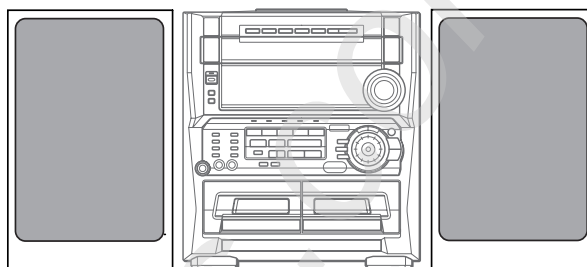




Z-L700 Z-L800

U

LH



SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM : 2ZM-3MK2 PR5NM
BASIC CD MECHANISM : 6ZG-1 ZRDM

SYSTEM	CD CASSEIVER	SPEAKER	STEREO TURNTABLE	REMOTE CONTROLLER
Z-L700	CX-ZL700	SX-WZL700	PX-E860	RC-ZAS12
Z-L800	CX-ZL800	SX-WZL800	-	

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" Z-L700 (U) / Z-L800 (LH), (S/M Code No. 09-002-422-7T1).
- If requiring information about the CD mechanism, see Service Manual of 6ZG-1, (S/M Code No. 09-001-338-7N2).
- If requiring information about the Stereo Turntable, see Service Manual of PX-E860 (U), (S/M Code No. 09-993-322-0R1).

aiwa

S/M Code No. 09-004-422-7R1

REVISION

DATA

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<AM tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 μ V/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier

Power output	U : 40 W + 40 W (200 Hz to 20 kHz, T.H.D. less than 1 %, 8 ohms) LH : Rated 37 W + 37 W (1 kHz, T.H.D. 1 %, 8 ohms) Reference : 45 W + 45 W (8 ohms, T.H.D. 10 %, 1 kHz) U : 0.15 % (15 W, 1 kHz, 8 ohms)
Total harmonic distortion	
Low frequency amplifier	
Power output	U : 120 W + 120 W (50 Hz to 200 Hz, T.H.D. less than 1 %, 6 ohms) LH : Rated 110 W + 110 W (75 Hz, T.H.D. 1 %, 6 ohms) Reference : 135 W + 135 W (6 ohms, T.H.D. 10 %, 75 Hz) U : 0.15 % (60 W, 75 Hz, 6 ohms) LH : 0.15 % (45 W, 75 Hz, 6 ohms)

Total harmonic distortion

Inputs

Outputs

VIDEO / AUX: 310 mV (adjustable)
PHONO : 400 mV (47 kohms)
MIC 1, MIC 2 : 1.4 mV (20 kohms)
CD DIGITAL OUT (OPTICAL)
SPEAKERS HIGH FREQ : accept speakers of 8 ohms or more
SPEAKERS LOW FREQ : accept speakers of 6 ohms or more
SURROUND SPEAKERS : accept speakers of 8 – 16 ohms or more
PHONES (stereo jack): accepts headphones of 32 ohms or more

<Compact disc player section>

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO ₂ tape : 50 Hz – 16000 Hz Normal tape : 50 Hz – 15000 Hz
Signal-to-noise ratio	50 dB (CrO ₂ tape peak level, above 400 Hz)
Recording system	AC bias
Heads	Deck 1 : Playback head x 1 Deck 2 : Recording / Playback / erase head x 1

<Speaker system SX-WZL700 (U)>

Cabinet type	3 way, built-in subwoofer
Speakers	Subwoofer : 200 mm (7 ⁷ / ₈ in.) cone type Full range : 120 mm (4 ³ / ₄ in.) cone type Super tweeter: 60 mm (2 ³ / ₈ in.) ceramic type 6 ohms / 8 ohms
Impedance	88 dB/W/m
Output sound pressure level	260 x 495 x 355 mm
Dimensions	(10 ¹ / ₄ x 19 ¹ / ₂ x 14 in.)
(W x H x D)	
Weight	8.5 kg (18 lbs 12 oz.)

<Speaker system SX-WZL800 (LH)>

Cabinet type	3 way, built-in subwoofer
Speakers	Subwoofer : 200 mm (7 ⁷ / ₈ in.) cone type Full range : 120 mm (4 ³ / ₄ in.) cone type Super tweeter: 60 mm (2 ³ / ₈ in.) cone type 6 ohms / 8 ohms
Impedance	88 dB/W/m
Output sound pressure level	260 x 495 x 355 mm
Dimensions	(10 ¹ / ₄ x 19 ¹ / ₂ x 14 in.)
(W x H x D)	
Weight	8.5 kg (18 lbs 12 oz.)

<General>

Power requirements	U : 120 V AC, 60 Hz LH : 120 V / 220 – 230 V / 240 V AC, (switchable), 50 / 60 Hz U : 210 W LH : 240 W
Power consumption	With power-economizing mode off : 45 W With power-economizing mode on : 0.9 W
Power consumption in standby mode (LH)	
Dimensions of main unit	360 x 395.3 x 402.3 mm
(W x H x D)	(14 ¹ / ₄ x 15 ⁵ / ₈ x 15 ⁷ / ₈ in.)
Weight of main unit	U : 12.5 kg (27 lbs 9 oz.) LH : 12.4 kg

• Design and specifications are subject to change without notice.

• The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE Sound, Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

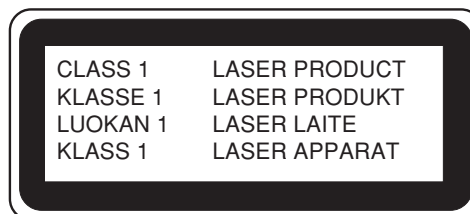
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.



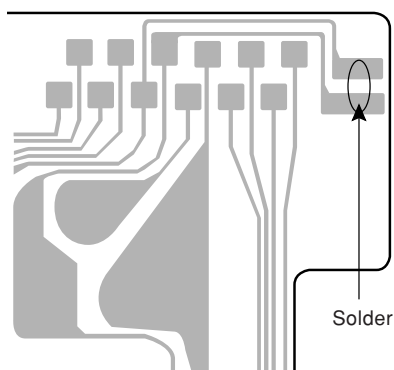
Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in right figure.

