

JVC

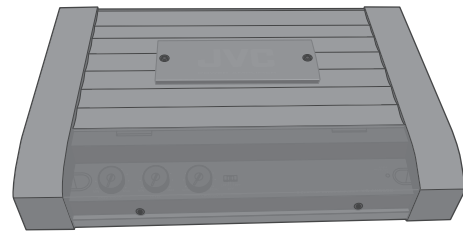
SERVICE MANUAL

POWER AMPLIFIER

KS-AR7002J, KS-AX5602E, KS-AX5602U



KS-AR7002



KS-AX5602

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

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SPECIFICATION

KS-AR7002

Power Output	150 W RMS x 2 channels at 4 Ω and [$<$ or $=$] 1% THD + N
Signal-to-Noise Ratio	80 dBA (reference: 1 W into 4 Ω)
Maximum Power Output	800 W
Load Impedance	4 Ω (2 Ω to 8 Ω allowance)
	4 Ω (4 Ω to 8 Ω allowance) (Bridge Mode)
Frequency Response	5 Hz to 50 kHz* (+0, -3 dB) * Subsonic filter cuts off extremely low frequency signals less than 20 Hz.
Input Sensitivity/Impedance	2 V/45 k Ω (0.3 V to 6 V, variable)
Distortion	Less than 0.04% (at 1 kHz)
Power Requirement	DC 14.4 V (11 V to 16 V allowance)
Grounding system	Negative ground
Dimensions (W \times H \times D)	15-3/4 inch \times 2-3/8 inch \times 11-3/8 inch (400 mm \times 60 mm \times 288 mm)
Mass (approx.)	11.5 lbs. (5.2 kg)

Design and specifications are subject to change without notice.


KS-AX5602

Maximum Power Output	800 W
RMS Power Output	150 W RMS x 2 channels at 4 Ω and [$<$ or $=$] 1% THD + N
Load Impedance	4 Ω (2 Ω to 8 Ω allowance)
	4 Ω (4 Ω to 8 Ω allowance) (Bridge Mode)
Frequency Response	5 Hz to 50 kHz* (+0, -3 dB) * Subsonic filter cuts off extremely low frequency signals less than 20 Hz.
Input Sensitivity/Impedance	2 V/45 k Ω (0.3 V to 6 V, variable)
Distortion	Less than 0.04% (at 1 kHz)
Signal-to-Noise Ratio	80 dBA (reference: 1 W into 4 Ω)
Power Requirement	DC 14.4 V (11 V to 16 V allowance)
Grounding system	Negative ground
Dimensions (W \times H \times D)	400 mm \times 60 mm \times 288 mm
Mass (approx.)	5.2 kg

Design and specifications are subject to change without notice.

SECTION 1 PRECAUTION

1.1 Safety Precautions

 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3 DISASSEMBLY

3.1 Main body (Using figures are KS-AR7002)

3.1.1 Removing the BOTTOM COVER (See Fig.1)

- (1) Remove the twelve screws A attaching the BOTTOM COVER.

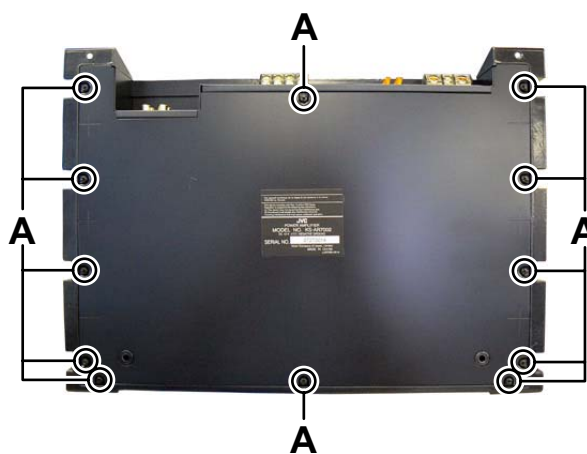


Fig.1

3.1.2 Removing the CROSSOVER BOARD assembly (See Fig.2, 3)

- (1) Remove the two screws **B** attaching the TOP COVER. (See Fig.2)
- (2) Remove the three knobs.
- (3) Disconnect the connector wire from CROSSOVER BOARD assembly connected to connector **CON1** of the MAIN BOARD assembly. (See Fig.3)
- (4) Remove the two screws **C** attaching the CROSSOVER BOARD assembly. (See Fig.3)



Fig.2

3.1.3 Removing the LED BOARD assembly (See Fig.3)

- (1) Disconnect the connector wire from LED BOARD assembly connected to connector **CON2** of the MAIN BOARD assembly.
- (2) Remove the one screw **D** attaching the LED BOARD assembly.

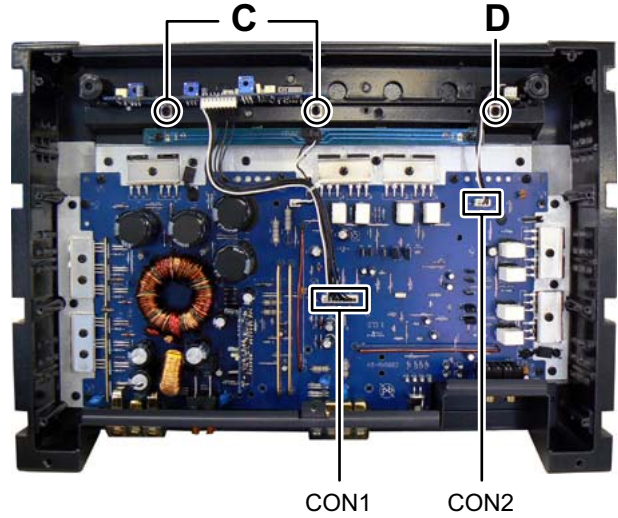


Fig.3

3.1.4 Removing the ILLUMINATOR LED BOARD assembly (See Fig.4)

- (1) Disconnect the connector wire from ILLUMINATOR LED BOARD assembly connected to connector **CON3** of the MAIN BOARD assembly.
- (2) Remove the two screws **E** attaching the ILLUMINATOR LED BOARD assembly.

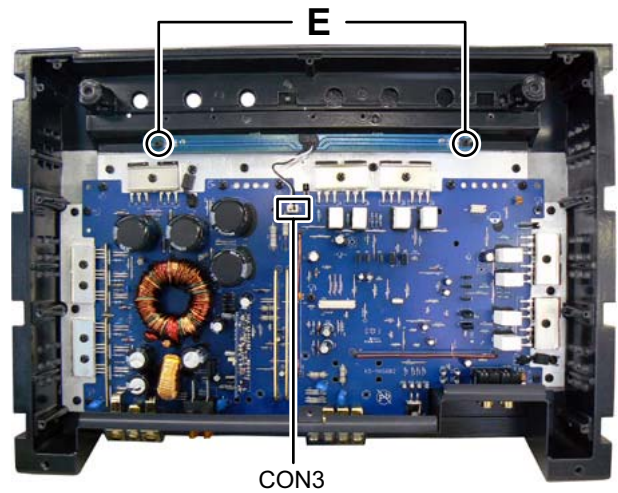


Fig.4

3.1.5 Removing the MAIN BOARD assembly (See Fig.5, 6)

- (1) Remove the five screws **F** and one screw **G** attaching the BACK PANEL. (See Fig.5)
- (2) Remove the nine screws **H** attaching the TRANSISTOR BRACKET. (See Fig.6)
- (3) Remove the two screws **J** attaching the THERMISTOR. (See Fig.6)
- (4) Remove the nine screws **K** and one screw **L** attaching the MAIN BOARD assembly. (See Fig.6)

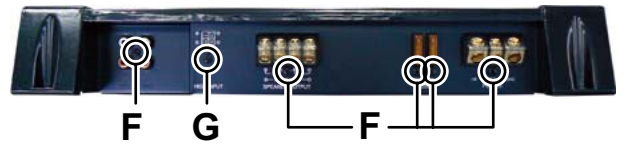


Fig.5

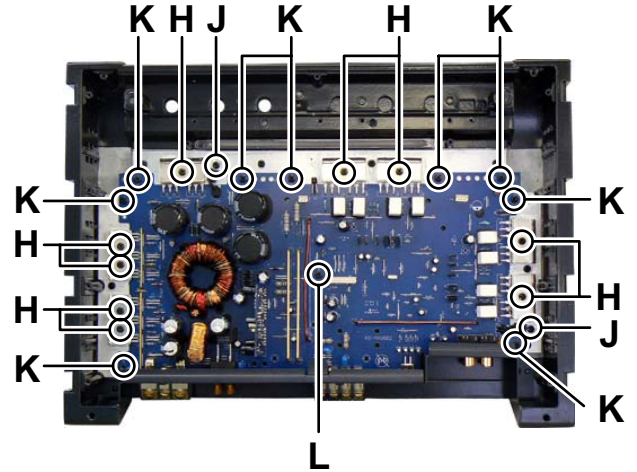


Fig.6

SECTION 4 ADJUSTMENT

This service manual does not describe ADJUSTMENT.

SECTION 5 TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.



