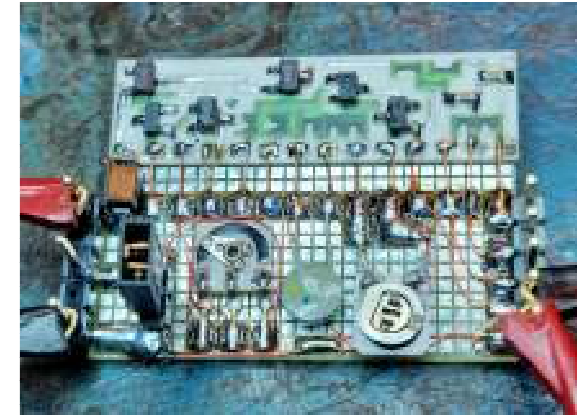
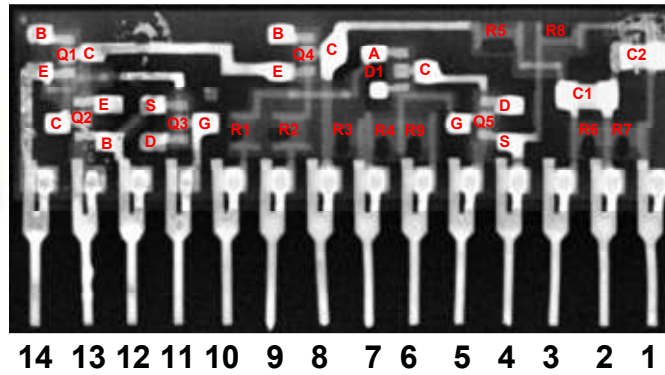
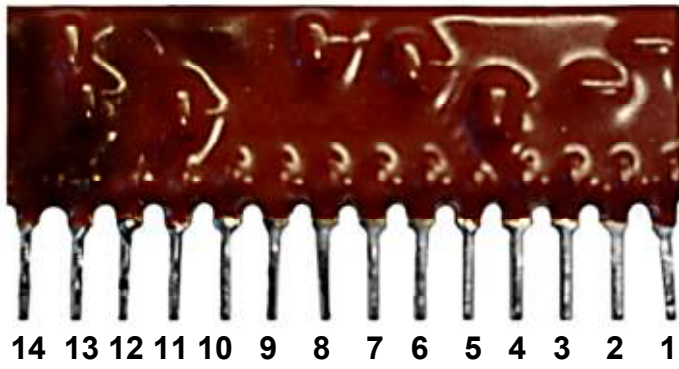
