







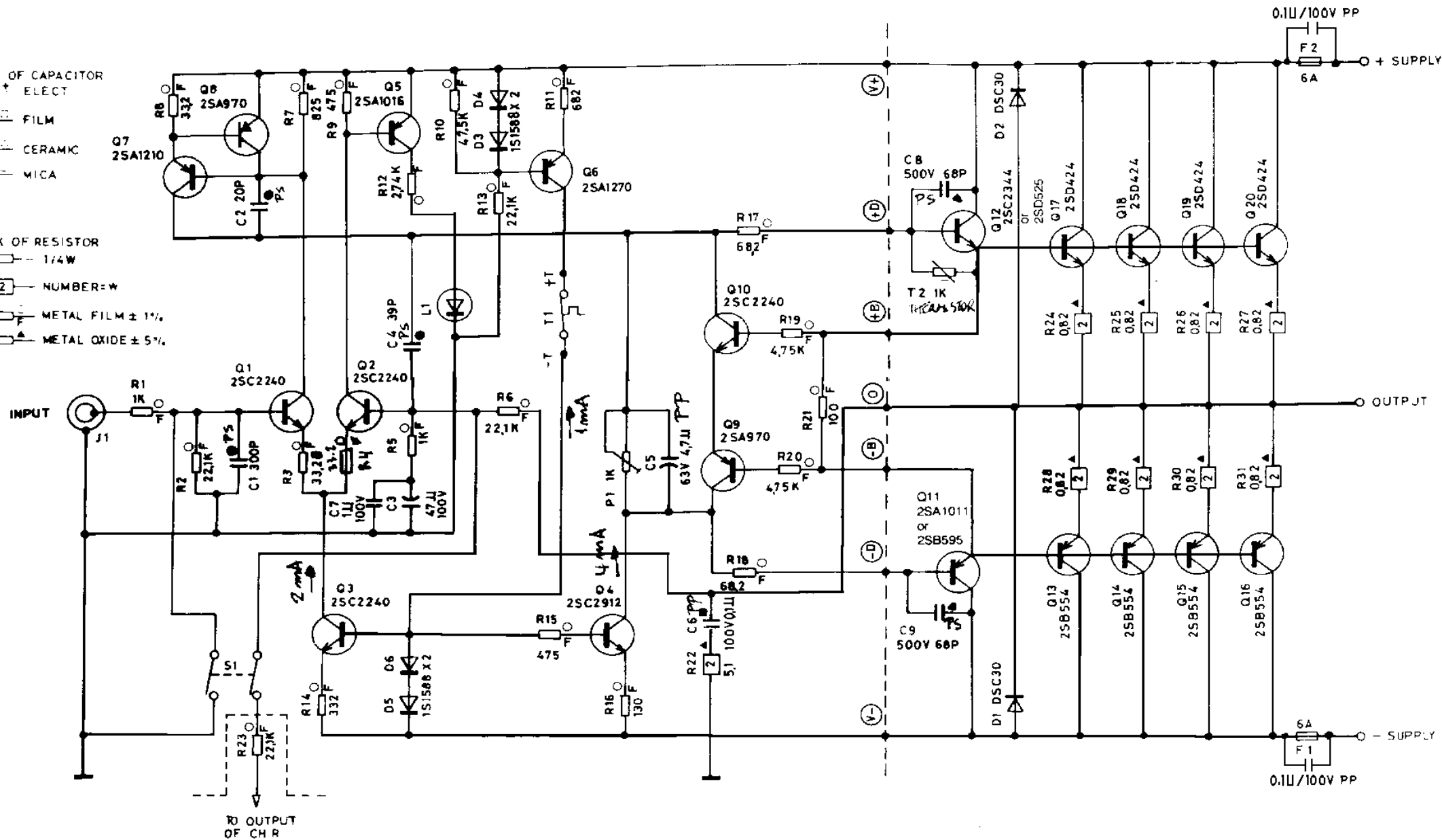


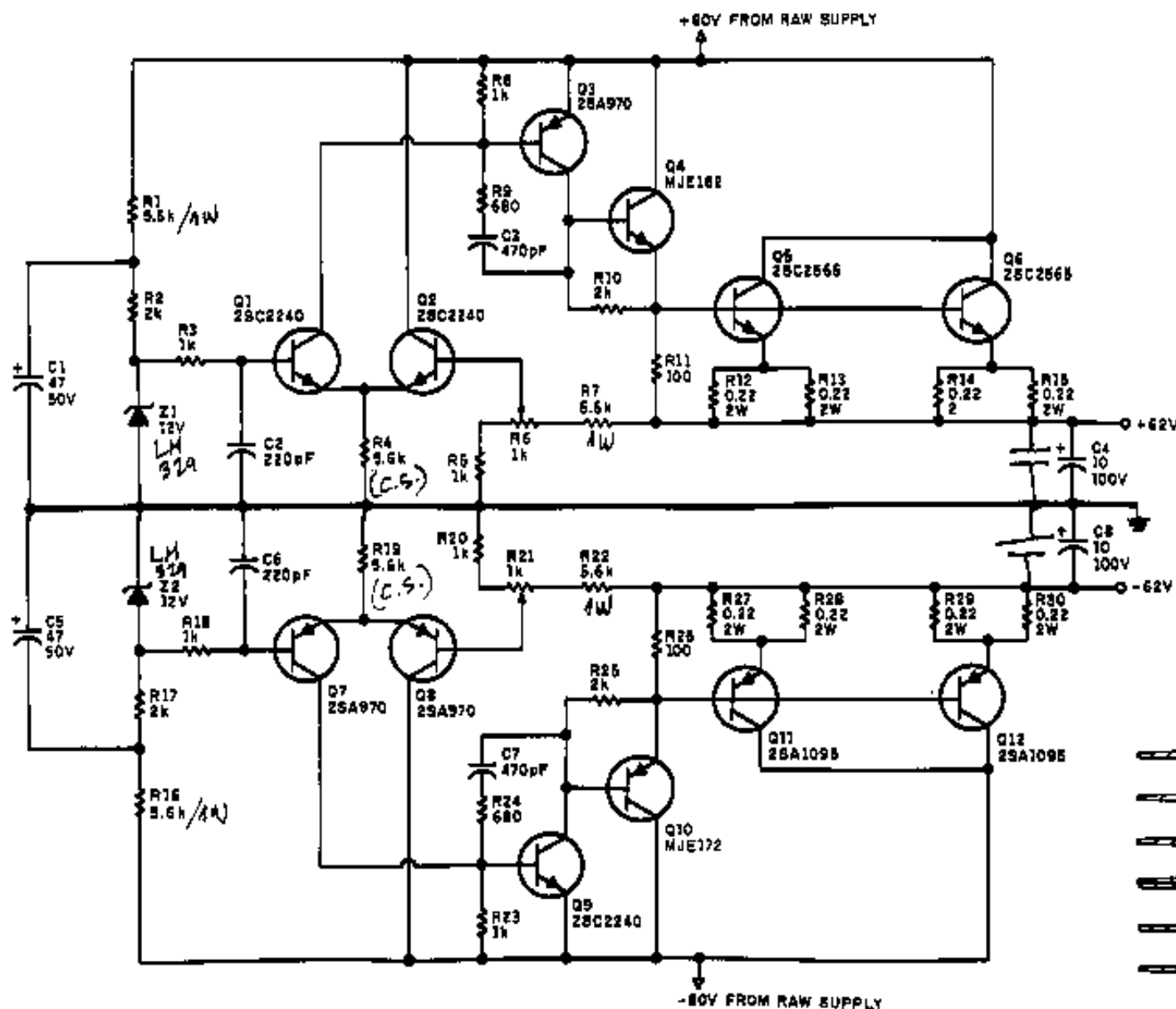
MARK OF CAPACITOR  
 ELECT

 FILM  
 CERAMIC  
 MICA

MARK OF RESISTOR

 1/4W  
 NUMBER=W  
 METAL FILM  $\pm 1\%$   
 METAL OXIDE  $\pm 5\%$





## PARTS LIST

### Resistors:

R1, R4, R7, R16, R19, R22	5.6k
R2, R10, R17, R25	2k
R3, R5, R8, R18, R20, R23	1k
R9, R24	680
R11, R26	1000
R12-R15, R27-R30	0.220/2W*
*can substitute 0.10/3W wirewound for pairs of 0.22a resistors	

### Zener diodes:

Z1, Z2	12V, 0.5W