JVC

Victor company of Japan, Limited
Mobile Entertainment Business Group Mobile Entertainment Category 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA347)

PARTS LIST

KS-AR7002J,KS-AX5602E,KS-AX5602U

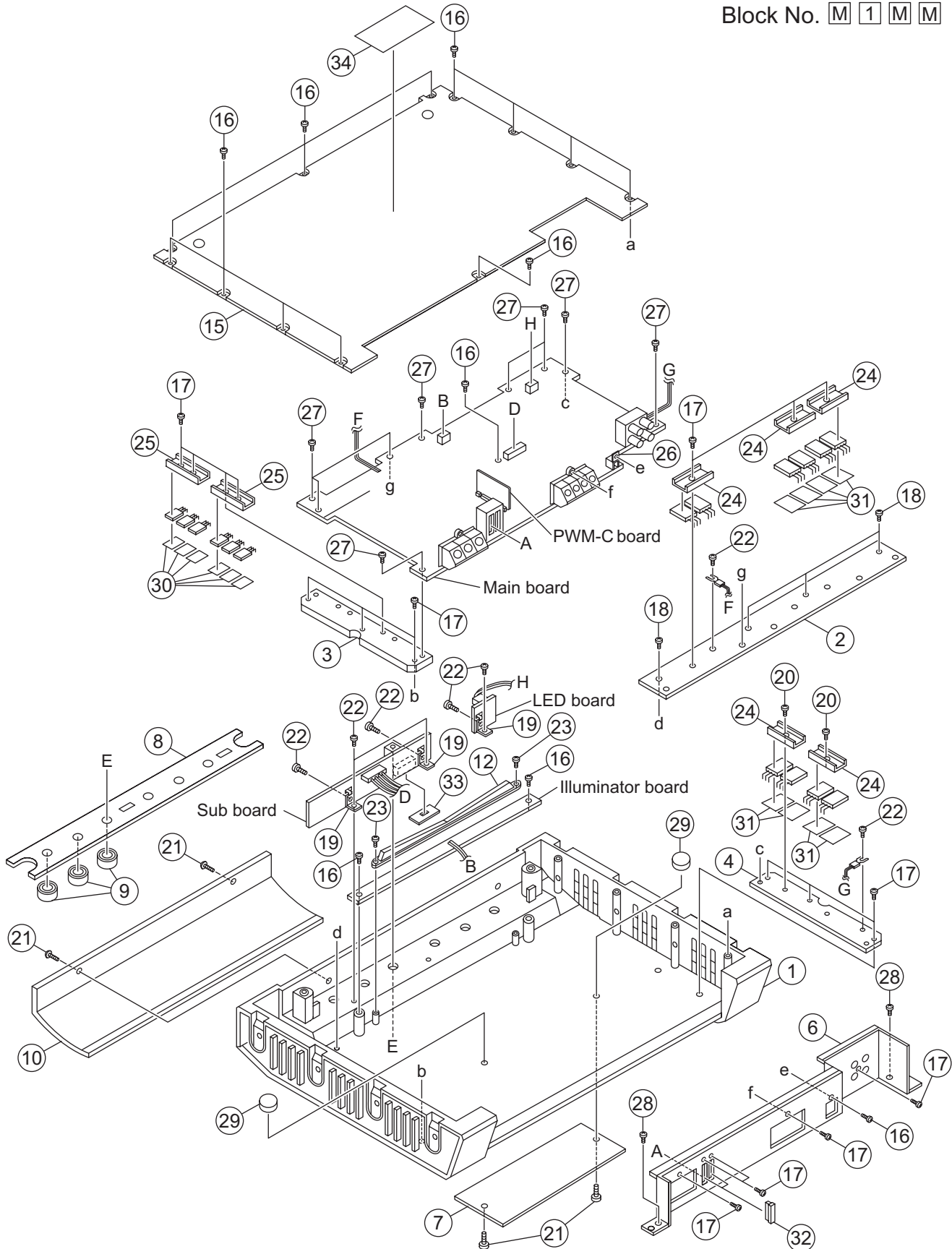
* All printed circuit boards and its assemblies are not available as service parts.

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Electrical parts list (Block No.01~03)	3-4
Packing materials and accessories parts list (Block No.M3)	3-8

Exploded view of general assembly and parts list

Block No. M 1 M M



The parts without symbol number are not service.

General Assembly

Block No. [M][1][M][M]

△	Symbol No.	Part No.	Part Name	Description	Local
	1	QH700233Z	MAIN DIECASTING		
	2	QH700234Z	SUB HEAT SINK		
	3	QH700235Z	SUB HEAT SINK		
	4	QH700236Z	SUB HEAT SINK		
	6	QP700362Z	BACK PANNEL		
	7	QD700038Z	BADGE		AR7002J
	7	QD700037Z	BADGE		AX5602E,AX5602U
	8	QO400029P	TOP CONT SHEET		AR7002J
	8	QO400025P	TOP CONT SHEET		AX5602E,AX5602U
	9	QK700035Z	VOLUME KNOB	(x3)	
	10	QD700035Z	TOP COVER		
	12	QD700036Z	ILLUMINATOR		
	15	QP700366Z	BOTTOM COVER		
	16	QS700060Z	SCREW	3X6 T/B(x16)	
	17	QS700089Z	SCREW	3X10 T/B(x18)	
	18	QS700058Z	SCREW	3X8 T/B(x4)	
	19	QB700092Z	TOP BRACKET	(x3)	
	20	QS700055Z	SCREW	3X12 T/B(x2)	
	21	QS700081Z	WRENCH SCREW	4X8 M/B(x4)	
	22	QS700065Z	SCREW	3X4 T/B(x8)	
	23	QS700069Z	SCREW	2X6 T/B(x2)	
	24	QB700060Z	TR BRACKET	(x5)	
	25	QB700054Z	TR BRACKET	(x2)	
	26	QB700091Z	HI INPUT BKT		
	27	QS700082Z	SCREW	3X5 T/B(x9)	
	28	QS700083Z	SCREW	3X6 T/B(x2)	
	29	QS700025Z	RUBBER	(x2)	
	30	QN700023Z	MAICA	(x6)	
	31	QN700024Z	MAICA	(x8)	
△	32	HU500005H	FUSE	LITTLE 40A(x2)	
	33	QF700001Z	SWITH COVER		
	34	LV37585-001A	NAME PLATE		AR7002J
	34	LV37586-001A	NAME PLATE		AX5602E,AX5602U

Electrical parts list

Main board

Block No. [0][1]				
△ Symbol No.	Part No.	Part Name	Description	Local
ICF1	HI300006C	IC	NJM 2068(M)	
ICF3	HI300006C	IC	NJM 2068(M)	
AB5	KSA1220Y	TRANSISTOR	HT500006H	
FET1	FQP65N06	F.E.T	HT500030H	
FET2	FQP65N06	F.E.T	HT500030H	
FET3	FQP65N06	F.E.T	HT500030H	
FET4	FQP65N06	F.E.T	HT500030H	
FET5	FQP65N06	F.E.T	HT500030H	
FET6	FQP65N06	F.E.T	HT500030H	
QA1	KTC3200GRAT	TRANSISTOR	HT200011R	
QA2	KTC1027	TRANSISTOR	HT200019R	
QA3	KTC1027	TRANSISTOR	HT200019R	
QA4	KTC1027	TRANSISTOR	HT200019R	
QA5	KSA1220Y	TRANSISTOR	HT500006H	
QA6	KSA1220Y	TRANSISTOR	HT500006H	
QA7	KTC3875YRTF	TRANSISTOR	HT300004C	
QA8	IRFP240	F.E.T	HT500031H	
QA9	IRFP240	F.E.T	HT500031H	
QA10	IRFP240	F.E.T	HT500031H	
QA11	IRFP240	F.E.T	HT500031H	
QB1	KTC3200GRAT	TRANSISTOR	HT200011R	
QB2	KTC1027	TRANSISTOR	HT200019R	
QB3	KTC1027	TRANSISTOR	HT200019R	
QB4	KTC1027	TRANSISTOR	HT200019R	
QB5	KSA1220Y	TRANSISTOR	HT500006H	
QB6	KSA1220Y	TRANSISTOR	HT500006H	
QB7	KTC3875YRTF	TRANSISTOR	HT300004C	
QB8	IRFP240	F.E.T	HT500031H	
QB9	IRFP240	F.E.T	HT500031H	
QB10	IRFP240	F.E.T	HT500031H	
QB11	IRFP240	F.E.T	HT500031H	
QM1	KRC102SRTKP	TRANSISTOR	HT300007C	
QM2	KTC3875YRTF	TRANSISTOR	HT300004C	
QM3	KTC4373YRTF	TRANSISTOR	HT300003C	
QM4	DTB114ESTP	TRANSISTOR	HT200003R	
QP1	KTC3875YRTF	TRANSISTOR	HT300004C	
QP2	KTA1661YRTF	TRANSISTOR	HT300002C	
QP3	KTA1661YRTF	TRANSISTOR	HT300002C	
QP4	KTA1661YRTF	TRANSISTOR	HT300002C	
QT1	KRC102SRTKP	TRANSISTOR	HT300007C	
D1	MC2838	DIODE	HD301008C	
D1	or KDS184	DIODE	HD301008C	
D2	MC2836	DIODE	HD301007C	
D2	or KDS181	DIODE	HD301007C	
D3	MC2838	DIODE	HD301008C	
D3	or KDS184	DIODE	HD301008C	
D4	MC2836	DIODE	HD301007C	
D4	or KDS181	DIODE	HD301007C	
D5	MC2838	DIODE	HD301008C	
D5	or KDS184	DIODE	HD301008C	
D6	MC2836	DIODE	HD301007C	
D6	or KDS181	DIODE	HD301007C	
DA1	1N4148	DIODE	HD100005A	
DA3	1SR156-400	DIODE	HD301005C	
DA4	1SR156-400	DIODE	HD301005C	
DA5	1N4148	DIODE	HD100005A	
DA6	1N4148	DIODE	HD100005A	
DA7	1SR156-400	DIODE	HD301005C	
DA8	1SR156-400	DIODE	HD301005C	
DA9	1N4148	DIODE	HD100005A	
DB1	1N4148	DIODE	HD100005A	
DB3	1SR156-400	DIODE	HD301005C	
DB4	1SR156-400	DIODE	HD301005C	
DB5	1N4148	DIODE	HD100005A	
DB6	1N4148	DIODE	HD100005A	
DB7	1SR156-400	DIODE	HD301005C	
DB8	1SR156-400	DIODE	HD301005C	
DB9	1N4148	DIODE	HD100005A	
DM1	1N4148	DIODE	HD100005A	
DP1	URF1020C	RECTIFIER DIODE	HD500006H	