PICK-UP Assy P.C.B



NOTE ON BEFORE STARTING REPAIR**1. Forced discharge of electrolytic capacitor of power supply block**

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.

In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

- ① Remove the AC power cord.
- ② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
- ③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
- ④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
- ⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

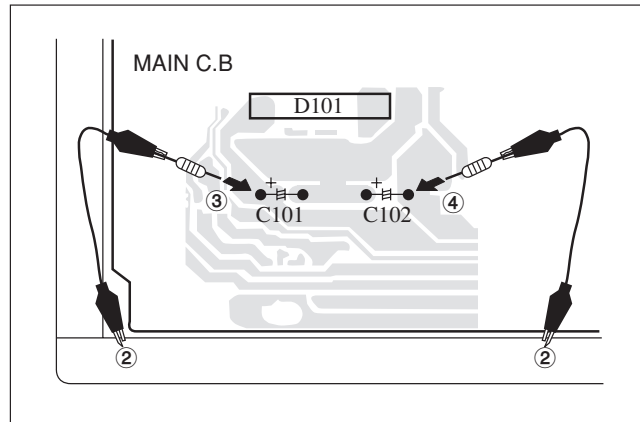


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is “H”, the MICROCOMPUTER is judged to be operating correctly. When this terminal is “L”, the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.

When the MICROCOMPUTER is not defective, the HOLD terminal can also go “L” when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to “L”.

- Good or no good judgement of the MICROCOMPUTER

- ① Turn on the AC main power.
- ② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the “H” level or not.
- ③ When the HOLD terminal is “L” level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

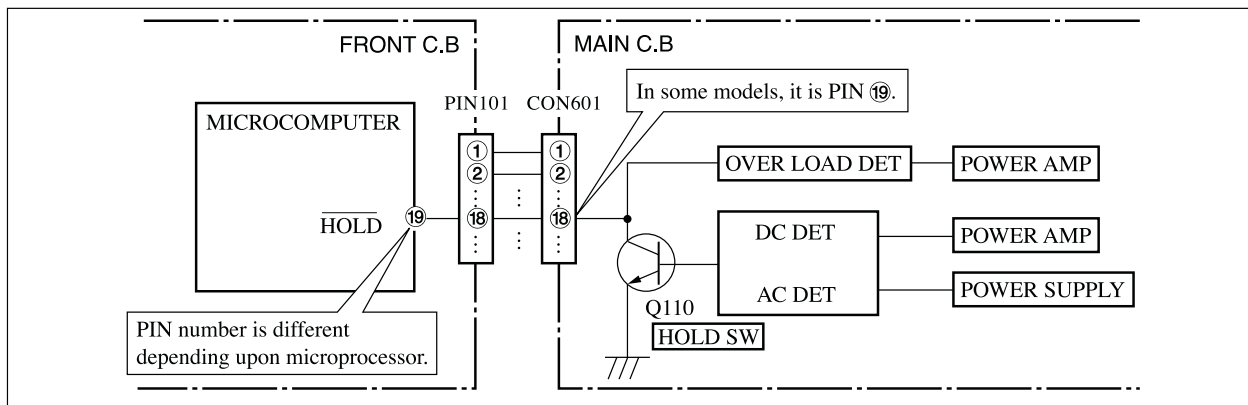


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.

When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

- ① Remove the AC power cord.