--------	-----------

### Capacitors:

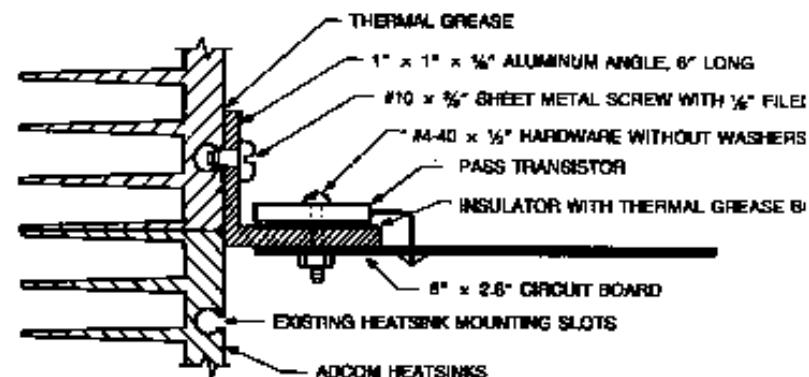
C1, C5	47 $\mu$ F, 50V electrolytic
C2, C6	220pF polypropylene, polystyrene
C3, C7	470pF polypropylene, polystyrene
C4, C8	10 $\mu$ F, 100V electrolytic

### Trimpots:

R6, R21	1k cermet, single turn
---------	------------------------

### Transistors:

Q1, Q2, Q9	2SA970 Toshiba
Q3, Q7, Q8	2SC2240 Toshiba
Q4	MJE182 Motorola
Q5, Q6	2SC2565 Toshiba
Q10	MJE172 Motorola
Q11, Q12	2SA1095 Toshiba



Mounting details—section view from top.