Service Manual

Radio

RF-B50L

FM-MW-LW-SW1~7 10-Band Portable Radio

■ SPECIFICATIONS

Frequency Range:
FM; 87.5~108MHz
MW; 520~1610kHz (577~186m)
LW; 150~285kHz (2000~1060m)
SW1; 5.95~6.2MHz (50.4~48.4m)
SW2; 7.1~7.3MHz (42.3~41.1m)
SW3; 9.5~9.8MHz (31.6~30.6m)
SW4; 11.7~12.0MHz (25.6~25m)
SW5; 15.1~15.45MHz (19.9~19.4m)
SW6; 17.7~17.9MHz (16.9~16.8m)
SW7; 21.45~21.75MHz (14~13.8m)

Intermediate Frequency:
FM; 10.7MHz
AM (MW, LW); 450kHz
AM (MW, LW); 462kHz (for U.K.)
SW1~7; 1st IF 11.850MHz
SW1~7; 2nd IF 450kHz
SW1~7; 2nd IF 462kHz (for U.K.)

Sensitivity:
FM; 5μV (−3dB, Limit Sens)
MW; 101.5μV/m/50mW output
LW; 179.7μV/m/50mW output
SW1; 2.2μV/50mW output
SW2; 2.5μV/50mW output
SW3; 1.8μV/50mW output
SW4; 1.0μV/50mW output
SW5; 1.0μV/50mW output
SW6; 1.5μV/50mW output
SW7; 6.3μV/50mW output

Power Source: DC 6V (Four "AA" Size Penlight Battery)
(National UM-3 or equivalent)

Power Output: 550mW...RMS (max)

Speaker: 8cm (3") PM Dynamic Speaker

Impedance:
Speaker 8Ω
Earphone/External Speaker
Jack φ3.5 .....8Ω

Antenna:
EXT Antenna; FM 75Ω
LW, SW1~7 High Impedance
Whip Antenna; FM, SW1~7
Ferrite Core Antenna; MW, LW

Dimensions: 184(W)×112(H)×33(D)mm
$(7^{1}/_{4}\times4^{7}/_{16}\times1^{5}/_{16})''$

Weight: 500g (1 lb 1.6 oz) without batteries

Specifications are subject to change without notice.

Panasonic

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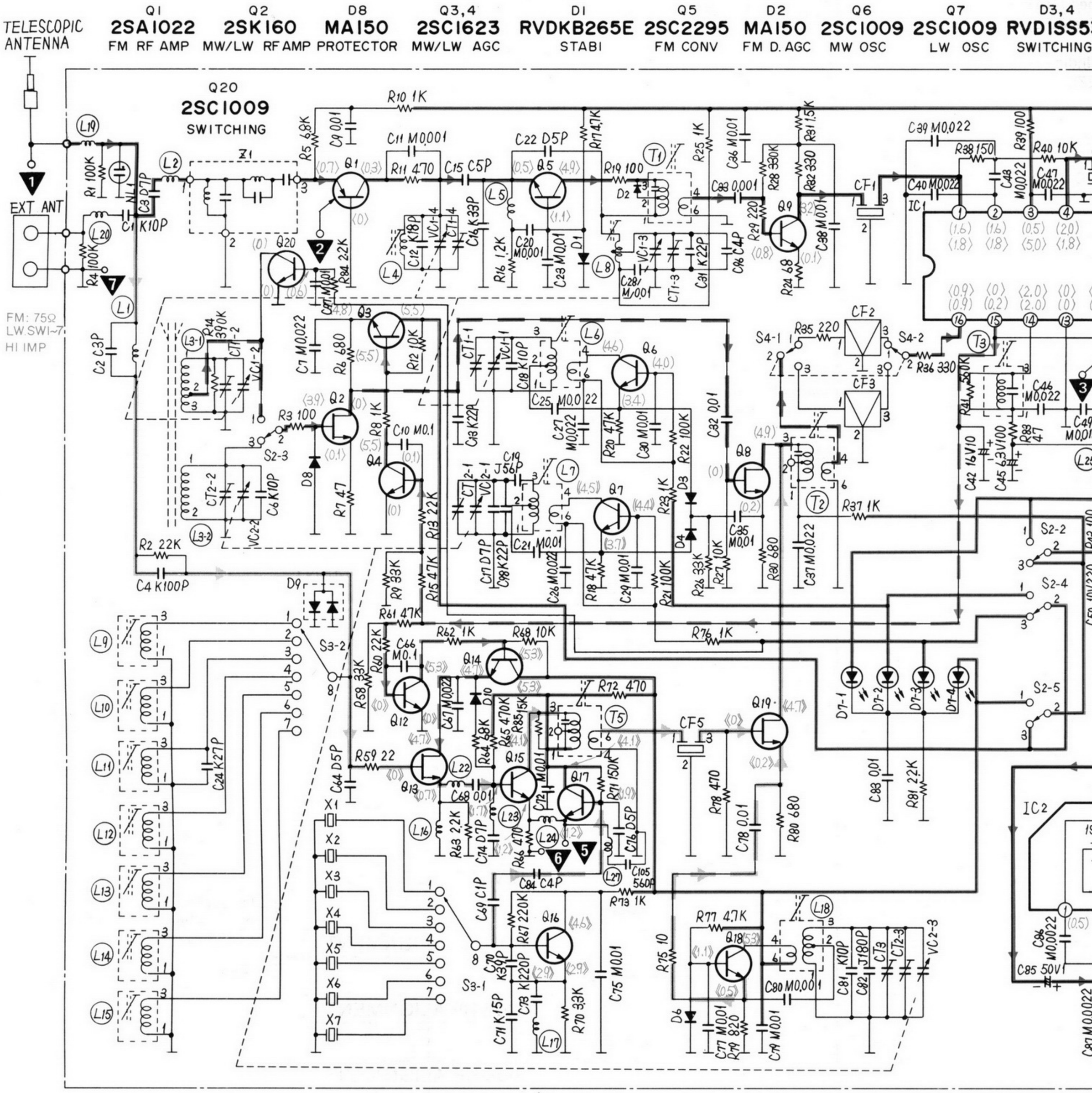
SCHEMATIC DIAGRAM MO