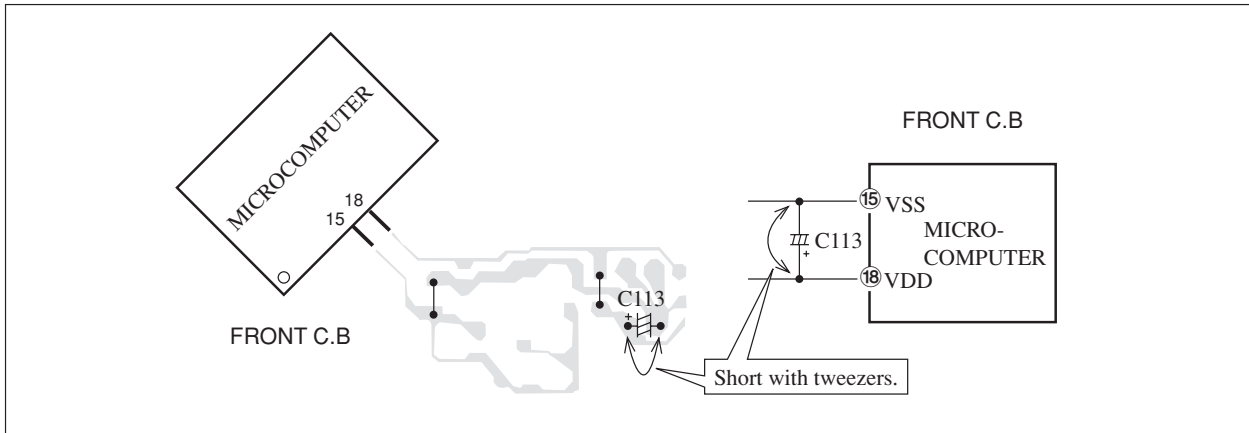


Fig-2-2

- ② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
- ③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				87-A40-745-080			ZENER,UZ4.7BSA
	8A-MA3-656-010		C-IC,LC876580W-5P55	87-A40-749-080			ZENER,UZ5.6BSB<8LH>
	87-A21-418-010		IC,STK490-340<8LH>	87-017-149-080			ZENER,HZS6A2L
	87-A21-397-010		IC,STK490-070	MAIN C.B			
	87-A21-021-040		C-IC,BU2099FV	C3	87-A10-712-080		C-CAP,S 0.22-50 F
	87-A20-783-040		C-IC,BA7762AFS	C4	87-A10-712-080		C-CAP,S 0.22-50 F
	87-A21-577-040		C-IC,M61506FP	C21	87-016-035-090		CAP, E 6800-35 VR
	87-A21-482-010		IC,RPM6938-H4	C22	87-016-035-090		CAP, E 6800-35 VR
	87-A21-018-040		C-IC,M65849BFP631D<8LH>	C25	87-016-300-080		CAP, ELECT 22-100
	87-A21-452-010		C-IC,BD3876KS2	C26	87-016-300-080		CAP, ELECT 22-100
	87-070-289-040		IC,BU 2092F	C27	87-016-300-080		CAP, ELECT 22-100
	87-A21-415-010		IC,LA1843	C28	87-016-300-080		CAP, ELECT 22-100
	87-A21-051-040		C-IC,BU9990-03FS<8LH>	C31	87-010-263-080		CAP, ELECT 100-10V
	87-070-127-110		IC,LC72131 D	C32	87-010-197-080		CAP, CHIP 0.01-25
	87-020-454-010		IC,DN6851	C33	87-010-263-080		CAP, ELECT 100-10V<7U>
TRANSISTOR				C34	87-010-247-080		CAP, ELECT 100-50V
	87-026-609-080		TR,KTA1266GR	C35	87-010-380-080		CAP, ELECT 47-16V
	87-026-610-080		TR,KTC3198GR	C36	87-010-381-080		CAP, ELECT 330-16V
	87-A30-076-080		C-TR,2SC3052F	C38	87-010-385-080		CAP, ELECT 220-25V
	87-A30-075-080		C-TR,2SA1235F	C39	87-010-385-080		CAP, ELECT 220-25V
	87-A30-318-080		TR,CSA952K	C40	87-010-197-080		CAP, CHIP 0.01-25
	89-213-702-010		TR,2SB1370E	C60	87-010-403-080		CAP, ELECT 3.3-50V
	87-A30-218-080		TR,2SB1237Q	C61	87-010-260-080		CAP, ELECT 47-25V
	87-A30-257-080		C-TR,2SD1306E	C80	87-010-401-080		CAP, ELECT 1-50V
	87-A30-107-070		C-TR,CMBT5401	C81	87-010-374-080		CAP, ELECT 47-10V
	87-026-245-080		TR,DTC114ES	C82	87-010-380-080		CAP, ELECT 47-16V
	87-A30-198-080		TR,KTC3199GR	C104	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A30-484-080		C-TR,KRA 102S	C105	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A30-269-040		C-FET,2SJ461-T1	C111	87-010-401-080		CAP, ELECT 1-50 M<8LH>
	87-A30-190-080		TR,CC5551<7U>	C112	87-010-401-080		CAP, ELECT 1-50 M<8LH>
	87-A30-087-080		C-FET,2SK2158	C113	87-010-545-080		CAP, ELECT 0.22-50V
	87-A30-097-010		TR,FN 1016<7U>	C114	87-010-545-080		CAP, ELECT 0.22-50V
	87-A30-468-080		C-TR,KRC 102S-RTK	C115	87-010-546-080		CAP, ELECT 0.33-50V
	87-A30-098-010		TR,FP 1016<7U>	C116	87-010-546-080		CAP, ELECT 0.33-50V
	87-A30-106-070		C-TR,CMBT5551<8LH>	C117	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A30-106-040		C-TR,CMBT5551<7U>	C121	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-107-080		C-TR,CMBT5401	C122	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-073-080		C-TR,RT1N 141C	C171	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-329-080		TR,CD1585BC	C172	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-063-080		C-TR,KRA 104S	C173	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-074-080		C-TR,RT1P 141C<7U>	C174	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-186-010		FET,2SK3053<7U>	C301	87-010-318-080		C-CAP,S 47P-50 CH
	89-327-143-080		TR,2SC27140(0.1W)	C302	87-010-318-080		C-CAP,S 47P-50 CH
	87-A30-489-080		C-TR,KRA107S	C303	87-012-157-080		C-CAP,S 330P-50 CH
	87-A30-234-080		TR,CSC4115BC	C304	87-012-157-080		C-CAP,S 330P-50 CH
	87-026-463-080		TR,2SA933SRS	C305	87-012-157-080		C-CAP,S 330P-50 CH
				C306	87-012-157-080		C-CAP,S 330P-50 CH
DIODE				C307	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-020-465-080		DIODE,1SS133 (110MA)	C309	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-673-090		DIODE,D10XB20	C310	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-553-080		DIODE,1N4003 LES	C311	87-010-198-080		CAP, CHIP 0.022-25
	87-A40-780-080		ZENER,UZ33BSD	C312	87-010-198-080		CAP, CHIP 0.022-25
	87-A40-736-080		DIODE,1N4148M(SEM)	C313	87-010-178-080		CHIP CAP 1000P-50
				C314	87-010-178-080		CHIP CAP 1000P-50
	87-A40-764-080		ZENER,UZ10BSC	C315	87-010-178-080		CHIP CAP 1000P-50
	87-A40-313-080		C-DIODE,MC 2840	C316	87-010-178-080		CHIP CAP 1000P-50