△ Symbol No.	Part No.	Part Name	Description	Local
DP2	P4KE	DIODE	HD100006A	
DP3	FR104	DIODE	HD100003A	
DP4	FMG32S	RECTIFIER DIODE	HD500010H	
DP5	FMG32R	RECTIFIER DIODE	HD500009H	
DP6	1N4148	DIODE	HD100005A	
DP7	1N4148	DIODE	HD100005A	
DR1	1N4148	DIODE	HD100005A	
DR2	1N4148	DIODE	HD100005A	
DX1	FR104	DIODE	HD100003A	
DX2	FR104	DIODE	HD100003A	
DX3	FR104	DIODE	HD100003A	
DX4	FR104	DIODE	HD100003A	
LED1A	HL500003H	LED	3PHI BLUE	
LED2A	HL500003H	LED	3PHI BLUE	
LEDA2	HL500003H	LED	3PHI BLUE	
LEDS1	HL500010H	LED	3PHI G/R 2COLOR	
ZD1	1W15V	Z DIODE	HD104007A	
ZD2	1W15V	Z DIODE	HD104007A	
ZDR1	1W43V	Z DIODE	HD104010A	
ZDR2	1W43V	Z DIODE	HD104010A	
C1	HC202008R	E CAPACITOR	16V 220uF	
CA1	HC202006R	E CAPACITOR	16V 47uF	
CA2	HC300010C	CHIP CAPACITOR	2012 560P	
CA3	HC202007R	E CAPACITOR	16V 100uF	
CA4	HC300004C	CHIP CAPACITOR	2012 102	
CA5	HC300012C	CHIP CAPACITOR	2012 473	
CA6	HC202029R	E CAPACITOR	16V 470uF	
CA7	HC300001C	CHIP CERAMIC	2012 68P	
CA8	HC206015R	MYLAR CAPACITOR	104J 100V (104)	
CA9	HC300002C	CHIP CAPACITOR	2012 100P	
CB1	HC202006R	E CAPACITOR	16V 47uF	
CB2	HC300010C	CHIP CAPACITOR	2012 560P	
CB3	HC202007R	E CAPACITOR	16V 100uF	
CB4	HC300004C	CHIP CAPACITOR	2012 102	
CB5	HC300012C	CHIP CAPACITOR	2012 473	
CB6	HC202029R	E CAPACITOR	16V 470uF	
CB7	HC300001C	CHIP CERAMIC	2012 68P	
CB8	HC206015R	MYLAR CAPACITOR	104J 100V (104)	
CB9	HC300002C	CHIP CAPACITOR	2012 100P	
CF1A	HC202004R	E CAPACITOR	16V 10uF	
CF1B	HC202004R	E CAPACITOR	16V 10uF	
CF2A	HC202004R	E CAPACITOR	16V 10uF	
CF2B	HC202004R	E CAPACITOR	16V 10uF	
CF3A	HC300002C	CHIP CAPACITOR	2012 100P	
CF3B	HC300002C	CHIP CAPACITOR	2012 100P	
CF4A	HC300002C	CHIP CAPACITOR	2012 100P	
CF4B	HC300002C	CHIP CAPACITOR	2012 100P	
CF5A	HC202005R	E CAPACITOR	16V 22uF	
CF5B	HC202005R	E CAPACITOR	16V 22uF	
CF6A	HC202005R	E CAPACITOR	16V 22uF	
CF6B	HC202005R	E CAPACITOR	16V 22uF	
CFS2	HC202006R	E CAPACITOR	16V 47uF	
CFS3	HC202006R	E CAPACITOR	16V 47uF	
CG1	HC206015R	MYLAR CAPACITOR	104J 100V (104)	
CG2	HC200015R	CERAMIC	103	
CG3	HC200019R	CERAMIC	563	
CG4	HC200008R	CERAMIC	220P	
CG5	HC200008R	CERAMIC	220P	
CH1	HC300002C	CHIP CAPACITOR	2012 100P	
CH2	HC300002C	CHIP CAPACITOR	2012 100P	
CH3	HC300002C	CHIP CAPACITOR	2012 100P	
CH4	HC300002C	CHIP CAPACITOR	2012 100P	
CHS4	HC300007C	CHIP CAPACITOR	2012 104	
CHS5	HC300007C	CHIP CAPACITOR	2012 104	
CK1	HC305003C	CHIP CAPACITOR	3216 25V 1.5uF	
CK2	HC202006R	E CAPACITOR	16V 47uF	
CK4	HC206004R	MYLAR CAPACITOR	472J100V (472)	
CK5	HC206004R	MYLAR CAPACITOR	472J100V (472)	
CK6	HC300007C	CHIP CAPACITOR	2012 104	
CM1	HC202006R	E CAPACITOR	16V 47uF	
CM2	HC202007R	E CAPACITOR	16V 100uF	
CP1	HC300007C	CHIP CAPACITOR	2012 104	
CP2	HC300014C	CHIP CAPACITOR	2012 224	
CP3	HC206015R	MYLAR CAPACITOR	104J 100V (104)	
CP4	HC202028R	E CAPACITOR	25V 220uF	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
CP5	HC205011R	METAL CAPACITOR	100nJ 100V (104)		RB19	HR300020C	CHIP RESISTOR	2012 47 KΩ	
CP6	HC300008C	CHIP CAPACITOR	2012 222		RB20	HR108002A	M.O RESISTOR	1W 4.7 Ω	
CP7	HC300007C	CHIP CAPACITOR	2012 104		RB21	HR103064A	C.F RESISTOR	1/4W 1.2 KΩ1%	
CP8	HC202024R	E CAPACITOR	35V 47uF		RB22	HR103013A	C.F RESISTOR	1/4W 100 Ω1%	
CP9	HC300014C	CHIP CAPACITOR	2012 224		RB23	HR103013A	C.F RESISTOR	1/4W 100 Ω1%	
CP13	HC500004H	E CAPACITOR	35V 680uF		RB24	HR103013A	C.F RESISTOR	1/4W 100 Ω1%	
CP14	HC500004H	E CAPACITOR	35V 680uF		RB25	HR103013A	C.F RESISTOR	1/4W 100 Ω1%	
CP15	HC202029R	E CAPACITOR	16V 470uF		RB26	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)	
CP16	HC202029R	E CAPACITOR	16V 470uF		RB27	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)	
CP17	HC500018H	E CAPACITOR	16V 3300uF		RB28	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)	
CP18	HC500018H	E CAPACITOR	16V 3300uF		RB29	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)	
CP19	HC500018H	E CAPACITOR	16V 3300uF		RB30	HR300006C	CHIP RESISTOR	2012 100 KΩ	
CP20	HC300014C	CHIP CAPACITOR	2012 224		RB31	HR300006C	CHIP RESISTOR	2012 100 KΩ	
CP21	HC300008C	CHIP CAPACITOR	2012 222		RB32	HR300006C	CHIP RESISTOR	2012 100 KΩ	
CP22	HC500023H	E CAPACITOR	50V 4700uF		RB33	HR300006C	CHIP RESISTOR	2012 100 KΩ	
CP23	HC500023H	E CAPACITOR	50V 4700uF		RB221	HR103064A	C.F RESISTOR	1/4W 1.2 KΩ1%	
CP24	HC500023H	E CAPACITOR	50V 4700uF		RE1	HR300052C	CHIP RESISTOR	2012 1 KΩ1%	
CP25	HC500023H	E CAPACITOR	50V 4700uF		RE2	HR300052C	CHIP RESISTOR	2012 1 KΩ1%	
CPX21	HC300014C	CHIP CAPACITOR	2012 224		RF1A	HR300012C	CHIP RESISTOR	2012 22 KΩ	
CU1	HC300007C	CHIP CAPACITOR	2012 104		RF1B	HR300012C	CHIP RESISTOR	2012 22 KΩ	
CU2	HC300007C	CHIP CAPACITOR	2012 104		RF2A	HR300012C	CHIP RESISTOR	2012 22 KΩ	
JA1	HR300031C	CHIP RESISTOR	2012 0 Ω		RF2B	HR300012C	CHIP RESISTOR	2012 22 KΩ	
JB1	HR300031C	CHIP RESISTOR	2012 0 Ω		RF3A	HR300012C	CHIP RESISTOR	2012 22 KΩ	
JS4	HR300031C	CHIP RESISTOR	2012 0 Ω		RF3B	HR300012C	CHIP RESISTOR	2012 22 KΩ	
R1	HR300019C	CHIP RESISTOR	2012 4.7 KΩ		RF4A	HR300012C	CHIP RESISTOR	2012 22 KΩ	
R1A	HR300048C	CHIP RESISTOR	2012 560 Ω		RF4B	HR300012C	CHIP RESISTOR	2012 22 KΩ	
RA2	HR305008C	CHIP RESISTOR	3216 4.7 KΩ		RF5A	HR305017C	CHIP RESISTOR	3216 2.2 KΩ	
RA3	HR305017C	CHIP RESISTOR	3216 2.2 KΩ		RF5B	HR305017C	CHIP RESISTOR	3216 2.2 KΩ	
RA4	HR305014C	CHIP RESISTOR	3216 620 Ω		RF6A	HR107064A	C.F RESISTOR	1/8W 100 KΩ1%	
RA5	HR305016C	CHIP RESISTOR	3216 15 KΩ1%		RF6B	HR107064A	C.F RESISTOR	1/8W 100 KΩ1%	
RA6	HR305018C	CHIP RESISTOR	3216 39 KΩ		RF7A	HR107064A	C.F RESISTOR	1/8W 100 KΩ1%	
RA7	HR300019C	CHIP RESISTOR	2012 4.7 KΩ		RF7B	HR107064A	C.F RESISTOR	1/8W 100 KΩ1%	
RA8	HR305011C	CHIP RESISTOR	3216 4.99 KΩ1%		RF8A	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RA9	HR305011C	CHIP RESISTOR	3216 4.99 KΩ1%		RF8B	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RA10	HR305011C	CHIP RESISTOR	3216 4.99 KΩ1%		RH1	HR103051A	C.F RESISTOR	1/4W 47 KΩ1%	
RA11	HR305013C	CHIP RESISTOR	3216 60.4 Ω1%		RH2	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
RA12	HR305010C	CHIP RESISTOR	3216 470 Ω		RH3	HR103051A	C.F RESISTOR	1/4W 47 KΩ1%	
RA13	HR305013C	CHIP RESISTOR	3216 60.4 Ω1%		RH4	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
RA14	HR305021C	CHIP RESISTOR	3216 620 Ω1%		RK1	HR100002A	C.F RESISTOR	1/2W 10 Ω(Small)	
RA15	HR107019A	C.F RESISTOR	1/8W 820 Ω1%		RK2	HR100002A	C.F RESISTOR	1/2W 10 Ω(Small)	
RA16	HR107019A	C.F RESISTOR	1/8W 820 Ω1%		RK3	HR305001C	CHIP RESISTOR	3216 1 KΩ	
RA17	HR305015C	CHIP RESISTOR	3216 12 KΩ		RL1	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RA18	HR300020C	CHIP RESISTOR	2012 47 KΩ		RL2	HR300021C	CHIP RESISTOR	2012 470 Ω	
RA19	HR300020C	CHIP RESISTOR	2012 47 KΩ		RM1	HR300023C	CHIP RESISTOR	2012 5.6 KΩ	
RA20	HR108002A	M.O RESISTOR	1W 4.7 Ω		RM2	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RA21	HR103064A	C.F RESISTOR	1/4W 1.2 KΩ1%		RM3	HR300014C	CHIP RESISTOR	2012 220 KΩ	
RA22	HR103013A	C.F RESISTOR	1/4W 100 Ω1%		RM4	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RA23	HR103013A	C.F RESISTOR	1/4W 100 Ω1%		RM5	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RA24	HR103013A	C.F RESISTOR	1/4W 100 Ω1%		RP1	HR300012C	CHIP RESISTOR	2012 22 KΩ	
RA25	HR103013A	C.F RESISTOR	1/4W 100 Ω1%		RP2	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RA26	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)		RP3	HR300016C	CHIP RESISTOR	2012 3.3 KΩ	
RA27	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)		RP4	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RA28	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)		RP5	HR100009A	C.F RESISTOR	1/2W 4.7 Ω(Small)	
RA29	HR505001H	M.P.R	5W 0.1 Ω(R-TYPE)		RP6	HR103020A	C.F RESISTOR	1/4W 1 KΩ1%	
RA30	HR300006C	CHIP RESISTOR	2012 100 KΩ		RP7	HR108004A	M.O RESISTOR	1W 22 Ω(R-TYPE)	
RA31	HR300006C	CHIP RESISTOR	2012 100 KΩ		RP8	HR300021C	CHIP RESISTOR	2012 470 Ω	
RA32	HR300006C	CHIP RESISTOR	2012 100 KΩ		RP9	HR108005A	M.O RESISTOR	1W 33 Ω(R-TYPE)	
RA33	HR300006C	CHIP RESISTOR	2012 100 KΩ		RP11	HR103036A	C.F RESISTOR	1/4W 10 KΩ1%	
RA221	HR103064A	C.F RESISTOR	1/4W 1.2 KΩ1%		RP12	HR103036A	C.F RESISTOR	1/4W 10 KΩ1%	
RB1	HR305019C	CHIP RESISTOR	3216 560 Ω		RP13	HR108019A	M.O RESISTOR	1W 68 Ω	
RB2	HR305008C	CHIP RESISTOR	3216 4.7 KΩ		RP14	HR108019A	M.O RESISTOR	1W 68 Ω	
RB3	HR305017C	CHIP RESISTOR	3216 2.2 KΩ		RP15	HR300016C	CHIP RESISTOR	2012 3.3 KΩ	
RB4	HR305014C	CHIP RESISTOR	3216 620 Ω		RP16	HR107011A	C.F RESISTOR	1/8W 220 Ω1%	
RB5	HR305016C	CHIP RESISTOR	3216 15 KΩ1%		RP17	HR107011A	C.F RESISTOR	1/8W 220 Ω1%	
RB6	HR305018C	CHIP RESISTOR	3216 39 KΩ		RP18	HR103009A	C.F RESISTOR	1/4W 47 Ω1%	
RB7	HR300019C	CHIP RESISTOR	2012 4.7 KΩ		RP19	HR103009A	C.F RESISTOR	1/4W 47 Ω1%	
RB8	HR305011C	CHIP RESISTOR	3216 4.99 KΩ1%		RP20	HR103009A	C.F RESISTOR	1/4W 47 Ω1%	
RB9	HR305011C	CHIP RESISTOR	3216 4.99 KΩ1%		RP21	HR103009A	C.F RESISTOR	1/4W 47 Ω1%	
RB10	HR305011C	CHIP RESISTOR	3216 4.99 KΩ1%		RP22	HR103009A	C.F RESISTOR	1/4W 47 Ω1%	
RB11	HR305013C	CHIP RESISTOR	3216 60.4 Ω1%		RP23	HR103009A	C.F RESISTOR	1/4W 47 Ω1%	
RB12	HR305010C	CHIP RESISTOR	3216 470 Ω		RP24	HR500046H	M.O RESISTOR	2W 4.7KΩ(FORMING)	
RB13	HR305013C	CHIP RESISTOR	3216 60.4 Ω1%		RP25	HR500046H	M.O RESISTOR	2W 4.7KΩ(FORMING)	
RB14	HR305021C	CHIP RESISTOR	3216 620 Ω1%		RPS1	HR300023C	CHIP RESISTOR	2012 5.6 KΩ	
RB15	HR107019A	C.F RESISTOR	1/8W 820 Ω1%		RPS2	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RB16	HR107019A	C.F RESISTOR	1/8W 820 Ω1%		RR1	HR300021C	CHIP RESISTOR	2012 470 Ω	
RB17	HR305015C	CHIP RESISTOR	3216 12 KΩ		RR2	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RB18	HR300020C	CHIP RESISTOR	2012 47 KΩ		RS1A	HR300033C	CHIP RESISTOR	2012 100 Ω	
					RS1B	HR300033C	CHIP RESISTOR	2012 100 Ω	