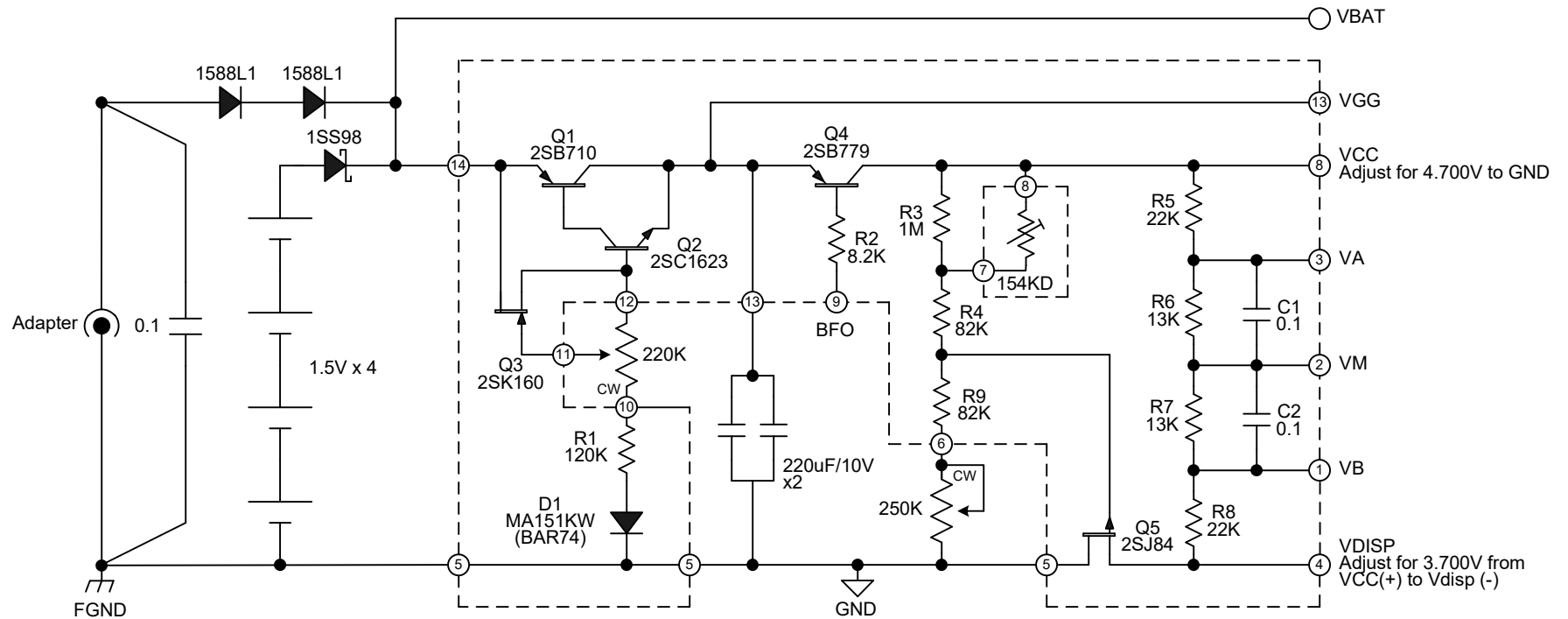
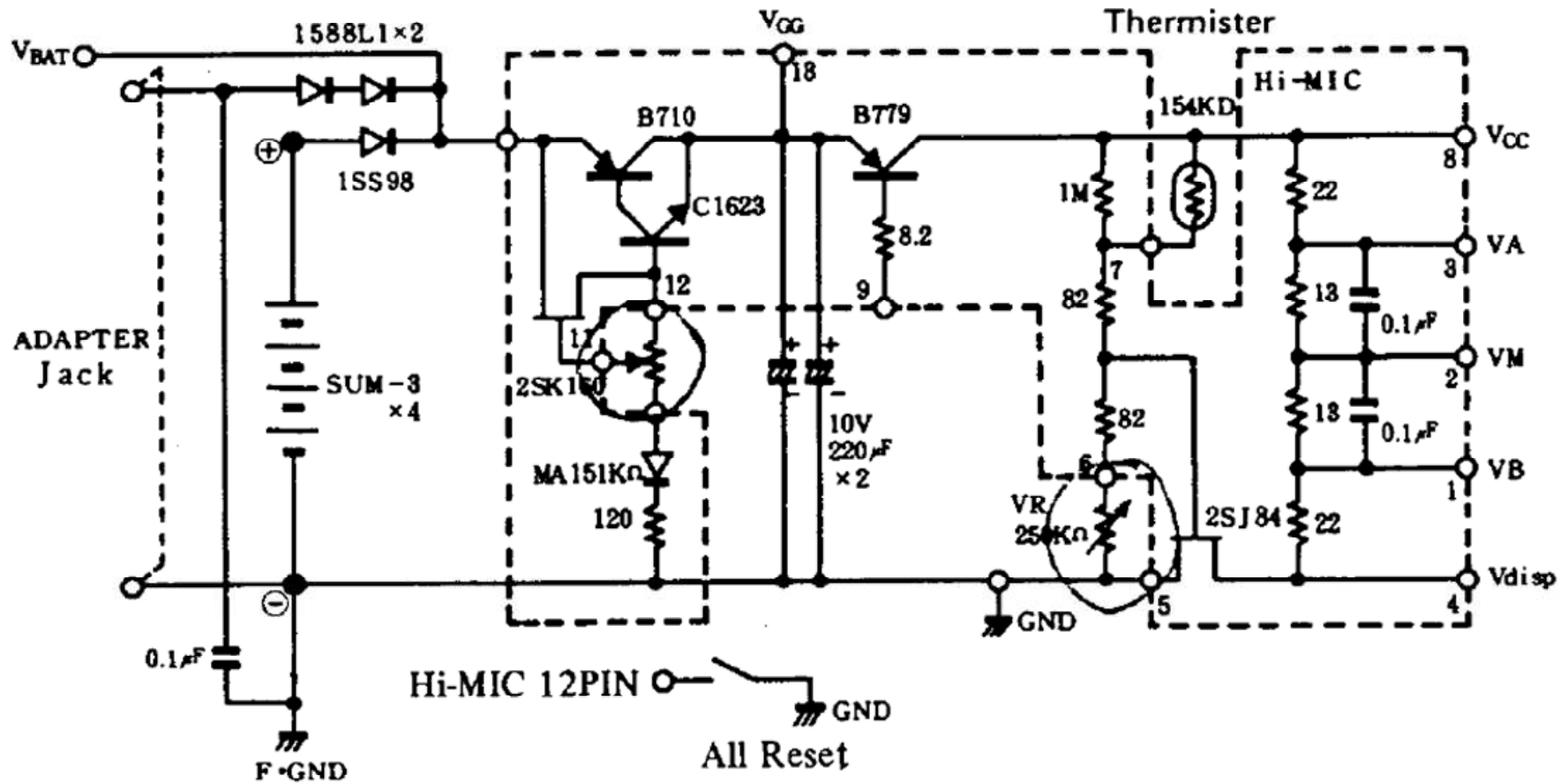