	87-A40-270-080		C-DIODE,MC2838	C321	87-012-142-080		CAP, S 0.33-16
	87-A40-269-080		C-DIODE,MC2836	C322	87-012-142-080		CAP, S 0.33-16
	87-A40-768-080		ZENER,UZ 16BSA	C324	87-010-260-080		CAP, ELECT 47-25V
	87-017-447-010		DIODE,GBU4DL	C325	87-010-370-080		CAP,E 330-6.3 SME
	87-017-154-080		ZENER,HZS6C3L	C327	87-010-404-080		CAP, ELECT 4.7-50V
	87-020-331-080		CHIP-DIODE,DAN202K	C328	87-010-404-080		CAP, ELECT 4.7-50V
	87-017-654-060		DIODE,GBU6J	C332	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-488-080		DIODE,1SS244<7U>	C335	87-010-401-080		CAP, ELECT 1-50V
	87-A40-751-080		ZENER,UZ6.2BSB	C336	87-010-401-080		CAP, ELECT 1-50V
	87-A40-747-080		ZENER,UZ5.1BSB	C337	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-646-010		DIODE,FMB-G16L<7U>	C339	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-802-080		ZENER,UZ5.1BSC	C340	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C351	87-012-140-080	CAP 470P-50		C636	87-A10-307-080	CAP-M,S 0.1-50	
C352	87-012-140-080	CAP 470P-50		C637	87-A10-307-080	CAP-M,S 0.1-50	
C354	87-010-175-080	CAP 560P-50		C638	87-A10-307-080	CAP-M,S 0.1-50	
C355	87-010-178-080	C-CAP,S 1000P-50 KB		C639	87-010-405-080	CAP, ELECT 10-50V	
C356	87-010-260-080	CAP, ELECT 47-25V		C644	87-010-401-080	CAP, ELECT 1-50V	
C357	87-010-197-080	CAP, CHIP 0.01-25 KB		C671	87-010-322-080	C-CAP,S 100P-50 CH	
C358	87-010-183-080	C-CAP,S 2700P-50 B		C672	87-010-322-080	C-CAP,S 100P-50 CH	
C359	87-010-183-080	C-CAP,S 2700P-50 B		C673	87-010-190-080	C-CAP,S 0.01-50 ZF	
C360	87-010-183-080	C-CAP,S 2700P-50 B		C679	87-010-196-080	CHIP CAPACITOR,0.1-25 ZF	
C370	87-010-196-080	CHIP CAPACITOR,0.1-25		C680	87-010-190-080	C-CAP,S 0.01-50 ZF	
C373	87-A11-177-080	C-CAP,S 0.15-16 K B		C682	87-010-196-080	CHIP CAPACITOR,0.1-25 ZF	
C374	87-A11-177-080	C-CAP,S 0.15-16 K B		C771	87-010-263-080	CAP, ELECT 100-10V	
C378	87-010-196-080	CHIP CAPACITOR,0.1-25 ZF		C772	87-010-197-080	CAP, CHIP 0.01-25KB	
C379	87-010-406-080	CAP, ELECT 22-50		C782	87-010-197-080	CAP, CHIP 0.01-25KB	
C380	87-010-406-080	CAP, ELECT 22-50		C783	87-010-197-080	CAP, CHIP 0.01-25KB	
C386	87-010-196-080	CHIP CAPACITOR,0.1-25 ZF		C784	87-010-197-080	CAP, CHIP 0.01-25KB	
C388	87-012-156-080	C-CAP,S 220P-50 J CH		C785	87-010-197-080	CAP, CHIP 0.01-25KB	
C391	87-010-319-080	C-CAP,S 56P-50 J CH		C786	87-010-197-080	CAP, CHIP 0.01-25KB	
C392	87-010-319-080	C-CAP,S 56P-50 J CH		C788	87-010-149-080	C-CAP,S 5P-50 CH	
C393	87-010-319-080	C-CAP,S 56P-50 J CH		C789	87-A12-052-080	C-CAP,S 0.033-25 J B	
C394	87-010-319-080	C-CAP,S 56P-50 J CH		C790	87-A12-052-080	C-CAP,S 0.033-25 J B	
C501	87-010-263-080	CAP, ELECT 100-10V<8LH>		C791	87-010-196-080	CHIP CAPACITOR,0.1-25	
C502	87-010-196-080	CHIP CAPACITOR,0.1-25<8LH>		C792	87-010-197-080	CAP, CHIP 0.01-25KB	
C503	87-016-460-080	C-CAP,S 0.22-16 K B<8LH>		C793	87-010-404-080	CAP, ELECT 4.7-50V	
C504	87-016-460-080	C-CAP,S 0.22-16 K B<8LH>		C795	87-010-197-080	CAP, CHIP 0.01-25KB	
C505	87-016-460-080	C-CAP,S 0.22-16 K B<8LH>		C796	87-010-197-080	CAP, CHIP 0.01-25KB	
C506	87-010-184-080	CHIP CAPACITOR 3300P-50<8LH>		C797	87-010-405-080	CAP, ELECT 10-50V	
C507	87-010-177-080	C-CAP,S 820P-50 SL<8LH>		C798	87-010-197-080	CAP, CHIP 0.01-25KB	
C508	87-016-669-080	C-CAP,S 0.1-25 K B<8LH>		C799	87-010-407-080	CAP, ELECT 33-50V	
C509	87-016-669-080	C-CAP,S 0.1-25 K B<8LH>		C800	87-010-194-080	CAP, CHIP 0.047-25ZF	
C510	87-010-184-080	CHIP CAPACITOR 3300P-50<8LH>		C801	87-010-403-080	CAP, ELECT 3.3-50V	
C511	87-010-177-080	C-CAP,S 820P-50 SL<8LH>		C802	87-010-194-080	CAP, CHIP 0.047-25 ZF	
C512	87-016-460-080	C-CAP,S 0.22-16 K B<8LH>		C803	87-010-198-080	CAP, CHIP 0.022-25KB	
C513	87-010-544-080	CAP, ELECT 0.1-50V<8LH>		C804	87-010-263-080	CAP, ELECT 100-10V	
C514	87-010-374-080	CAP, ELECT 47-10V<8LH>		C807	87-010-400-080	CAP, ELECT 0.47-50V	
C515	87-010-401-080	CAP, ELECT 1-50 M<8LH>		C808	87-010-401-080	CAP, ELECT 1-50V	
C516	87-010-401-080	CAP, ELECT 1-50 M<8LH>		C809	87-010-401-080	CAP, ELECT 1-50V	
C517	87-010-183-080	C-CAP,S 2700P-50 B<8LH>		C810	87-010-196-080	CHIP CAPACITOR,0.1-25	
C518	87-010-183-080	C-CAP,S 2700P-50 B<8LH>		C811	87-010-403-080	CAP, ELECT 3.3-50V	
C531	87-010-405-080	CAP, ELECT 10-50 M<8LH>		C812	87-010-403-080	CAP, ELECT 3.3-50V	
