



Technical Manual

DTS DECODER RDA-986

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THE ROTEL CO., LTD.
SHINSEN-BLD. 4F 10-10 SHINSEN-CHO, SHIBUYA-KU,
TOKYO 150-0045, JAPAN

Serial. NO. Beginning

Y-349A-0107/W

PARTS LIST (1/4)

NO	P/N	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	75L721RDA986	AL PLATE	L-721	1	
2	78C230500000	FRONT PLATE	C-2305	1	
3	78C245400000	UPPER COVER	C-2454	1	
4	78C244700000	REAR PLATE	C-2447	1	
5	78C245200000	BOTTOM PLATE	C-2452	1	
6	78C209400000	CHASSIS,LEFT	C-2094	1	
7	78C209500000	CHASSIS,RIGHT	C-2095	1	
8	81A4TSH19***	FOOT CUSHION	4TSH-19 50	4	
9	85A358*****	PVC,UPPER	A-358 (4TR-2418)	1	
10	85A561*****	ORNAMENT END CAP	A-561 (4TR-2797#2)	2	
11	78C2060000000	BREAKSKET,U-TYPE	C-2060	2	
12	E53017A***Z3	TRANSFORMER	E53017A***Z3	1	
13	78C233100000	SI-STEEL SHIELD	C-2331		
14	651B2U56B21P	AC CORD	SPT-2#18	1	
15	98BSB4F1K***	BUSHING	SB4F-1	1	
16	804TQF15****	POWER PUSH KNOB	4TQF-15	1	
17	85A4TTL15***	PUSH SW CONNECTOR	4TTL-2(A-365)	1	
18	97DS072****	PUSH SW SPRING	TR-1988A(S-072)	1	
19	85A4TQF13***	PUSH SW WASHER	4TQF-13	1	
20	92ES064****	COPPER POST	S-064 12MM	2	
21	85A499*****	ACRYLIC LIGHT GUIDER	A-499	3	
22	85A506*****	ACRYLIC LIGHT GUIDER	A-506	3/7	
23	20PSDLB1007U	POER SWITCH	SDDL1007U TV3	1	
24	594722ERKCBW	CAPACITOR,VDE	472/250V	1	
25	990130ULB***	TUBE,SLEEVE	38 B	1	
26	2652000122*2	FUSE 19195	5x20 1A/250V	2	B3180(F13.F14)
27	66HD686*****	CONNECTOR	ED-686 3P	1	
28	SCCR*P1809B*	PLASTIC SCREW	1/8x9	4	
29	SCCR9M3006Y*	SCREW	CRMS 3x6 Y	2	
30	SCCR*T3006Y*	SCREW	CRTS 3x6 Y	22	
31	SCCR*T3006B*	SCREW	CRTS 3x6 B	4	
32	SCCF*T3008W*	SCREW	CRTS 3x8 W	6	
33	SCCRWM4010B*	SCREW	CRWMS 4x10 B	2	
34	SCCR*T3008B*	SCREW	CRTS 3x8 B	4	
35	9903RDA986**	STYROFOAM	TZ-165-1-1	2	
36	911RDA986***	INSIDE CARTON	RDA-986	1	SIZE 493x390x127(RDA975)
37	91CRDA986***	OUTER CARTON	RDA-986	1/2	SIZE 503x406x320(RDA975)
38		PVC BAG		1	
39		PVC BAG		1	OWNER S MANUAL
40	RDA986B3180*	KIT	B3180	1	
41	RDA986B3181*	KIT	B3181 LED	1	
		ACCESSORIES			
1	9904RDA986**	OWER'S MANUAL	RDA-986	1	
2	9905RDA986**	WARRANTY STATEMENT CARD	RDA-986	1	
3	68DB25RDA975	DB25 CABLE	CD25FD25M28140050NM	1	

PARTS (2/4)

KIT: B3181

B3181					
1	18L934IT****	LED	L-934IT RED	3	D13.14.15
2	66HD746*****	CONNECTOR	ED-746 4P	1	J4 TO B2380 J5
3	60B3181*****	P.C.B	B3181	1	

