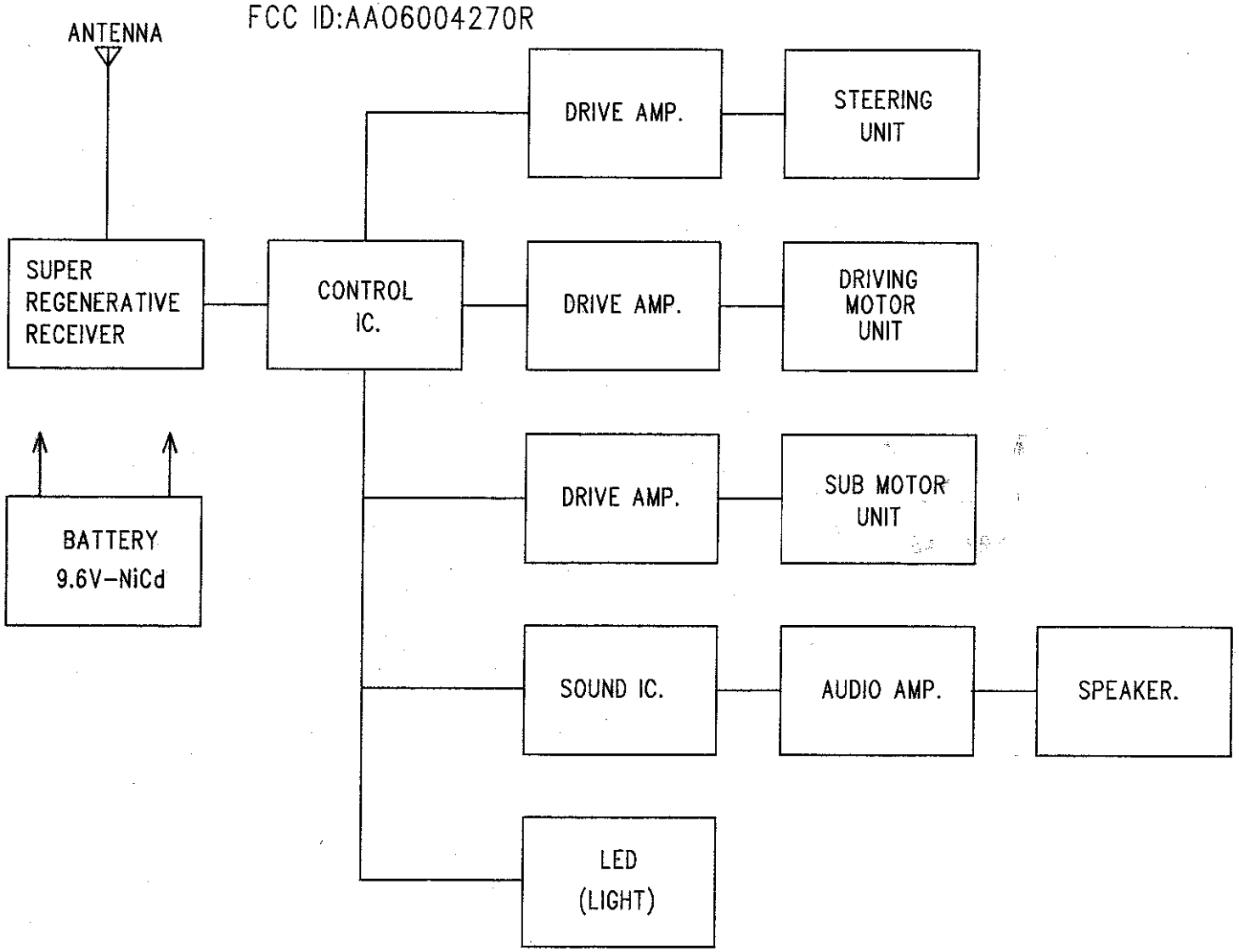
PCB:NO.RN6220 RECEIVER BLOCK DIAGRAM

FCC ID:AAO6004270R



FCC ID:AA06004270R CIRCUIT EXPLANATION

1) The Radio Frequency inputted through The ANT., is passed to the Super-regenerative receiver, formed by TR1, where the Action Signal is detected.

2) The Action Signal is decoded in the control IC., and are sent to each output terminal.

3) TR5, 6, 14, 15, 16 and 17 form the steering control circuit.