C532	87-010-196-080	CHIP CAPACITOR,0.1-25<8LH>		C814	87-010-197-080	CAP, CHIP 0.01-25	
C533	87-010-196-080	CHIP CAPACITOR,0.1-25<8LH>		C815	87-010-403-080	CAP, ELECT 3.3-50V	
C534	87-012-156-080	C-CAP,S 220P-50 CH<8LH>		C816	87-010-403-080	CAP, ELECT 3.3-50V	
C535	87-010-178-080	CHIP CAP 1000P-50<8LH>		C819	87-010-179-080	CAP,CHIP S 1200P-50	
C536	87-010-196-080	CHIP CAPACITOR,0.1-25		C820	87-010-179-080	CAP,CHIP S 1200P-50	
C537	87-010-318-080	C-CAP,S 47P-50 CH<8LH>		C821	87-010-405-080	CAP, ELECT 10-50V	
C538	87-010-318-080	C-CAP,S 47P-50 CH<8LH>		C823	87-010-177-080	CAP, CHIP 820P-50 J SL	
C539	87-010-318-080	C-CAP,S 47P-50 CH<8LH>		C824	87-010-405-080	CAP, ELECT 10-50	
C541	87-010-178-080	CHIP CAP 1000P-50<8LH>		C825	87-010-596-080	CAP, S 0.047-16	
C611	87-010-956-080	CHIP-CAP,S 0.068-25B		C842	87-010-197-080	CAP, CHIP 0.01-25 KB	
C612	87-010-369-080	C-CAP,S 0.033-25 K B		C844	87-010-197-080	CAP, CHIP 0.01-25 KB	
C613	87-010-190-080	S CHIP F 0.01-50		C850	87-010-260-080	CAP, ELECT 47-25V	
C614	87-016-669-080	C-CAP,S 0.1-25 K B		C851	87-010-197-080	CAP, CHIP 0.01-25 KB	
C616	87-010-185-080	C-CAP,S 3900P-50 K B		C852	87-010-197-080	CAP, CHIP 0.01-25 KB	
C617	87-010-194-080	CAP, CHIP 0.047-25ZF		C853	87-010-197-080	CAP, CHIP 0.01-25 KB	
C618	87-010-401-080	CAP, ELECT 1-50V		C858	87-010-196-080	CHIP CAPACITOR,0.1-25	
C619	87-010-263-080	CAP, ELECT 100-10V		C859	87-010-196-080	CHIP CAPACITOR,0.1-25	
C620	87-016-669-080	C-CAP,S 0.1-25 K B		C860	87-010-197-080	CAP, CHIP 0.01-25	
C621	87-010-197-080	CAP, CHIP 0.01-25 KB		C959	87-010-196-080	CHIP CAPACITOR,0.1-25	
C623	87-010-401-080	CAP, ELECT 1-50V		C960	87-010-196-080	CHIP CAPACITOR,0.1-25	
C624	87-010-401-080	CAP, ELECT 1-50V		C961	87-010-152-080	C-CAP,S 8P-50 CH	
C626	87-A11-590-080	CAP, CHIP 0.047-16 KB		C963	87-015-785-080	CHIP CAPACITOR, 0.1-25ZF	
C627	87-010-400-080	CAP, ELECT 0.47-50V		C971	87-010-381-080	CAP, ELECT 330-16V	
C628	87-010-400-080	CAP, ELECT 0.47-50V		C972	87-010-404-080	CAP, ELECT 4.7-50V	
C629	87-A11-590-080	CAP, CHIP 0.047-16 KB		C973	87-010-197-080	CAP, CHIP 0.01-25KB	
C630	87-010-263-080	CAP, ELECT 100-10V		C974	87-010-197-080	CAP, CHIP 0.01-25KB	
C631	87-010-185-080	C-CAP,S 3900P-50 K B		C979	87-010-322-080	C-CAP,S 100P-50 CH	
C632	87-010-185-080	C-CAP,S 3900P-50 K B		C981	87-010-260-080	CAP, ELECT 47-25V	
C634	87-010-196-080	CHIP CAPACITOR,0.1-25		C982	87-010-196-080	CHIP CAPACITOR,0.1-25	
C635	87-A10-307-080	CAP-M,S 0.1-50		C983	87-010-197-080	CAP, CHIP 0.01-25KB	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C984	87-010-197-080		CAP, CHIP 0.01-25KB	C132	87-012-156-080		C-CAP,S 220P-50 CH
C987	87-010-197-080		CAP, CHIP 0.01-25KB	C133	87-010-316-080		C-CAP,S 33P-50 CH
C991	87-010-312-080		C-CAP,S 15P-50 CH	C135	87-018-209-080		CAP, TC U 0.01-50
C992	87-010-312-080		C-CAP,S 15P-50 CH	C137	87-010-313-080		CAP, CHIP 18P-50
C993	87-010-178-080		CHIP CAP 1000P-50	C138	87-010-196-080		CHIP CAPACITOR,0.1-25
C995	87-010-178-080		CHIP CAP 1000P-50	C171	87-010-213-080		C-CAP,S 0.015-50 B
C997	87-010-196-080		CHIP CAPACITOR,0.1-25	C172	87-010-183-080		C-CAP,S 2700P-50 B
C998	87-010-260-080		CAP, ELECT 47-25V	C188	87-010-194-080		CAP, CHIP 0.047-25
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F	C193	87-010-197-080		CAP, CHIP 0.01 DM
CF831	87-008-261-010		FILTER, CFSFE10.7MA5	C251	87-010-196-080		CHIP CAPACITOR,0.1-25
CF832	87-008-261-010		FILTER, CFSFE10.7MA5	C252	87-012-156-080		C-CAP,S 220P-50 CH
CN1	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3	C253	87-010-322-080		C-CAP,S 100P-50 CH
CN91	87-A60-109-010		CONN,2P V S2M-2W	C301	87-012-358-080		C-CAP,S 0.47-10 F Z
CN92	87-A60-109-010		CONN,2P V S2M-2W<7U>	C302	87-010-171-080		C-CAP,S 270P-50 SL
CN101	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3	C303	87-012-358-080		C-CAP,S 0.47-10 F Z
CN301	87-A60-620-010		CONN,3P V 2MM JMT	C304	87-012-358-080		C-CAP,S 0.47-10 F Z
CN351	87-A60-625-010		CONN,8P V 2MM JMT	C305	87-010-196-080		CHIP CAPACITOR,0.1-25
CN601	87-099-719-010		CONN,30P TYK-B(X)	C306	87-010-196-080		CHIP CAPACITOR,0.1-25
CN602	87-A60-131-010		CONN,6P V FE	C310	87-010-196-080		CHIP CAPACITOR,0.1-25