KIT: B3180

NO	P/N	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	300010C4TJ2T	RESISTOR CARBON	5% 1/4W T 10	1	R106
2	300022C4TJ2T	RESISTOR CARBON	5% 1/4W T 22	1 R	6
3	300075C4TJ2T	RESISTOR CARBON	5% 1/4W T 75	1 R	2
4	300100C4TJ2T	RESISTOR CARBON	5% 1/4W T 100	6	R13.89.90.91.105.119
5	300470C4TJ2T	RESISTOR CARBON	5% 1/4W T 470	1 R	17
6	30001KC4TJ2T	RESISTOR CARBON	5% 1/4W T 1K	4	R1.18.27.86
7	3002K2C4TJ2T	RESISTOR CARBON	5% 1/4W T 2K2	18	R37.38.41.42.57.58.60.61.76.77.79.99.112.113-117
8	3003K9C4TJ2T	RESISTOR CARBON	5% 1/4W T 3K9	24	R21-24.31-34.45-48.50-53.64-67.69-72
9	3004K7C4TJ2T	RESISTOR CARBON	5% 1/4W T 4K7	2	R4.101
10	3005K6C4TJ2T	RESISTOR CARBON	5% 1/4W T 5K6	1 R	96
11	30010KC4TJ2T	RESISTOR CARBON	5% 1/4W T 10K	7	R5.7.19.28.43.62.87
12	30012KC4TJ2T	RESISTOR CARBON	5% 1/4W T 12K	6	R20.30.44.49.63.68
13	30015KC4TJ2T	RESISTOR CARBON	5% 1/4W T 15K	6	R80.81.82.83.84.85
14	30022KC4TJ2T	RESISTOR CARBON	5% 1/4W T 22K	2	R3.88
15	30047KC4TJ2T	RESISTOR CARBON	5% 1/4W T 47K	2	R109.110
16	30100KC4TJ2T	RESISTOR CARBON	5% 1/4W T 100K	9	R12.39.40.56.59.75.78.98.108
17	30220KC4TJ2T	RESISTOR CARBON	5% 1/4W T 220K	1 R	95
18	30330KC4TJ2T	RESISTOR CARBON	5% 1/4W T 330K	1 R	97
19	30470KC4TJ2T	RESISTOR CARBON	5% 1/4W T 470K	1	R100
20	131N4148****	DIODE	1N4148	1	D12
21	131N4007****	DIODE	1N4007	7	D2.3.7.8.9.10.11
22	13Z4P70P5***	ZENER DIODE	4.7V/0.5W	1	D6
23	13Z0150P5***	ZENER DIODE	15V/0.5W	1	D5
24	491021HRZFDT	CAPACITOR CERAMIC	102/50V F/Z	6	C138-143
25	491031HRZFDT	CAPACITOR CERAMIC	103/50V F/Z	4	C1.11.44.116
26	491041HRZFDT	CAPACITOR CERAMIC	104/50V MIN SIZE	15	C3-6.26-33.123-125
27	490101HRJDNT	CAPACITOR CERAMIC	10P/50V SL/K	6	C8.53.57.73.77.92
28	494711HRKBDT	CAPACITOR CERAMIC	470P/50V SL/K	1	C22
29	496811HRKBDT	CAPACITOR CERAMIC	680P/50V SL/K	6	C130-135
30	501021HRJENT	CAPACITOR MYLAR	102J/50V	1	C96
31	501031HRJENT	CAPACITOR MYLAR	103J/50V	6	C51.55.71.75.90.94
32	501221HRJENT	CAPACITOR MYLAR	122J/50V	6	C41.48.64.68.83.87
33	502221HRJENT	CAPACITOR MYLAR	222J/50V	6	C42.49.65.69.84.88
34	503321HRJENT	CAPACITOR MYLAR	332J/50V	6	C40.47.63.67.82.86
35	504731HRJENT	CAPACITOR MYLAR	473J/50V	1	C45
36	404R71H0511T	CAPACITOR ELEC	4.7U/50V	1	C21.129

PARTS (3/4)