   (3-1) Right turns.
   IC. 15P. (Pin) is turned on, and TR5, 15, 16 are tuned on to make a Right turn.

   (3-2) Left turned.
   IC. 16P. is turned on, and TR6, 14, 17 are turned on to make a Left turn.

4) TR8, 9, 10, 11, 12 and 13 form the driving control circuit.

   (4-1) Forward drive.
   IC. 14P. is turned on, and TR8, 10, 13 are turned on to make a Forward drive.

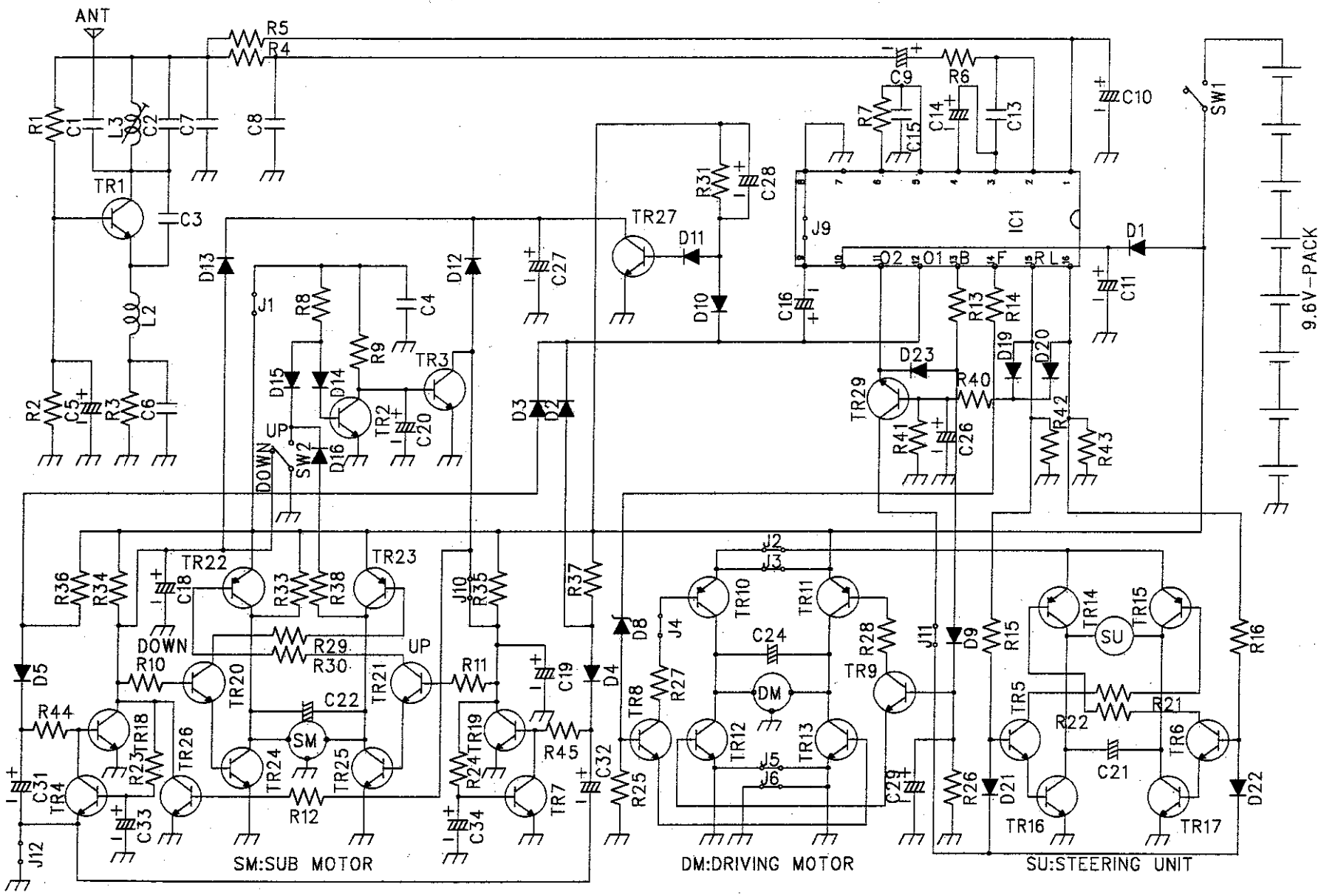
   (4-2) Backward drive.
   IC. 13P. is turned on, and TR9, 11, 12 are turned on to make a Backward drive.