CNA1	8A-NF8-653-010		CONN ASSY,9P TID-A(480)	C311	87-010-405-040		CAP,E 10-50
CNA2	8A-NF6-640-010		CONN ASSY,3P (VM) ANF-6	C411	87-012-157-080		C-CAP,S 330P-50 CH
FB501	87-008-372-080		FILTER, EMI BL OIRNI<8LH>	C412	87-010-405-040		CAP,E 10-50
FC602	88-906-321-110		FF-CABLE,6P 1.25 320MM	C421	87-010-197-080		CAP, CHIP 0.01-25
FFE831	A8-8ZA-190-030		8ZA-1 FEUNM	C422	87-010-182-080		C-CAP,S 2200P-50 B
J101	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM	C940	87-012-145-080		CAP, CHIP S 270P-50 J CH
J102	87-A60-238-010		TERMINAL,SP 4P	C941	87-012-145-080		CAP, CHIP S 270P CH
J603	87-A60-926-010		JACK,PIN 4P R/W/TC58-118	C942	87-012-145-080		CAP, CHIP S 270P CH
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02	C943	87-012-145-080		CAP, CHIP S 270P CH
L101	87-A50-610-010		COIL,1UH K (MDEC)	C944	87-012-145-080		CAP, CHIP S 270P CH
L102	87-A50-610-010		COIL,1UH K (MDEC)	C945	87-012-145-080		CAP, CHIP S 270P CH
L301	87-A50-049-010		COIL,TRAP 85K(COI)	C946	87-012-145-080		CAP, CHIP S 270P CH
L302	87-A50-049-010		COIL,TRAP 85K(COI)	C947	87-012-145-080		CAP, CHIP S 270P CH
L351	87-007-342-010		COIL,OSC 85K BIAS	C948	87-012-145-080		CAP, CHIP S 270P CH
L801	87-A50-540-010		COIL,FM DET(TOK)	C949	87-012-145-080		CAP, CHIP S 270P CH
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)	C950	87-012-145-080		CAP, CHIP S 270P CH
L811	87-005-847-080		COIL,2.2UH(CECS)	C951	87-012-145-080		CAP, CHIP S 270P CH
L832	87-005-847-080		COIL,2.2UH(CECS)	C952	87-012-145-080		CAP, CHIP S 270P CH
L951	8A-NF8-667-010		COIL,AM PACK 4(TOK)	C962	87-012-155-080		C-CAP 180P-50CH<8LH>
R117	87-010-805-080		C-CAP,S 1-16 ZF	C963	87-010-297-080		C-CAP,S 100P-50 CH<8LH>
R118	87-010-805-080		C-CAP,S 1-16 ZF	C967	87-010-197-080		CAP, CHIP 0.01 DM<8LH>
R161	87-A00-441-050		RES,270-1/2W J RP	C968	87-016-044-040		CAP,E 100-16 GAS<8LH>
R162	87-A00-441-050		RES,270-1/2W J RP	C969	87-010-196-080		CHIP CAPACITOR,0.1-25<8LH>
R163	87-A00-441-050		RES,270-1/2W J RP	C972	87-015-629-080		CAP CHIP 2200P-50<8LH>
R164	87-A00-441-050		RES,270-1/2W J RP	C973	87-012-156-080		C-CAP,S 220P-50 CH<8LH>
R790	87-010-197-080		C-CAP,S 0.01-25 KB	C974	87-015-682-040		CAP,E 22-16 7L<8LH>
R991	87-010-322-080		C-CAP,S 100P-50 J CH	C975	87-010-071-040		CAP,E 1-50 M 5L SRE<8LH>
R993	87-010-322-080		C-CAP,S 100P-50 J CH	C976	87-010-060-040		CAP,E 100-16<8LH>
R995	87-010-322-080		C-CAP,S 100P-50 J CH	C977	87-010-197-080		CAP, CHIP 0.01-25<8LH>
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA	CN101	87-099-720-010		CONN,30P TYK-B(P)
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA	CN102	87-A60-162-010		CONN,14P H FE
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P	CN103	87-A60-166-010		CONN,18P H FE
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309	CN104	87-A60-163-010		CONN,15P H FE
				CN301	87-A60-156-010		CONN,8P H FE
				CNA105	8A-MA3-654-010		CONN ASSY,2P V 200MM
				FB001	87-A90-896-080		F-BEAD,035600STY7
MICON C.B							
C101	87-010-498-040		CAP,E 10-16 GAS	FC102	88-914-231-110		FF-CABLE,14P 1.25
C102	87-010-194-080		CAP, CHIP 0.047-25	FC103	88-918-231-110		FF-CABLE,18P 1.25
C103	87-010-194-080		CAP, CHIP 0.047-25	FC104	88-915-151-110		FF-CABLE,15P 1.25 150MM
C105	87-A11-242-040		CAP,E 220-10 M 5L SRM	FL101	8A-MA3-651-010		FL,BJ751GNK
C106	87-A11-242-040		CAP,E 220-10 M 5L SRM	L101	87-A50-333-010		COIL,OSC 9.43MHZ
C107	87-010-196-080		CHIP CAPACITOR,0.1-25	L961	87-A50-093-010		COIL,CLOCK 5.76MHZ<8LH>
C111	87-016-460-080		C-CAP,S 0.22-16 K B	LED131	87-A40-317-080		LED,SLR-342VCT31 RED
C112	87-010-493-040		CAP,E 0.47-50 GAS	LED201	87-A40-496-040		LED,SLR-342PCT31 GRN
C113	87-010-178-080		CHIP CAP 1000P-50	LED202	87-A40-317-080		LED,SLR-342VCT31 RED
C114	87-018-209-080		CAP, TC U 0.01-50	LED203	87-A40-496-040		LED,SLR-342PCT31 GRN
C116	87-010-196-080		CHIP CAPACITOR,0.1-25	LED205	87-A40-317-080		LED,SLR-342VCT31 RED
C122	87-012-369-080		C-CAP,S 0.047-50F	LED206	87-A40-496-040		LED,SLR-342PCT31 GRN
C123	87-010-408-040		CAP,E 47-50 SME	LED207	87-A40-317-080		LED,SLR-342VCT31 RED
C124	87-010-421-040		CAP,E 4.7-50 5L	LED209	87-A40-496-040		LED,SLR-342PCT31 GRN
C125	87-010-421-040		CAP,E 4.7-50 5L	LED210	87-A40-317-080		LED,SLR-342VCT31 RED