Symbol No.	Part No.	Part Name	Description	Local
RU1	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
RU2	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
SE1	HR107023A	C.F RESISTOR	1/8W 1.5 KΩ1%	
SE2	HR107023A	C.F RESISTOR	1/8W 1.5 KΩ1%	
TRH1	HR300006C	CHIP RESISTOR	2012 100 KΩ	
L1	HO501201H-3	BEED	ATS 3550	
L2	HO501201H-3	BEED	ATS 3550	
L3	HO501201H-3	BEED	ATS 3550	
L4	HO501201H-3	BEED	ATS 3550	
CON1	HK502506H	WAFER	YMW 025-09P	
CON2	HK502504H	WAFER	YMW 025-03P	
CON3	HK502505H	WAFER	YMW 025-02P	
CON2-1	HE503026H	CONNECTOR WIRE	#26 3P 100M/M 2.5mm pitch	
CON3-1	HE503025H	CONNECTOR WIRE	#26 2P 80M/M 2.5mm pitch	
FUSE1	HH500007H	FUSE HOLD	BXS02-10	
HI1	HE503020H	HI INPUT	4P MOLD	
JP1	HJ502004H	JUMP PLATE	5P GOLD 15m/m pitch	
JP2	HJ502003H	JUMP PLATE	4P GOLD 15m/m pitch	
JP3	HO501201H-4	CUPPER WIRE	2PHI 90m/m (H= 15m/m)	
JP4	HO501201H-5	CUPPER WIRE	2PHI 100m/m (H= 15m/m)	
JP5	HO501201H-5	CUPPER WIRE	2PHI 100m/m (H= 15m/m)	
JP6	HO501201H-4	CUPPER WIRE	2PHI 90m/m (H= 15m/m)	
RCA1	HK501013H	RCA JACK	AV4-8 4-38 (R/W)	
RFC1	HO501201H-2	RFC	27PHI 11L 5T	
TER1	HM505017H	TERMINAL	WB03-33GDTH (MILKY)	
TER2	HM505019H	TERMINAL	WB04-34GDTH (MILKY)	
TH1	HR506004H	THERMISTOR	NTC5D-153H25-BK (MOLD)	
TH2	HR506004H	THERMISTOR	NTC5D-153H25-BK (MOLD)	
TRANS1	HO501201H-1	POWER TRANS	4916 5/16/8 T1=4T (4T/8T=7)	

Symbol No.	Part No.	Part Name	Description	Local
C9	HC300007C	CHIP CAPACITOR	2012 104	
C10	HC300007C	CHIP CAPACITOR	2012 104	
C11	HC300007C	CHIP CAPACITOR	2012 104	
CB1	HC300007C	CHIP CAPACITOR	2012 104	
CB2	HC300007C	CHIP CAPACITOR	2012 104	
CG1	HC300007C	CHIP CAPACITOR	2012 104	
CS1	HC202032R	E CAPACITOR	100V 10uF	
CS2	HC202007R	E CAPACITOR	16V 100uF	
CX1	HC300004C	CHIP CAPACITOR	2012 102	
R1	HR300003C	CHIP RESISTOR	2012 10 KΩ	
R2	HR300001C	CHIP RESISTOR	2012 1 KΩ	
R3	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
R4	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
R6	HR300004C	CHIP RESISTOR	2012 15 KΩ	
R7	HR300053C	CHIP RESISTOR	2012 20 KΩ	
R8	HR300022C	CHIP RESISTOR	2012 470 KΩ	
R9	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
R10	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
R11	HR300005C	CHIP RESISTOR	2012 18 KΩ	
R12	HR300017C	CHIP RESISTOR	2012 33 KΩ	
R13	HR300017C	CHIP RESISTOR	2012 33 KΩ	
R14	HR300021C	CHIP RESISTOR	2012 470 Ω	
R16	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
R19	HR300002C	CHIP RESISTOR	2012 1 MΩ	
R20	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
R21	HR300005C	CHIP RESISTOR	2012 18 KΩ	
R22	HR300026C	CHIP RESISTOR	2012 1 KΩ	
R23	HR300026C	CHIP RESISTOR	2012 1 KΩ	
RB1	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RB2	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RG1	HR300001C	CHIP RESISTOR	2012 1 KΩ	
RG2	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RG3	HR300016C	CHIP RESISTOR	2012 3.3 KΩ	
RG4	HR300025C	CHIP RESISTOR	2012 6.8 KΩ	
RG5	HR300025C	CHIP RESISTOR	2012 6.8 KΩ	
RG6	HR300025C	CHIP RESISTOR	2012 6.8 KΩ	
RG7	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RG8	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RS1	HR300011C	CHIP RESISTOR	2012 2.7 KΩ	
RS2	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS3	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RS4	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RS5	HR300003C	CHIP RESISTOR	2012 10 KΩ	