5) TR3, 4, 7, 18, 19, 20, 21, 22, 23, 24, 25, 26 and 27 form the Up-Down action control circuit.

   (5-1) Up action. (From Down side state)
   SW2 is Down side state.
   IC. 12P. is turned on, and TR19 is turned off.
   Then TR7, 21, 22 and 25 are tuned on to make a Up motion.

   (5-2) Down extend action. (From Up side state.)
   SW2 is Up side state. (TR2 is Off and TR3 is On.)
   IC. 12P. is turned on, and TR18 is turned off.
   Then TR4, 20, 23 and 24 are tuned on to make a Down extend motion.

   (5-3) TR27 is turned on once passed a certain time on Up-and-Down action.



NO.RN6220
CIRCUIT DIAGRAM

1998.5.27 MM.

NO. RN6220 LIST

FCC ID:AA06004270R

2000/6/12

NO.	DESCRIPTION	CODE	PARTS NAME	NOTE
1	I.C.	IC 1	NR9600	
2	TRANSTSTOR	TR 1	2SC380-O or equivalent	
3		TR 2	2SC9450 or equivalent	
4		TR 3	2SC9450 or equivalent	
5		TR 4	2SC9450 or equivalent	
6		TR 5	2SC9450 or equivalent	
7		TR 6	2SC9450 or equivalent	
8		TR 7	2SC9450 or equivalent	
9		TR 8	2SC9450 or equivalent	
10		TR 9	2SC9450 or equivalent	
11		TR10	2SA1357 or equivalent	
12		TR11	2SB772Q or equivalent	
13		TR12	2SD882Q or equivalent	
14		TR13	2SC3420 or equivalent	
15		TR14	KSA928 or equivalent	
16		TR15	KSA928 or equivalent	
17		TR16	KSC2328 or equivalent	
18		TR17	KSC2328 or equivalent	
19		TR18	2SC9450 or equivalent	
20		TR19	2SC9450 or equivalent	
21		TR20	2SC9450 or equivalent	
22		TR21	2SC9450 or equivalent	
23		TR22	KSA928 or equivalent	
24		TR23	KSA928 or equivalent	
25		TR24	KSC2328 or equivalent	
26		TR25	KSC2328 or equivalent	
27		TR26	2SC9450 or equivalent	
28		TR27	2SC9450 or equivalent	
29	DIODE	D 1	ISS133 or equivalent	
30		D 2	ISS133 or equivalent	
31		D 3	ISS133 or equivalent	
32		D 4	ISS133 or equivalent	
33		D 5	ISS133 or equivalent	
34		D 8	0 ohm	
35		D 9	ISS133 or equivalent	
36		D10	ISS133 or equivalent	
37		D11	ISS133 or equivalent	
38		D12	ISS133 or equivalent	
39		D13	ISS133 or equivalent	
40		D14	ISS133 or equivalent	
41		D15	ISS133 or equivalent	
42		D16	ISS133 or equivalent	
43		D23	ISS133 or equivalent	
44	RESISTOR	R 1	4.7K	
45		R 2	8.2K	
46		R 3	560	
47		R 4	5.6K	
48		R 5	2.2K	
49		R 6	10K	
50		R 7	6.8K(±1%)	
51		R 8	100K	
52		R 9	100K	
53		R10	2.2K	
54		R11	2.2K	
55		R12	10K	
56		R13	2.2K	
57		R14	2.2K	
58		R15	10K	
59		R16	10K	
60		R21	1K	
61		R22	1K	
62		R23	10K	
63		R24	10K	
64		R25	10K	
65		R26	12K	
66		R27	68(1W)	
67		R28	68(1W)	
68		R29	220	
69		R30	220	
70		R31	150K	
71		R33	47(1/2W)	
72		R34	2.2K	
73		R35	2.2K	
74		R36	10K	
75		R37	10K	
76		R38	47(1/2W)	
77		R42	10K	
78		R43	10K	
79		R44	15K	
80		R45	15K	
81	CAPACITOR	C 1	10p(C)	
82		C 2	5p(C)	
83		C 3	33p(C)	
84		C 4	473(C)	
85		C 5	4.7(E)	
86		C 6	222(M)	
87		C 7	223(M)	
88		C 8	103(M)	
89		C 9	1(E)	
90		C10	100(E)	
91		C11	100(E)	
92		C13	150p(C)	
93		C14	1(E)	
94		C15	102J(M)	
95		C16	100(E)	
96		C18	10(E)	
97		C19	10(E)	
98		C20	33(E)	
99		C21	10(NP)	
100		C22	473(C)	
101		C24	473(C)	
102		C27	10(E)	
103		C28	220(E)	
104		C29	1(E)	
105		C31	1(E)	
106		C32	1(E)	
107		C33	10(E)	
108		C34	10(E)	
109	INDUCTOR	L 2	SP 3.3uH	
110		L 3	S6.5T	
111	JUMPER	J 1	0ohm	
112		J 2	2.2 ohm(1W)	
113		J 3	WIRE:80mm	
114		J 4	0 ohm	
115		J 5	WIRE:80mm	
116		J 6	WIRE:60mm	
117		J 9	0 ohm(D 0.5mm Formed type)	10x8.5x15mm
118		J10	WIRE:60mm	
119		J12	0 ohm	
120	EXTRA PARTS	EP 1	RADIATOR:H-7 x 2	
121		EP 2	TAPPING:3*8B(With spring washer)x4	
122		EP 3	PCB:NO.RN6220	
123		EP 4	TUBE:D1.5x15mm(PVC)YELLOW	*to J2.Leg