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED211	87-A40-496-040		LED,SLR-342PCT31 GRN	J201	87-A61-148-010		JACK, PIN 4P R/W BLUE
LED212	87-A40-317-080		LED,SLR-342VCT31 RED	L251	87-A50-610-010		COIL, 1UH-S
LED213	87-A40-317-080		LED,SLR-342VCT31 RED	L252	87-A50-610-010		COIL, 1UH-S
LED214	87-A40-317-080		LED,SLR-342VCT31 RED	R131	87-A00-262-080		RES, M/F 0.15-2W J<8LH>
S401	87-A90-095-080		SW, TACT EVQ11G04M	R132	87-A00-262-080		RES, M/F 0.15-2W J<8LH>
S402	87-A90-095-080		SW, TACT EVQ11G04M	R161	87-A00-418-010		RES, M/F 0.15-3W J<7U>
S403	87-A90-095-080		SW, TACT EVQ11G04M	R162	87-A00-418-010		RES, M/F 0.15-3W J<7U>
S404	87-A90-095-080		SW, TACT EVQ11G04M<8LH>	R165	87-A00-418-010		RES, M/F 0.15-3W J<7U>
S405	87-A90-095-080		SW, TACT EVQ11G04M	R166	87-A00-418-010		RES, M/F 0.15-3W J<7U>
S421	87-A91-625-010		SW, RTRY EC12E24308-30MM	R231	87-A00-258-080		RES, M/F 0.22-1W J
AMP IF C.B				R232	87-A00-258-080		RES, M/F 0.22-1W J
C3	87-010-186-080		CAP, CHIP 4700P-50<8LH>	R243	87-A00-258-080		RES, M/F 0.22-1W J<7U>
C101	87-010-178-080		CHIP CAP 1000P-50	R244	87-A00-258-080		RES, M/F 0.22-1W J<7U>
C102	87-010-178-080		CHIP CAP 1000P	RY201	87-A91-686-010		RELAY, G5PA-28 (OMRON) <7U>
C103	87-010-405-080		CAP, ELECT 10-50V	TH101	87-A91-042-080		C-THMS, 100K 55001<7U>
C104	87-010-405-080		CAP, ELECT 10-50V	TH102	87-A91-042-080		C-THMS, 100K 55001<7U>
C107	87-010-405-080		CAP, ELECT 10-50V<8LH>	WH101	87-A90-459-010		HLDR 2.5-5P
C107	87-010-404-080		CAP, ELECT 4.7-50V<7U>	WH103	87-A90-459-010		HLDR, WIRE 2.5-5P<7U>
C108	87-010-405-080		CAP, ELECT 10-50V<8LH>	CNTL C.B			
C108	87-010-404-080		CAP, ELECT 4.7-50V<7U>	C602	87-010-069-040		CAP, E 0.33-50
C111	87-010-322-080		C-CAP, S 100P-50 CH<7U>	C603	87-010-319-080		C-CAP, S 56P-50 CH
C112	87-010-322-080		C-CAP, S 100P-50 CH<7U>	C604	87-010-178-080		CHIP CAP 1000P-50
C113	87-A10-812-080		C-CAP, S 220P-200 J CH<7U>	C606	87-015-785-080		CHIP CAPACITOR, 0.1-25
C113	87-010-260-080		CAP, ELECT 47-25V<8LH>	C607	87-010-060-040		CAP, E 100-16
C114	87-A10-812-080		C-CAP, S 220P-200 J CH<7U>	C611	87-010-186-080		CAP, CHIP 4700P-50
C114	87-010-260-080		CAP, ELECT 47-25V<8LH>	C612	87-015-699-040		CAP, E 10-50
C115	87-A10-119-080		CAP, ELECT 10-100 REA<8LH>	C621	87-015-691-040		CAP, E0.1-50 SRA<7U>
C116	87-A10-119-080		CAP, ELECT 10-100 REA<8LH>	C622	87-010-544-040		CAP, E 0.1-50 SME<7U>
C119	87-010-197-080		CAP, CHIP 0.01-25	C623	87-010-178-080		CHIP CAP 1000P<7U>
C120	87-010-197-080		CAP, CHIP 0.01-25	C624	87-010-319-080		C-CAP, S 56P-50 CH<7U>
C121	87-010-260-080		CAP, ELECT 47-25V<7U>	C624	87-010-163-080		C-CAP, S 56P-50 SL<7U>
C122	87-010-260-080		CAP, ELECT 47-25V<7U>	C625	87-010-405-040		CAP, E 10-50<7U>
C133	87-010-186-080		CAP, CHIP 4700P-50<8LH>	C651	87-010-182-080		C-CAP, S 2200P-50 B
C173	87-010-186-080		CAP, CHIP 4700P-50<7U>	C652	87-010-197-080		CAP, CHIP 0.01-25
C174	87-010-186-080		CAP, CHIP 4700P-50<7U>	C661	87-010-196-080		CHIP CAPACITOR, 0.1-25
C203	87-A10-300-080		CAP, M 0.027-50 J	C662	87-010-196-080		CHIP CAPACITOR, 0.1-25
C204	87-A10-300-080		CAP, M 0.027-50 J	C663	87-012-156-080		C-CAP, S 220P-50 CH
C205	87-010-177-080		C-CAP, S 820P-50 SL	C664	87-012-156-080		C-CAP, S 220P-50 CH
C206	87-010-177-080		C-CAP, S 820P-50 SL	C686	87-010-196-080		CHIP CAPACITOR, 0.1-25
C207	87-010-403-080		CAP, ELECT 3.3-50V	C692	87-010-196-080		CHIP CAPACITOR, 0.1-25
C208	87-010-403-080		CAP, ELECT 3.3-50V	C846	87-010-196-080		CHIP CAPACITOR, 0.1-25
C209	87-010-184-080		CHIP CAPACITOR 3300P-50<7U>	CN661	87-A60-166-010		CONN, 18P H FE
C210	87-010-184-080		CHIP CAPACITOR 3300P-50<7U>	CNA602	8A-MA3-655-010		CONN ASSY, 2P V 60MM
C211	87-010-403-080		CAP, ELECT 3.3-50V	LED671	87-A40-317-080		LED, SLR-342VCT31 RED
C212	87-010-403-080		CAP, ELECT 3.3-50V	LED672	87-A40-317-080		LED, SLR-342VCT31 RED
C215	87-012-156-080		C-CAP, S 220P-50	LED673	87-A40-317-080		LED, SLR-342VCT31 RED
C216	87-012-156-080		C-CAP, S 220P-50	LED674	87-A40-317-080		LED, SLR-342VCT31 RED
C217	87-010-260-080		CAP, ELECT 47-25V	LED675	87-A40-317-080		LED, SLR-342VCT31 RED
C218	87-010-260-080		CAP, ELECT 47-25V	LED677	87-A40-317-080		LED, SLR-342VCT31 RED
C221	87-010-405-080		CAP, ELECT 10-50V	LED678	87-A40-317-080		LED, SLR-342VCT31 RED
C222	87-010-405-080		CAP, ELECT 10-50V	LED679	87-A40-317-080		LED, SLR-342VCT31 RED
C223	87-010-197-080		CAP, CHIP 0.01-25	LED680	87-A40-619-040		LED, SLR-56PT-T31-W GRN
C224	87-010-197-080		CAP, CHIP 0.01-25	LED681	87-A40-619-040		LED, SLR-56PT-T31-W GRN
C249	87-012-368-080		CHIP CAPACITOR 0.1-50 ZF<7U>	LED682	87-A40-619-040		LED, SLR-56PT-T31-W GRN
C251	87-010-993-080		C-CAP, S 0.056-25 B	LED683	87-A40-619-040		LED, SLR-56PT-T31-W GRN
C252	87-010-196-080		CHIP CAPACITOR, 0.1-25	LED684	87-A40-619-040		LED, SLR-56PT-T31-W GRN
C253	87-010-196-080		CHIP CAPACITOR, 0.1-25	LED685	87-A40-619-040		LED, SLR-56PT-T31-W GRN
C254	87-010-993-080		C-CAP, S 0.056-25 B	LED686	87-A40-678-010		LED, SELU1E10CXM BLUE-DEF
C255	87-010-190-080		S CHIP F 0.01-50	LED692	87-A40-678-010		LED, SELU1E10CXM BLUE-DEF
C256	87-010-190-080		S CHIP F 0.01-50	S651	87-A91-624-010		SW, RTRY EC12E1240405-20MM
C291	87-010-374-080		CAP, ELECT 47-10V<8LH>	S805	87-A90-095-080		SW, TACT EVQ11G04M<8LH>
C402	87-010-196-080		CHIP CAPACITOR, 0.1-25<7U>	S806	87-A90-095-080		SW, TACT EVQ11G04M
C413	87-A10-119-080		CAP, E 10-100 REA<7U>	S807	87-A90-095-080		SW, TACT EVQ11G04M
C414	87-A10-119-080		CAP, E 10-100 REA<7U>	S808	87-A90-095-080		SW, TACT EVQ11G04M
CNA101	8A-NF8-656-010		CONN ASSY, 5P TID-A 400<8LH>	S809	87-A90-095-080		SW, TACT EVQ11G04M
CNA103	8A-NF8-656-010		CONN ASSY, 5P TID-A 400<7U>	S810	87-A90-095-080		SW, TACT EVQ11G04M
CON101	87-A61-011-010		CONN, 13P H BLK TAC-L13P-A3	S811	87-A90-095-080		SW, TACT EVQ11G04M
CON102	87-A61-011-010		CONN, 13P H BLK TAC-L13P-A3	S812	87-A90-095-080		SW, TACT EVQ11G04M