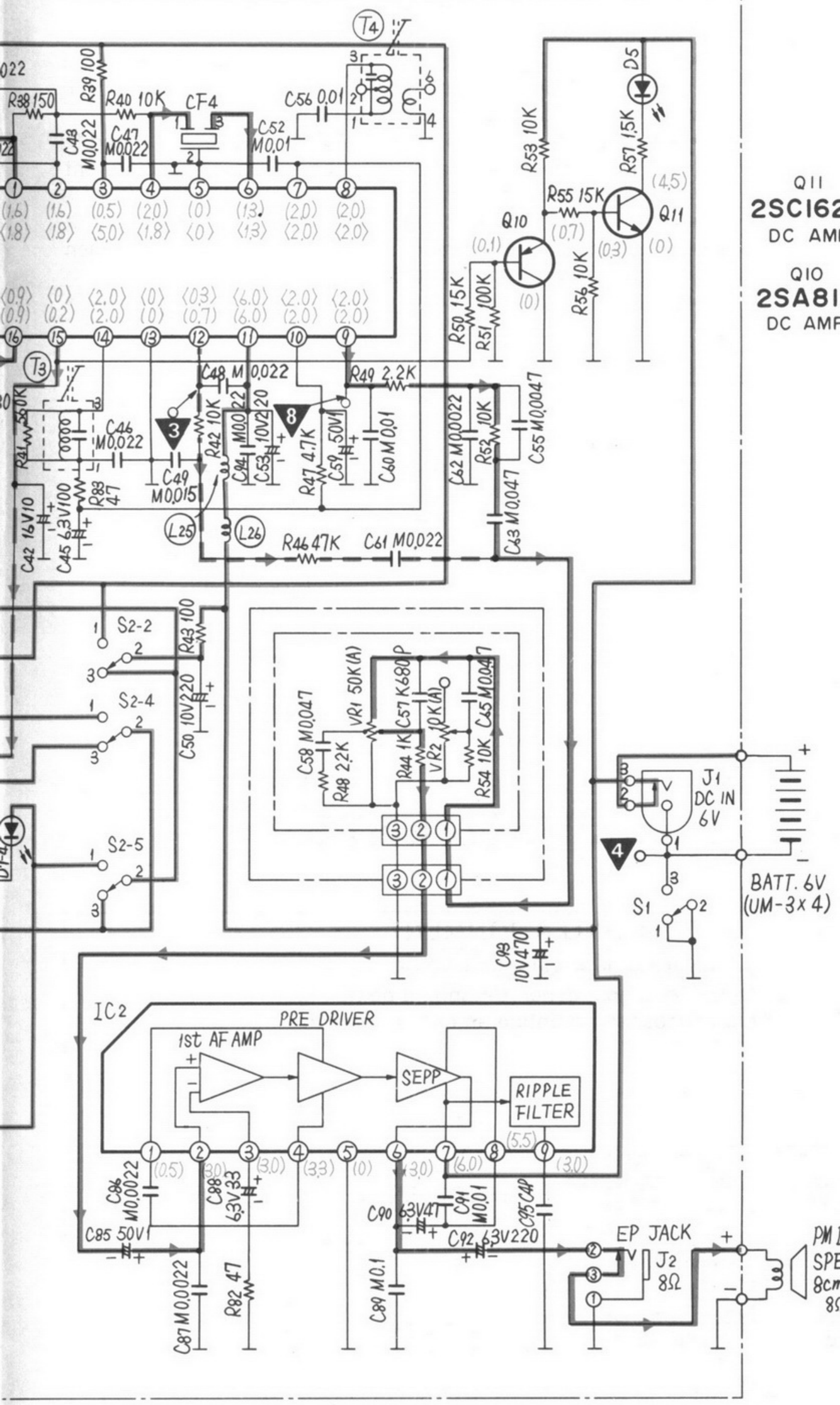


Notes:

1. S1: Power switch in "OFF" position. (1...OFF, 3...ON)
2. S2-2~S2-5: Band switch.
   - S2-2: FM switch in "ON" position. (1...ON, 3...OFF)
   - S2-3, S2-4: MW switch in "OFF" position. (1...ON, 3...OFF)
   - S2-5: SW1~7 switch in "OFF" position. (1...ON, 3...OFF)
3. S3-1, S3-2: SW1~7 Band switch in "SW1" position. (1...SW1, 2...SW2, 3...SW3, 4...SW4, 5...SW5, 6...SW6, 7...SW7)
4. S4-1, S4-2: Band width switch in "WIDE" position. (1...WIDE, 3...NAR)
5. VR1: Volume control VR.
6. VR2: Tone control VR.
7. DC voltage measurements are electronics voltmeter based o terminal of battery.
   < >...FM position, ( )...
   (( ))...LW position,
   << >>...SW1 position.
8. Battery Current No signal .... Maximum outp

RAM MODEL RF-B50L

Q7	D3, 4	Q8	Q9	IC1	D5
1009	RVDISS53	2SK184	2SC1009	RVIBA4220A	LN224RPH
OSC	SWITCHING	MW/LW MIX	FM IF AMP	FM/AM IF AMP, DET, AF AMP	TUNING IND

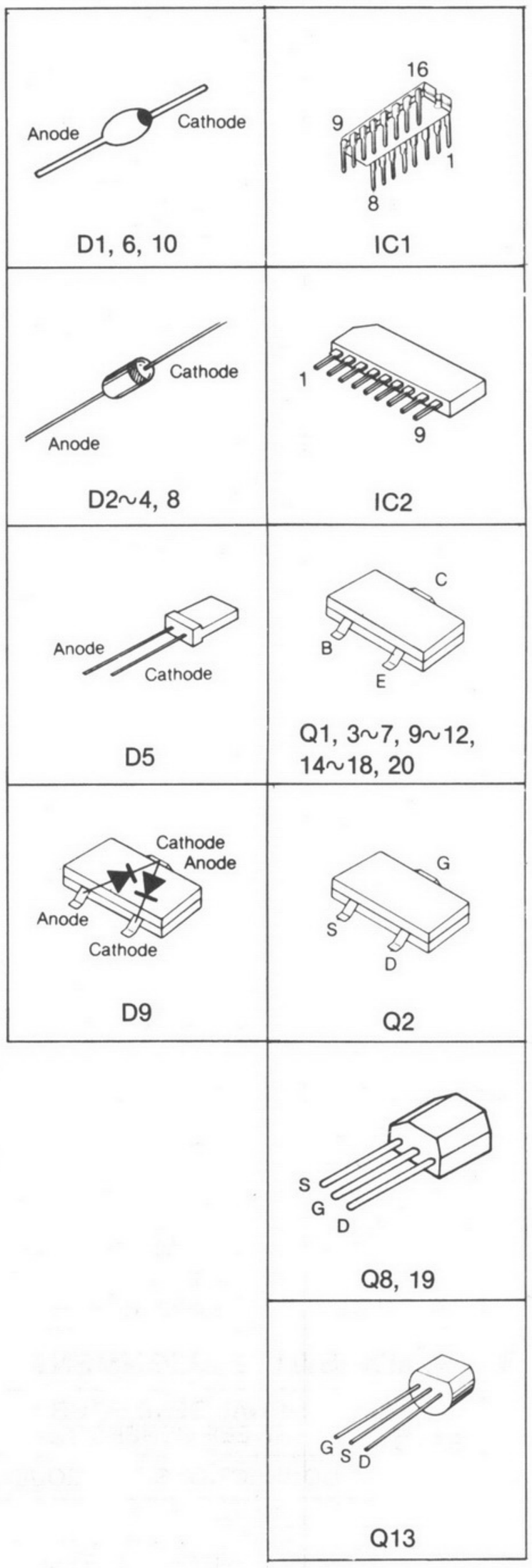


Q11	Q10
2SC1623	2SA812
DC AMP	DC AMP

Q19	D7-1~7-4	IC2
95 2SK184	LN042157PH	RVILA4140
OSC SW1~7 2nd MIX	BAND IND	POWER AMP

measurements are taken with voltmeter based on negative battery.
M position, ( )...MW position,
W position,
.SW1 position.
rent No signal 25mA
Maximum output ...180mA

+(B) Voltage Line
AGC Signal Line
Radio (FM) Signal Line
SW1~7 Signal Line
1st, 2nd OSC Signal Line
MW Signal Line



IC1 RVIBA4220A