PWM-C board

Block No. [0][2]

Symbol No.	Part No.	Part Name	Description	Local
IC1	HI500005H	IC	KIA494AF	
IC2	HI300002C	IC	NJM2904M	
IC3	HI300002C	IC	NJM2904M	
QB1	KTC4373YRTF	TRANSISTOR	HT300003C	
QB2	KTC3875YRTF	TRANSISTOR	HT300004C	
QB3	KTC3875YRTF	TRANSISTOR	HT300004C	
QS1	KTA1661YRTF	TRANSISTOR	HT300002C	
D1	LL4148	SWITCH DIODE	HD300001C	
D2	LL4148	SWITCH DIODE	HD300001C	
D3	LL4148	SWITCH DIODE	HD300001C	
D4	LL4148	SWITCH DIODE	HD300001C	
DB1	LL4148	SWITCH DIODE	HD300001C	
DG1	LL4148	SWITCH DIODE	HD300001C	
DG2	LL4148	SWITCH DIODE	HD300001C	
DS1	LL4148	SWITCH DIODE	HD300001C	
DS2	LL4148	SWITCH DIODE	HD300001C	
ZG1	HD301004C	Z DIODE	201215V	
ZG2	HD301003C	Z DIODE	20126.2V	
C1	HC202007R	E CAPACITOR	16V 100uF	
C2	HC202007R	E CAPACITOR	16V 100uF	
C3	HC202007R	E CAPACITOR	16V 100uF	
C4	HC202001R	E CAPACITOR	50V 0.1uF	
C6	HC205001R	TF CAPACITOR	102	
C7	HC205004R	METAL CAPACITOR	47nJ 100V (473)	
C8	HC300007C	CHIP CAPACITOR	2012 104	

PIN1	HK502502H	WAFER	FAU0640-06P
PIN2	HK502503H	WAFER	FAU0640-07P
PIN3	HK502501H	WAFER	FAU0640-03P

Sub1 board

Block No. [0][3]

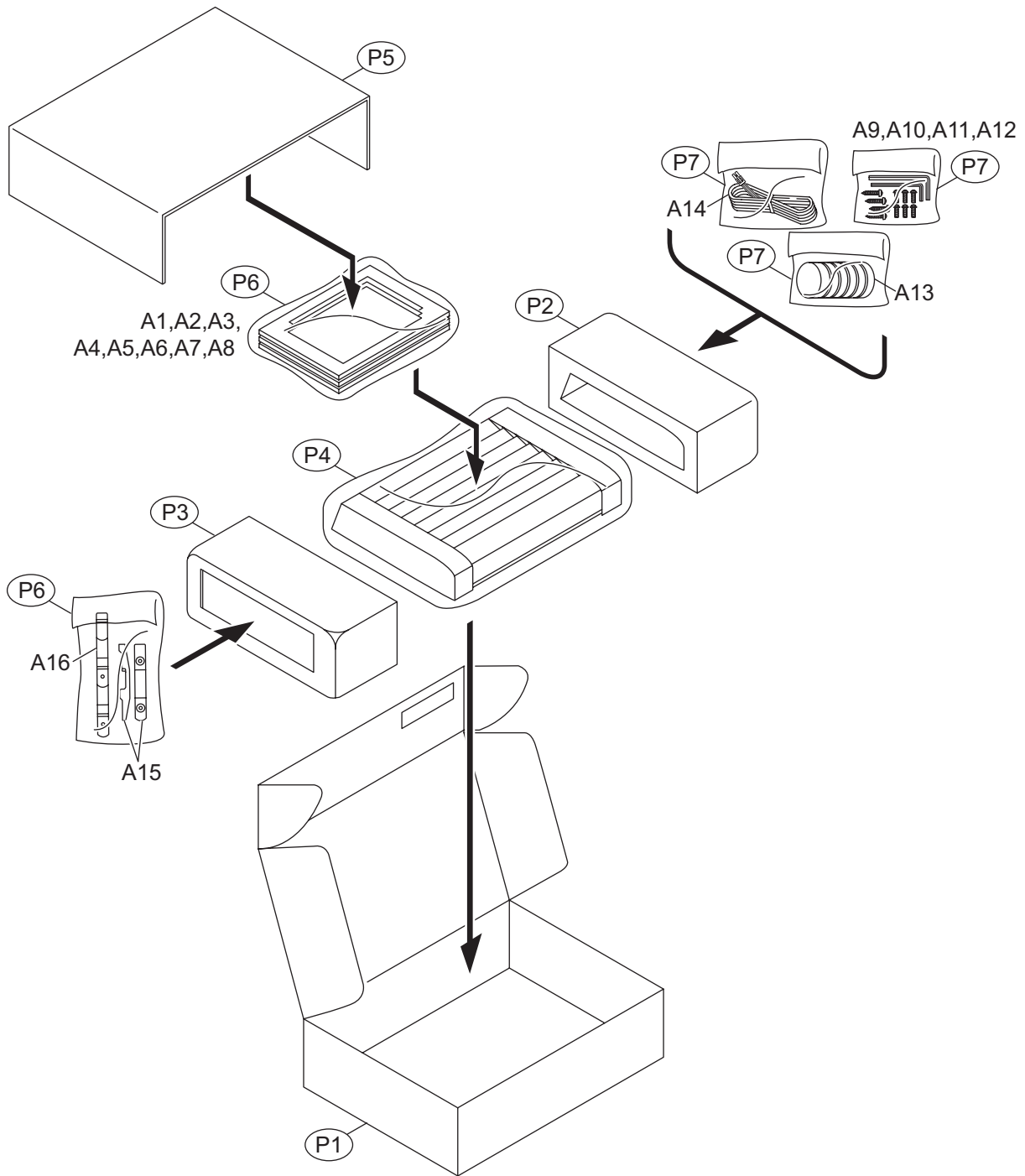
Symbol No.	Part No.	Part Name	Description	Local
ICF5	HI300006C	IC	NJM 2068(M)	
ICF6	HI300006C	IC	NJM 2068(M)	
ICF7	HI300006C	IC	NJM 2068(M)	
ICS1	HI300006C	IC	NJM 2068(M)	
ICS2	HI300006C	IC	NJM 2068(M)	
ICS3	HI300006C	IC	NJM 2068(M)	
ICS4	HI300006C	IC	NJM 2068(M)	
ICS5	HI300006C	IC	NJM 2068(M)	
ICS6	HI300006C	IC	NJM 2068(M)	
ICS7	HI300006C	IC	NJM 2068(M)	
ICX1	HI300006C	IC	NJM 2068(M)	
CF7A	HC300015C	CHIP CAPACITOR	2012 47P	
CF7B	HC300015C	CHIP CAPACITOR	2012 47P	
CF8A	HC300004C	CHIP CAPACITOR	2012 102	
CF8B	HC300004C	CHIP CAPACITOR	2012 102	
CF9A	HC202002R	E CAPACITOR	50V 2.2uF	
CF9B	HC202002R	E CAPACITOR	50V 2.2uF	
CF10A	HC205011R	METAL CAPACITOR	100nJ 100V (104)	
CF10B	HC205011R	METAL CAPACITOR	100nJ 100V (104)	

△ Symbol No.	Part No.	Part Name	Description	Local
CS1	HC202006R	E CAPACITOR	16V 47uF	
CS2	HC202006R	E CAPACITOR	16V 47uF	
CS1A	HC300015C	CHIP CAPACITOR	2012 47P	
CS1B	HC300015C	CHIP CAPACITOR	2012 47P	
CS2A	HC205013R	METAL CAPACITOR	82nJ 100V (823)	
CS2B	HC205013R	METAL CAPACITOR	82nJ 100V (823)	
CS3A	HC205013R	METAL CAPACITOR	82nJ 100V (823)	
CS3B	HC205013R	METAL CAPACITOR	82nJ 100V (823)	
CS4A	HC205013R	METAL CAPACITOR	82nJ 100V (823)	
CS4B	HC205013R	METAL CAPACITOR	82nJ 100V (823)	
CS5A	HC305002C	CHIP CAPACITOR	3216 224	
CS5B	HC305002C	CHIP CAPACITOR	3216 224	
CS6A	HC305002C	CHIP CAPACITOR	3216 224	
CS6B	HC305002C	CHIP CAPACITOR	3216 224	
JS1	HR300031C	CHIP RESISTOR	2012 0 Ω	
RF9A	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RF9B	HR300010C	CHIP RESISTOR	2012 2.2 KΩ	
RF10A	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RF10B	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RF11A	HE503075H	CHIP RESISTOR	2012 68 KΩ	
RF11B	HE503075H	CHIP RESISTOR	2012 68 KΩ	
RF12A	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RF12B	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RF13A	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RF13B	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RF14A	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RF14B	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RF15A	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RF15B	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RF16A	HR300021C	CHIP RESISTOR	2012 470 Ω	
RF16B	HR300021C	CHIP RESISTOR	2012 470 Ω	
RF17A	HR300037C	CHIP RESISTOR	2012 120 KΩ1%	
RF17B	HR300037C	CHIP RESISTOR	2012 120 KΩ1%	
RS1	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS2A	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RS2B	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RS3A	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS3B	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS4A	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS4B	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS5A	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS5B	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS6A	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RS6B	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RS7A	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RS7B	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RS8A	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RS8B	HR300041C	CHIP RESISTOR	2012 3.9 KΩ	
RS9A	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS9B	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS10A	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RS10B	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RS11A	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RS11B	HR300019C	CHIP RESISTOR	2012 4.7 KΩ	
RS12A	HE503075H	CHIP RESISTOR	2012 68 KΩ	
RS12B	HE503075H	CHIP RESISTOR	2012 68 KΩ	
RS13A	HR300049C	CHIP RESISTOR	2012 56 KΩ	
RS13B	HR300049C	CHIP RESISTOR	2012 56 KΩ	
RS14A	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS14B	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS15A	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS15B	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RS16A	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RS16B	HR300020C	CHIP RESISTOR	2012 47 KΩ	
RS17A	HR300054C	CHIP RESISTOR	2012 22 Ω	
RS17B	HR300054C	CHIP RESISTOR	2012 22 Ω	
RX1	HR300003C	CHIP RESISTOR	2012 10 KΩ	
RX2	HR300003C	CHIP RESISTOR	2012 10 KΩ	
VR1	HV500048H	VOLUME	V09M 3B20KX2 (S=10mm)NEW	
VR2	HV500049H	VOLUME	V09M 15C10KX2 (S=10mm)NEW	
CON1-1	HE503027H	CONNECTOR WIRE	#26 9P 210M/M 2.5mm pitch	
SW1	HW501012H	SWITCH	KSA2342T (9)	
VRS1	HV500052H	VOLUME	V09M 15C50KX6 (S=10mm)NEW	