RESISTOR:No mark=1/6W, ±5% INDUCTOR:100mA, ±10%

CAPACITOR (C):Ceramic, 50WV, +80-20% (T)Tantalum, 16WV, ±10%

(M):Mylar, 50WV[No mark=K.rank(±10%), J.rank(±5%)]

(E):Electrolytic, 16WV, ±20% (N):Non pole electrolytic, 16WV, ±20%

SR0141A CIRCUIT EXPLANATION

1) This circuit receives power via SW1 from Battery.

2) Multi-vibrator that is formed by TR2 and TR3 is active while SW1 is closing. Consequently, B1,B2,B3 and B4 are intermittently turned on.

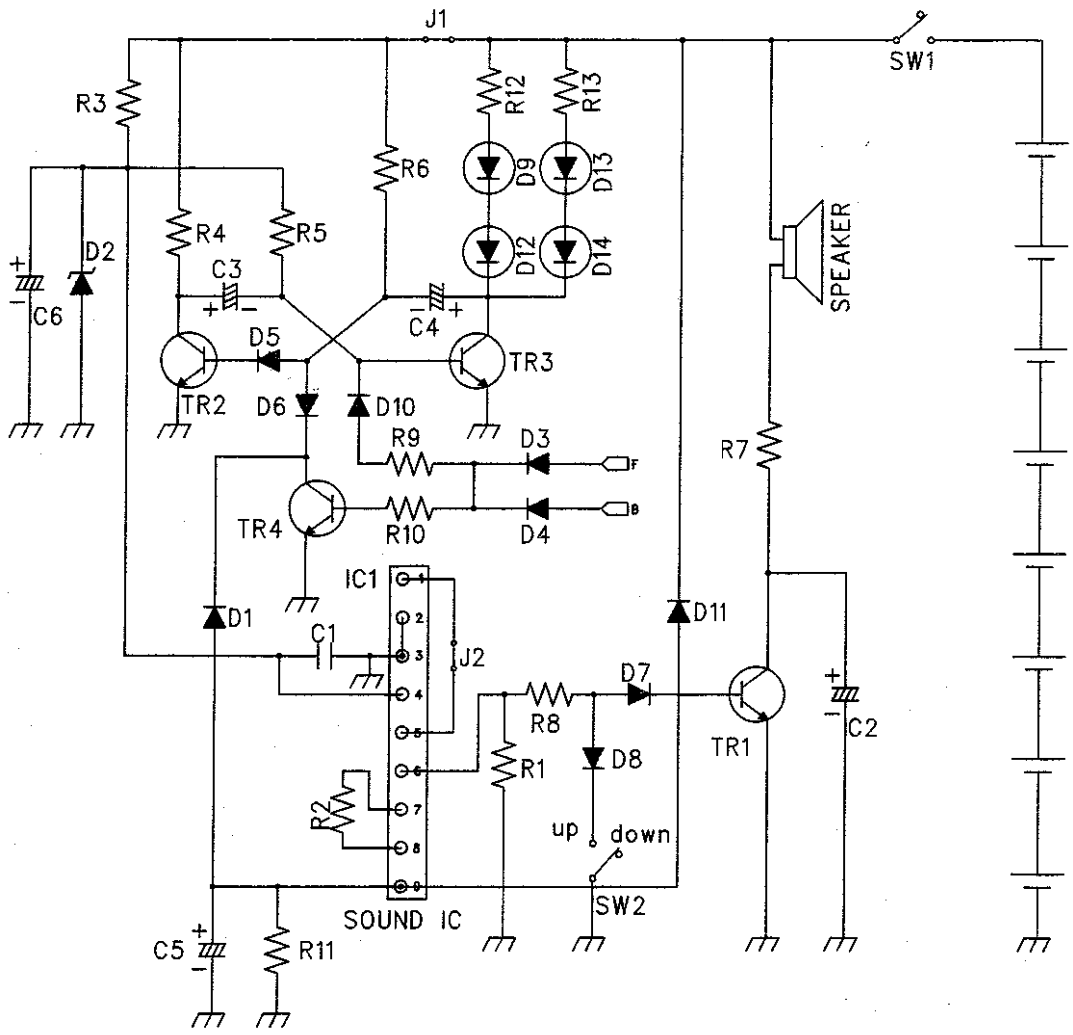
3) However, TR4 is turn on and stop multi-vibrator while TR4 receive signal of Forward or signal of Backward. Consequently,B1,B2,B3 and B4 are turned on continuously.