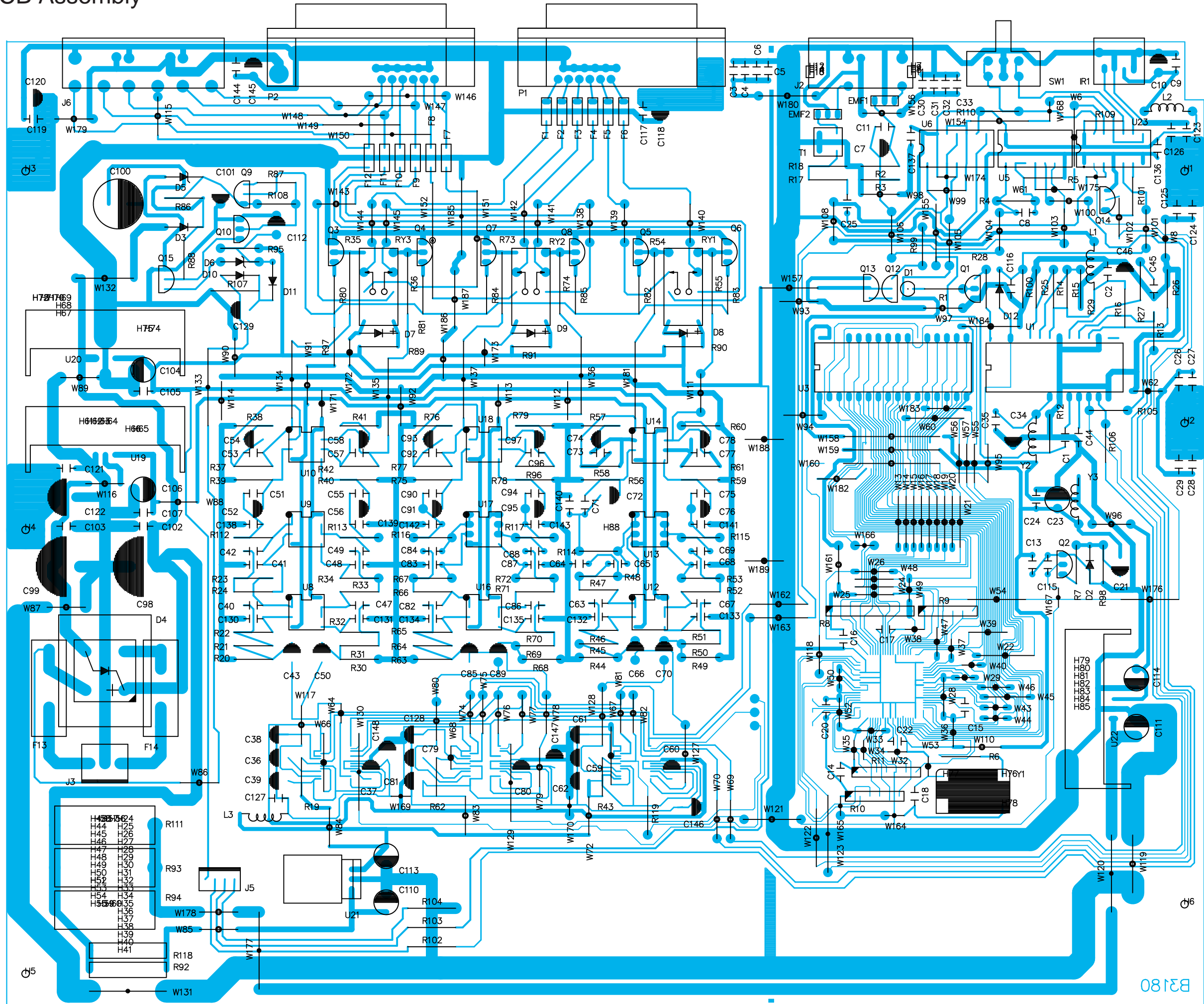
37	401001H0511T	CAPACITOR ELEC	10U/50V	18	C34.36-39.59-61.62.79-81.101.128.146-148
38	404R71H0511TT	CAPACITOR ELEC	4.7U/50V	1	C21
39	404701E0511T	CAPACITOR ELEC	47U/25V	4	C7.10.46.112
40	401011E6311T	CAPACITOR ELEC	100U/25V	7	C23.110.104.106.111.113.114
41	481001H0511T	CAPACITOR ELEC	10U/50V NP	12	C43.50.52.56.66.70.72.76.85.89.91.95
42	484701E0811T	CAPACITOR ELEC	47U/25V NP	9	C54.58.74.78.93.97.118.120.145
43	561041HRZFDT	CAPACITOR CERAMIC	104/50 X7R	24	C2.9.13-C18.20.24.25.35.102.103.105.107.115.117.119. C121.127.136.137.144
44	122SA1015BLT	TRANSISTOR	2SA1015BL/GR	1	Q9
45	122SC1815BLT	TRANSISTOR	2SC1815BL/GR	6	Q1.2.10.12.14.15
46	122SC2235Y*T	TRANSISTOR	2SC2235Y	1	Q13
47	122SC3327A*T	TRANSISTOR	2SC3327A	6	Q3.4.5.6.7.8
48	67A05*****T	FUSE HOLDER	5	4	F13.F14
49	11PCA1716E*S	IC SMD	PCM1716E	3	U7.11.15
50	11DSPA56009S	IC SMD	XCI56009F	1	U2
51	11A57C25620S	IC SMD	AS7C256-20JC	1	U4
52	300100C4TJ2T	RESISTOR CARBON	5% 1/4W T 100	3	R120.121.122
53	30001KC2TJ5T	RESISTOR CARBON	5% 1/2W T 1K	3	R102.103.104
54	3002K2C2TJ5T	RESISTOR CARBON	5% 1/2W T 2K2	1	R107
55	39047001MJ*B	RESISTOR M.O.F	5% 1W 470	6	35.36.54.55.73.74
56	39018002MJ*B	RESISTOR M.O.F	5% 2W 180	2	R92.118
57	34006805TJ*B	RESISTOR CEMENT	5% 5W T 68	3	R93.94.111
58	401021E1220B	CAPACITOR ELEC	1000U/25V	1	C100
59	402221E1625B	CAPACITOR ELEC	2200U/25V	1	C99
60	404721E1831B	CAPACITOR ELEC	4700U/25V	1	C98
61	484701E0811T	CAPACITOR ELEC	470U/16V NP	1	C122
62	73C047UH****	CHOKE	47UH	3	L1-L3
63	73B3C2T7P5P8	BEAD CORD	73.5Tx7.5 x0.8	2 Y	2.Y3
64	29C41030605J	RESISTOR NETWORKS	10Kx5	2	R9.10
65	29C41030706J	RESISTOR NETWORKS	10Kx6	1	R11
66	29C41030908J	RESISTOR NETWORKS	10Kx8	1	R8
67	11AD712****	IC	AD712	9	U8.9.10.12.13.14.16.17.18.
68	11T C74HCU04A	IC	TC74HCU04A	1	U5
69	11TC74HC08AP	IC	TC74HC08AP	1	U6
70	1174HC125AED	IC	74HC125	1	U23
71	11MC27C10012	IC	MC27C1001	1	U3
72	11CSB8412CPD	IC	CS8412-CP	1	U1
73	13S4VB20****	BRIDGE DIODES	S4VB20	1	D4
74	74G6A2HDC12V	RELAY	G6A-2-H DC12V	3	RY1-RY3
75	20FILTER101*	CERAMIC FILTER	EMI 101	2	EMIF1.EMIF2
76	20FILTER102*	CERAMIC FILTER	EMI 102	12	F1-F12
77	639213*****	IFT	9213 40-001	1	T1
78	20S04P022BY*	SLIDE SWITCH	SS004-P022BY-PF8	1	SW1
79	14TORX176***	OPTICAL RECIEVER	TORX176	1	IR1
80	17NTKIFULL*B	OSCILLATOR	1MHZ	1	Y1
81	10A32PBD****	SOCKER IC	32P	1	U3
82	66W504504R**	WAFER	5045-4P	1	J5
83	66W396303R**	WAFER	3963-3P	1	J3
84	68DBR25MTKO*	DB25 JACK	DBR25MTKO	1	MALE