Packing materials and accessories parts list

Block No. **M** **3** **M** **M**

No additional / supplemental order of WARRANTY CARDS are available.



The parts without symbol number are not service.

Packing and Accessories

Block No. [M][3][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
A 1	LVT1700-001A	INST BOOK	ENG FRE	AR7002J
A 1	LVT1697-001A	INST BOOK	ENG FRE	AX5602E,AX5602U
A 2	LVT1700-002A	INST BOOK	SPA	AR7002J
A 2	LVT1697-002A	INST BOOK	SPA	AX5602E
A 2	LVT1697-006A	INST BOOK	CHI THA	AX5602U
A 3	LVT1697-003A	INST BOOK	GER ITA	AX5602E
A 3	LVT1697-007A	INST BOOK	ARA PER	AX5602U
A 4	LVT1697-004A	INST BOOK	DUT SWE	AX5602E
A 5	LVT1697-005A	INST BOOK	RUS UKR	AX5602E
A 6	-----	WARRANTY CARD	BT-51029-3	AR7002J
A 6	-----	WARRANTY CARD	BT-54031-1	AX5602E
A 7	-----	WARRANTY CARD	BT-52006-2	AR7002J
A 8	BT-51041-1	REGIS. CARD		AR7002J
A 9	QS700021Z	L WRENCH		
A 10	QS700022Z	L WRENCH		
A 11	QS700043Z	SCREW	(x4)	
A 12	QS700051Z	SCREW	(x6)	
A 13	QS700025Z	RUBBER	(x6)	
A 14	HE503024H	HI INPUT TAP	#20 4P 200m/m(WHITE/GRAY)	
A 15	QS700023Z	S TPYE BRACKET	(x2)	
A 16	QS700024Z	L TPYE BRACKET		
P 1	LV37736-001A	CARTON		AR7002J
P 1	LV37686-005A	CARTON		AX5602E,AX5602U
P 2	LV22528-002A	POLY FOAM	R	
P 3	LV22528-001A	POLY FOAM	L	
P 4	QO400010P	POLY BAG	FOR AMP	
P 5	QC400325P	CARTON PAD		
P 6	QO400015P	POLY BAG	FOR BOOKLET BAG/PARTS BAG-4(x2)	
P 7	QO400014P	POLY BAG	FOR PARTS BAG1-3(x3)	

JVC

SCHEMATIC DIAGRAMS

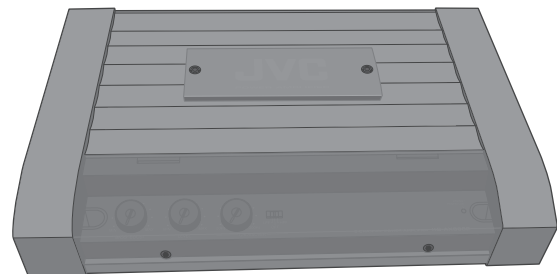
POWER AMPLIFIER

KS-AR7002J,KS-AX5602E,KS-AX5602U

CD-ROM No.SML200708



KS-AR7002



KS-AX5602

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

Contents

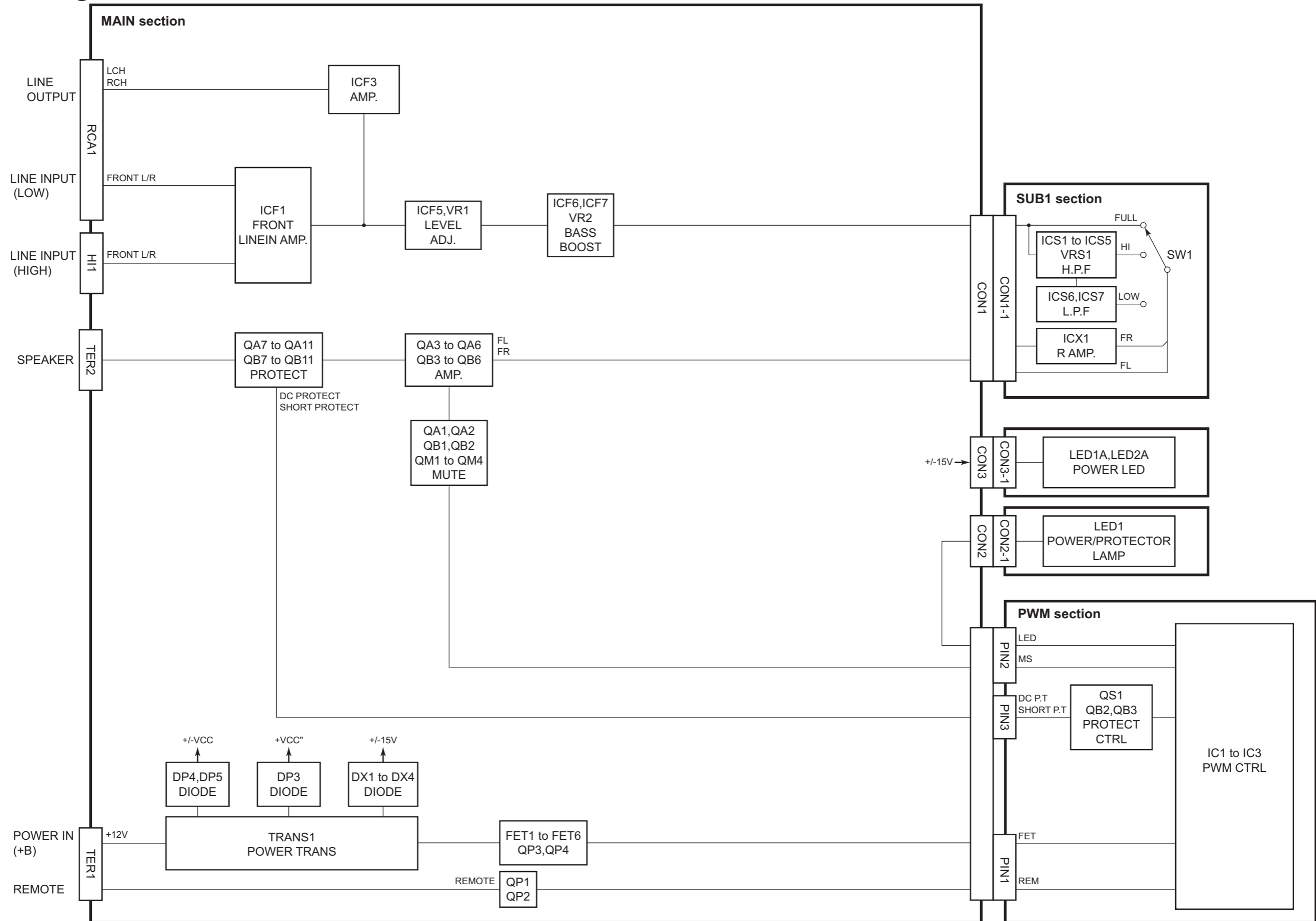
Block diagram	2-1
Standard schematic diagrams	2-2
Printed circuit boards	2-5 to 6