4) Sound IC outputs the sound while SW1 is closing.

5) However, 9pin of sound IC receive signal of low while TR4 is turn on. Consequently, sound IC raises frequency of outputting sound.
And, 9pin of sound IC receive signal of high while TR4 is turn off. Consequently, sound IC decreases frequency of outputting sound.

6) TR1 is forming audio amplifier for speaker.

7) SW2 is closing circuit when Up action at the Car. Consequently, TR1 is turning off. Then it stops outputting to speaker.



NO.SR0141A(SOUND & LIGHT PCB.)
CIRCUIT DIAGRAM

2000.6.12 NIKKO MM.

NO. SR0141A PCB. PARTS LIST

SOUND & LIGHT PCB.

2000/6/12

NO.	DESCRIPTION	CODE	PARTS NAME	NOTE
1	I.C.	IC1	SOUND IC.	
2	TRANSISTOR	TR1	2SD882Q or equivalent	
3		TR2	2SC945Q or equivalent	
4		TR3	2SC945Q or equivalent	
5		TR4	2SC945Q or equivalent	
6	DIODE	D1	1N4148 or equivalent	
7		D2	3.3V(ZENER)	
8		D3	1N4148 or equivalent	
9		D4	1N4148 or equivalent	
10		D5	1N4148 or equivalent	
11		D6	1N4148 or equivalent	
12		D7	1N4148 or equivalent	
13		D8	1N4148 or equivalent	
14		D10	1N4148 or equivalent	
15		D11	1N4148 or equivalent	
16	RESISTOR	R1	-	
17		R2	56K	
18		R3	390	
19		R4	2.2K	
20		R5	22K	
21		R6	12K	
22		R7	5(3W)	
23		R8	180	
24		R9	2.2K	
25		R10	10K	
26		R11	1M	
27		R12	330	
28		R13	330	
29	CAPACITOR	C1	103(C)	
30		C2	1(E)small	
31		C3	47(E)	
32		C4	22(E)	
33		C5	0.47(E)	
34		C6	-	
35	JUMPER	J1	0 ohm	
36		J2	0 ohm	
37	EXTRA PARTS	EP1	PCB:NO.SR0141A	

RESISTOR:No mark=1/4W, ±5% INDUCTOR:100mA, ±10%

CAPACITOR (C):Ceramic, 50WV, +80-20% (T):Tantalum, 35WV, ±10%

(M):Mylar, 50WV[No mark=K.rank(±10%), J.rank(±5%)]

(E):Electrolytic, 16WV, ±20% (N):Non pole Electrolytic, 16WV, ±20%