47 Ω
- R8,R9,R13,R14 = 1k Ω
- R10,R15 = 330 Ω
- R16,R19,R30,R31 = 22k Ω
- R17,R20,R28 = 270 Ω
- R18,R21 = 8k Ω
- R23 = 12k Ω
- R24,R26 = 10k Ω
- R25,R27 = 33 Ω
- R29 = 120 Ω
- R32,R33 = 220 Ω
- R34,R35 = 0 Ω 22 / 5W low-inductance, e.g., MPC71 series
- R36 = 10 Ω / 1W *
- R37 = 1 Ω / 5W
- P1 = 1k Ω preset H

Capacitors:

- C1 = 2 μ F2, MKT (Siemens), lead pitch 5mm or 7.5mm
- C2,C4,C5 = 1nF
- C3 = 180nF
- C6,C7 = 100 μ F 25V radial
- C8,C9 = 220 μ F 25V radial
- C10,C12,C14 = 100nF
- C11 = 10nF *
- C13,C15 = 1000 μ F 63V radial

Inductors:

- L1 = 9 turns 1.5 mm dia. ECW around R37, inside diameter 8 mm

Semiconductors:

- D1,D2 = rectangular face, red
- D3,D4 = zener diode 3V9 / 0.5W
- T1,T2,T6 = BC546B
- T3,T4,T5 = BC556B
- T7 = BC560C
- T8 = MJE350
- T9 = BC550C
- T10 = MJE340
- T11 = 2SK537 (Toshiba)
- T12 = 2SK1530 (Toshiba)
- T13 = 2SJ201 (Toshiba)

Miscellaneous:

- 5 off M3 spade terminals, PCB mount
- 3 off ceramic (or mica) isolating washer for voor T8/T10/T11
- 2 off mica isolating washer for

; the most recent one can be found in the Summer Circuits issue of 1997, and we have reproduced its