TRS-80 PC-2 (Sharp PC-1500) Regulator module



P19 of PC2 Service Manual



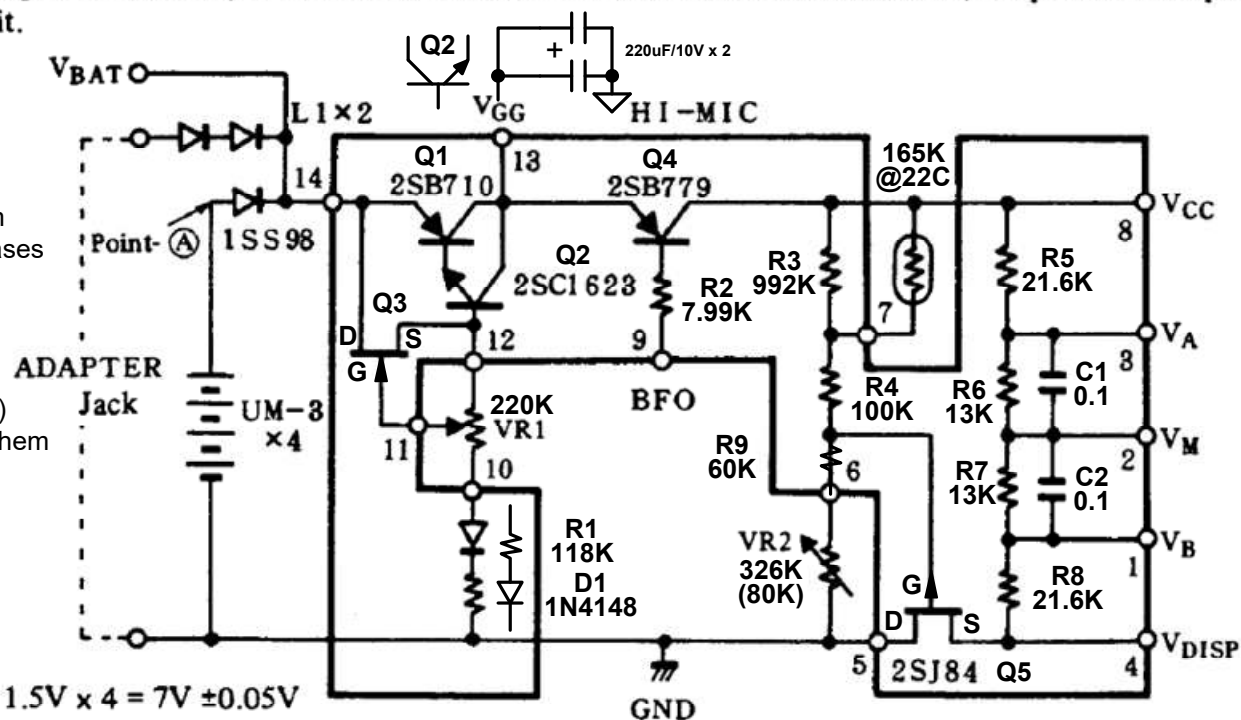
P16 of PC2 Service Manual

6) Power supply circuit

The power supply is incorporated in a single resin molded IC that consists of the stabilizer circuit, temperature compensation circuit, and bleeder circuit.

Notes:

1. Q2 E and Collector swapped
2. Q3 is an N-JFET
3. Q5 is a P-JFET as shown
4. V_{disp} is measured to be 3.70V from $V_{CC}(+)$ to $V_{disp}(-)$. Voltage decreases with increasing temperature.
5. R1 and D1 are swapped
6. Dropout voltage is about 1V
7. I_q V_{CC} off is about 14uA (No load)
 I_q V_{CC} on is about 500uA (No load)
8. R9 was not shown in the original schem



Supply voltage: $1.5V \times 4 = 7V \pm 0.05V$
VGG: $4.7V$
VCC: $4.7V \pm 0.02V$
V DISP: $3.7V \pm 0.01V$
(In the case of $25^{\circ}C$)

Adjusting method

1. Apply $7.0 \pm 0.2\text{V DC}$. at point- (A).
2. Turn VR1 to read at VCC $4.7 \pm 0.02\text{ V DC}$ from GND.
3. Turn VR2 to read at VDISP $3.7 \pm 0.01\text{V DC}$ from GND.
4. Adjusting condition is 25°C .