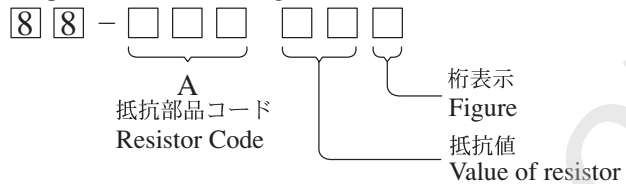
HEAD-2 C.B

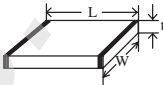
85-ZM3-601-010 PWB, FLEX I
 CON351 83-NEG-608-010 CONN ASSY, 8P-RPB

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding

チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



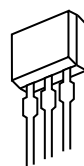
E C B

CD1585
CSA952
CSC4115
KTA1266
KTC3198
KTC3199



E C B

CC5551



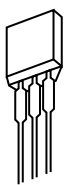
E C B

2SB1237



B C E

2SB1370
FN1016
FP1016



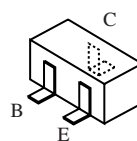
E C B

2SA933
DTC114ES



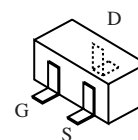
G D S

2SK3053



B C E

2SA1235 KRA102
2SC2714 KRA104
2SC3052 KRA107
2SD1306 KRC102
CMBT5401 RT1N141C
CMBT5551 RT1P141C



G D S

2SJ461-T1
2SK2158