

SECTION 8

6-VOLT POWER SUPPLIER AND FLASHER PS1/8

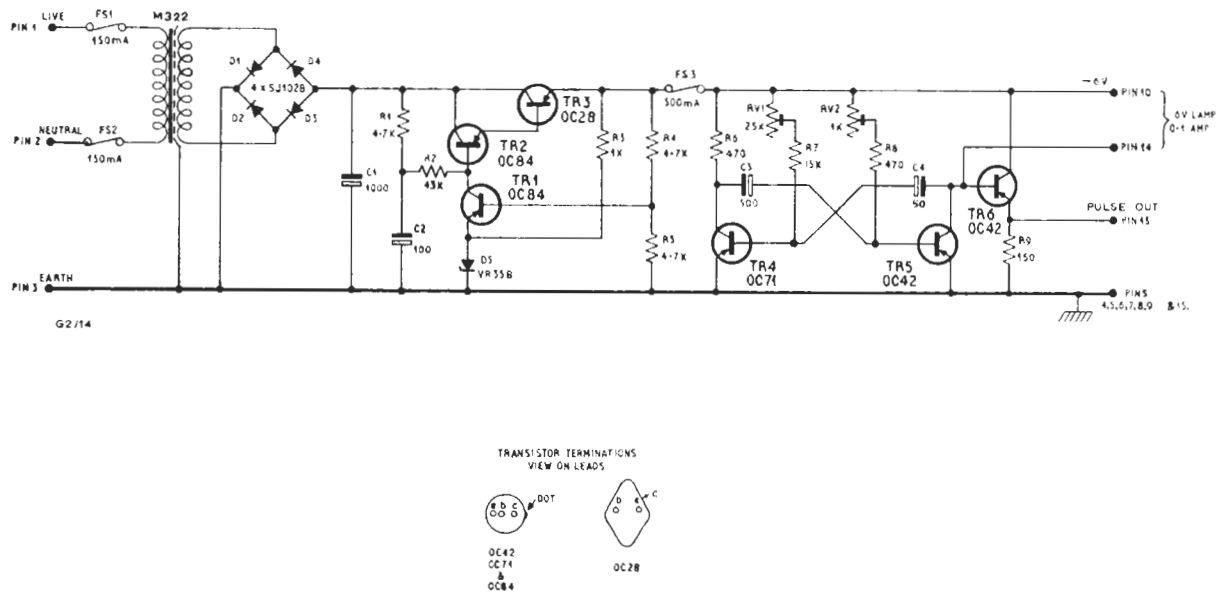


Fig. 8.1 Circuit of the PS1/8

**Introduction**

This supplier accepts a 240-volt mains input and provides a stabilised output at -6 volts and, when a suitable load is connected, an interrupted d.c. output; see EP1/502, Instruction V.15.

The supplier is constructed on a chassis type CH1/12B with index-peg positions 1 and 19.

**Circuit Description**

The unit consists of a conventional stabilised power-supply circuit and a free-running multivibrator which provides the interrupted output. A circuit of the unit is shown in Fig. 8.1.

The power-supply section comprises a mains transformer with an output of 12 volts, a bridge-rectifier circuit and a series-stabiliser circuit formed by transistors TR1, TR2, TR3 and zener diode D5. The potential of the output is determined by the relative values of R4 and R5.

The multivibrator is formed by collector-coupled pair TR4 and TR5; the collector load of TR5 is formed by the externally-connected load. A second output from the multivibrator is taken to an emitter-follower output stage TR6. The mark and space periods of the output are set by means of RV1 and RV2 respectively.