Safety precaution



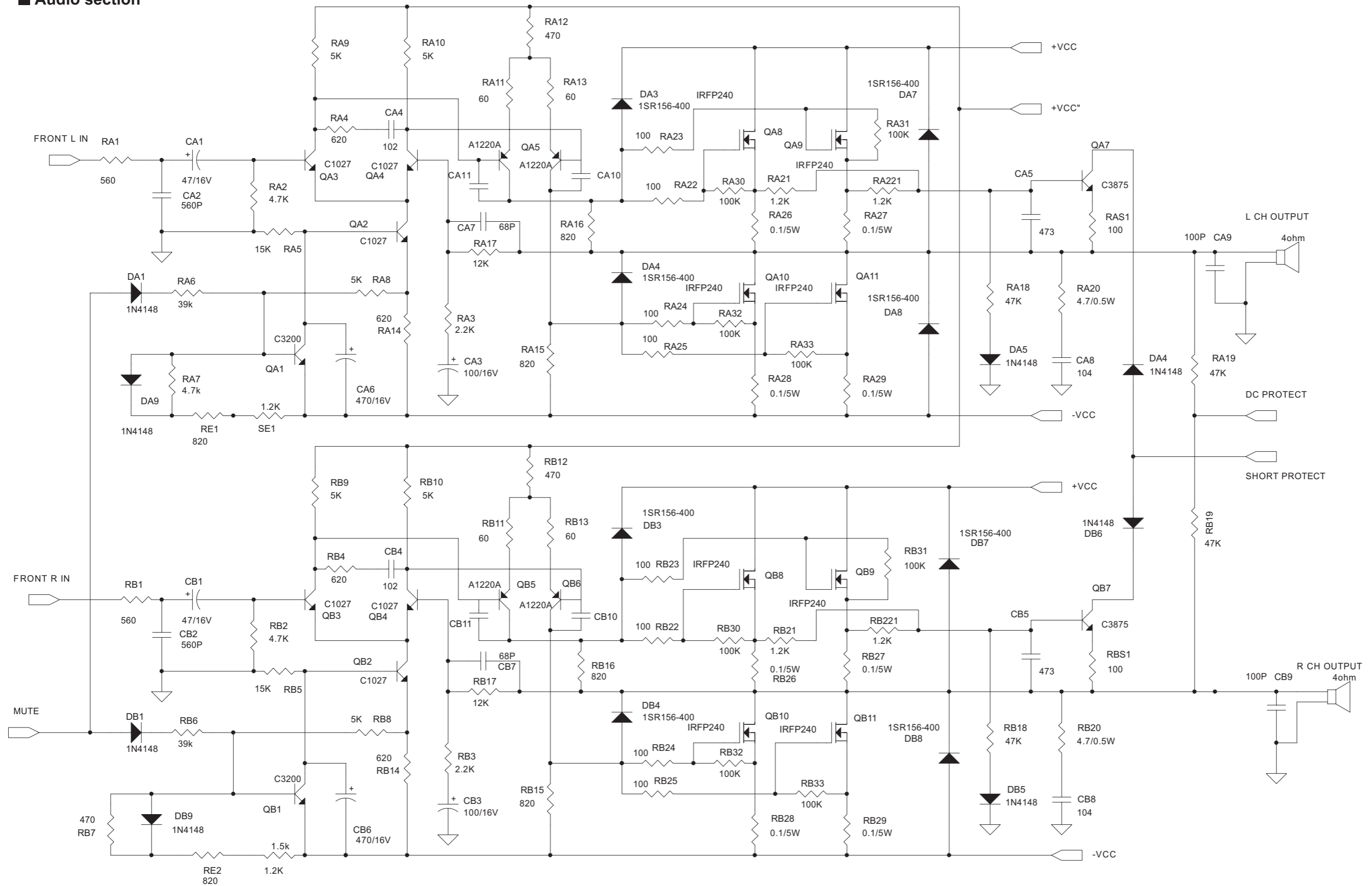
CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