PARTS (4/4)

85	38DBR25STKO*	DB25 JACK	DBR25STK025F	1	FEMALE
86	68HSP246V639	RCA JACK 6P	HSP-246V6-39	1	
87	68HSP252V312	RCA JACK 2P	HSP-252V3-12	1	
88	18L32HD****B	LED	L-32HD 3 RED	1 D	1
89	SCCR*T3015Y*	SCREW	CRTS 3x15 Y	1	D4
90	SCWSY3 ****	SPRING WASHER	3	1	
91	60B3180****	P.C.B	B3180	1	
92	11AN7815***B	IC	AN7815	1	U20
93	11AN7805***B	IC	AN7805	2	U21.22
94	11AN7915***B	IC	AN7915	1	U19
95	76H550000151	HEAT SINK	H-550	1	IC XC56009F
56	76H49600031*	HEAT SINK	H-496	3	U19.20.22
97	76H19800123*	HEAT SINK	H-198	1	U21
98	SCCR*T3008B*	SCREW	CRTS 3x8 B	3	U19.20.22
99	SCCR*T3006Y*	SCREW	CRTS 3x6 Y	1	U21
100	SCWSY3 ****	SPRING WASHER	3	3	

Meno

PCB Assembly



B3180

Schematic Diagram

MAIN PCB B3180