Block diagram

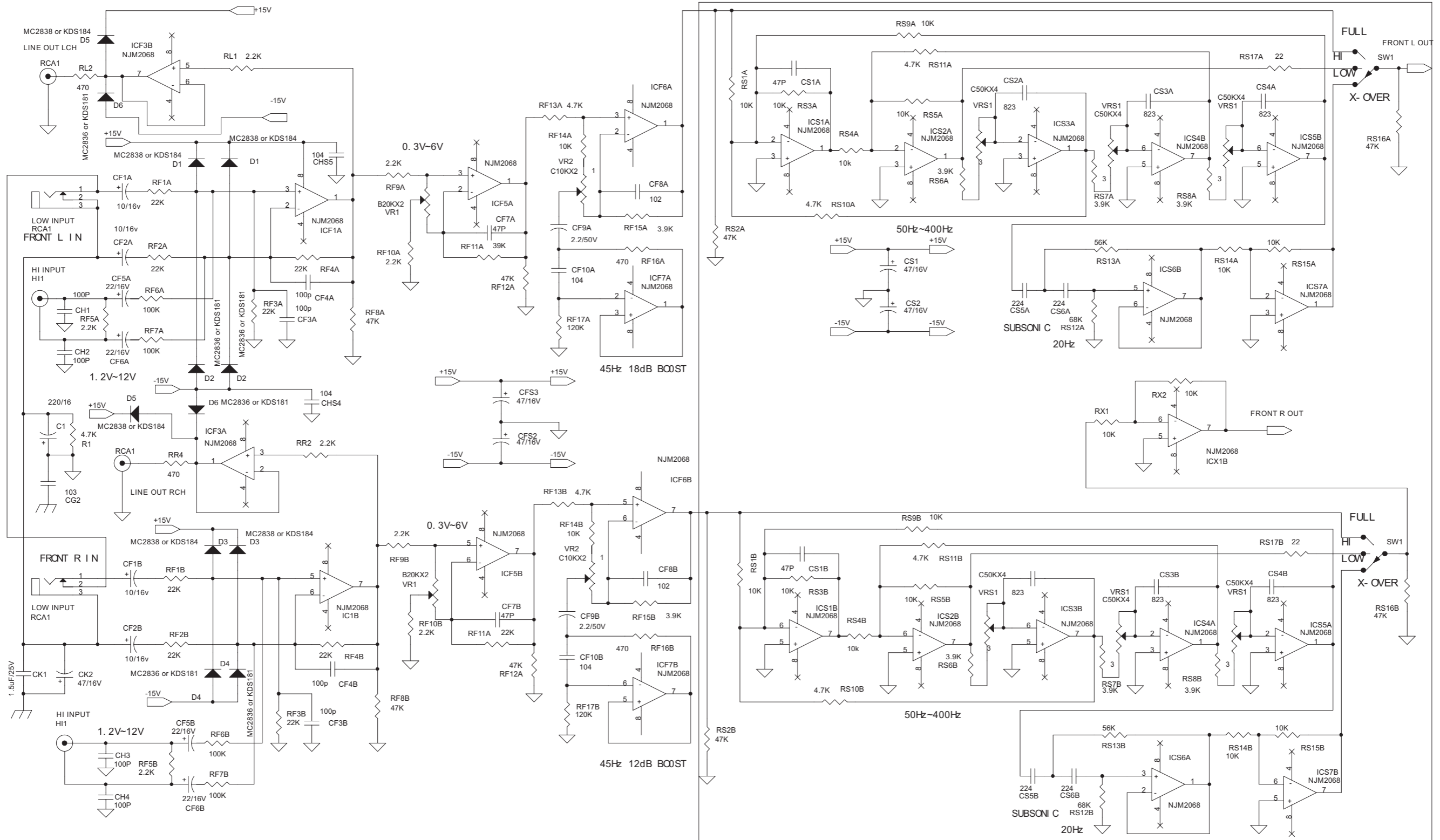


Standard schematic diagrams

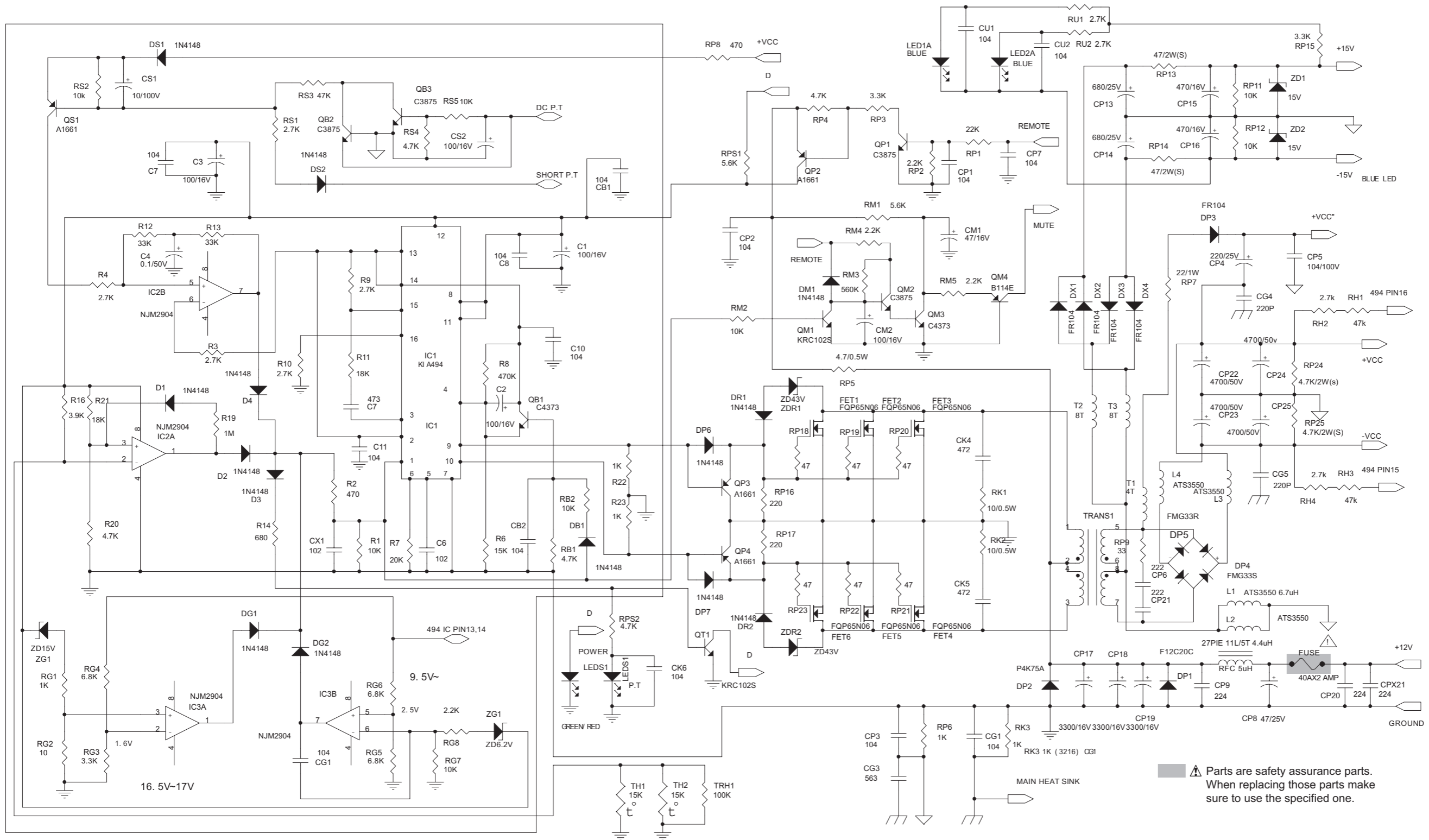
■ Audio section



■ Input/Cross-over/Front section



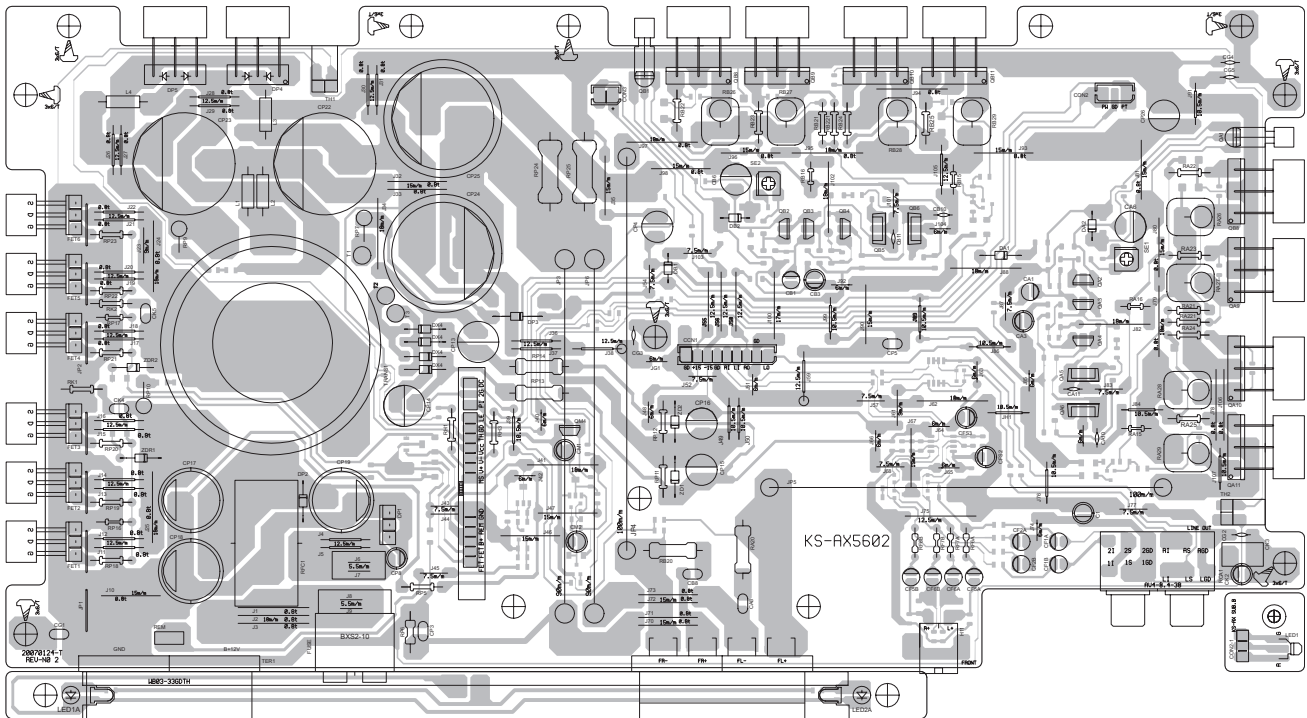
■ Power section



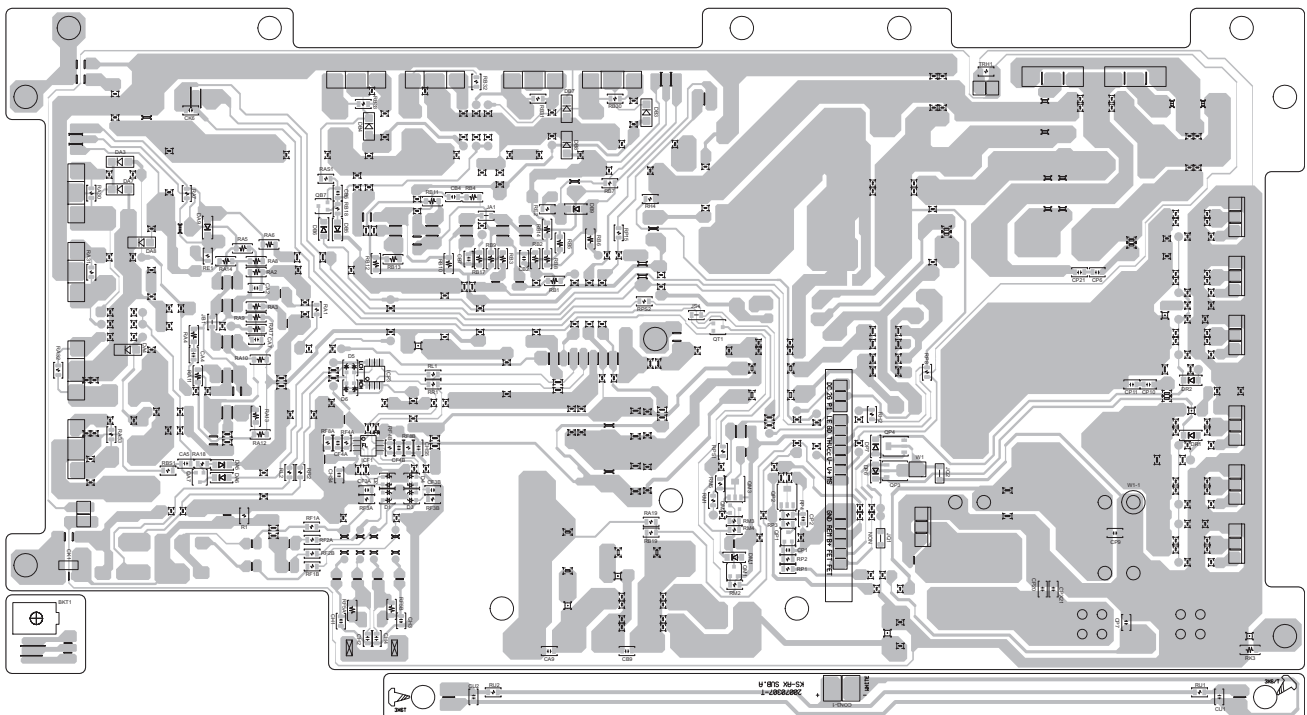
Printed circuit boards

■ Main board Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

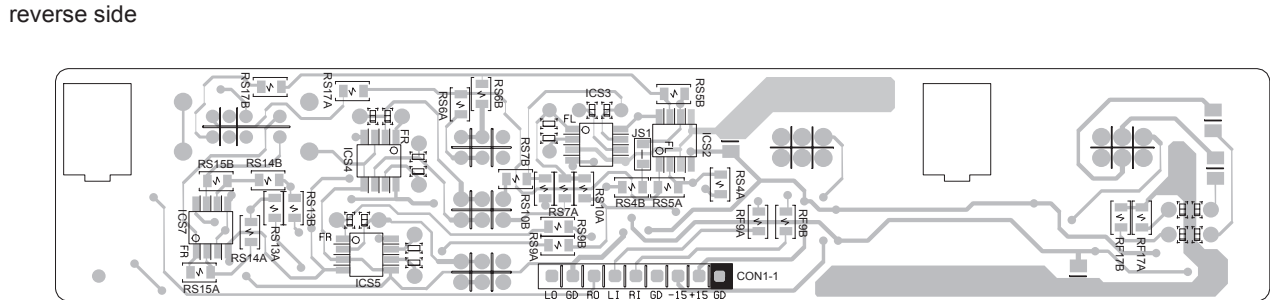
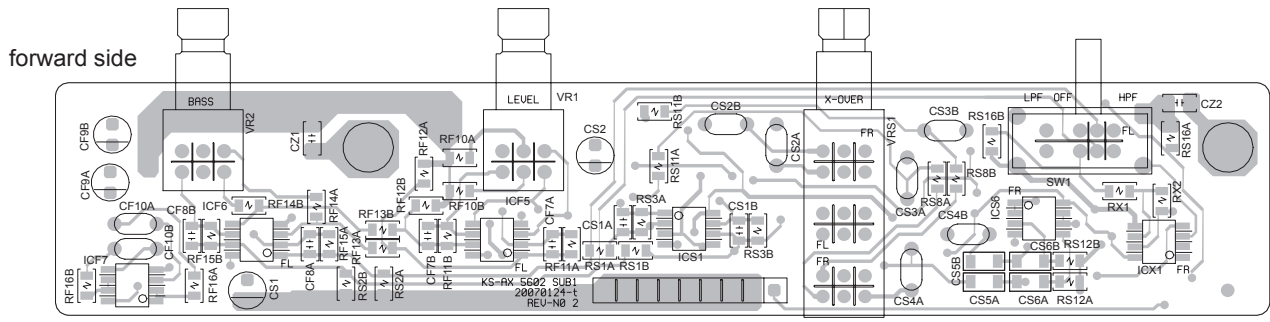
forward side



reverse side

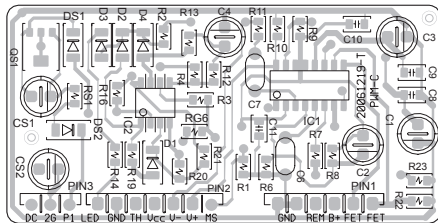


Sub board Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

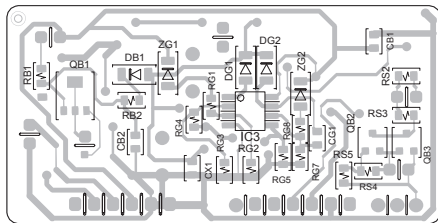


PWMC board Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

forward side



reverse side



< MEMO >

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