



SERVICE MANUAL

UHF TRUNKED RADIO

IC-F4TR

INTRODUCTION

This service manual describes the latest service information for the **IC-F4TR** UHF TRUNKED RADIO at the time of publication.

To upgrade quality, all electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

DANGER

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than 10 V. This will ruin the transceiver.

DO NOT expose the transceiver to rain, snow or any liquids.

DO NOT reverse the polarities of the power supply when connecting the transceiver.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front end.

ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit order numbers
2. Component part number and name
3. Equipment model name and unit name
4. Quantity required

<SAMPLE ORDER>

1110001810 S.IC TA7368F IC-F4TR MAIN UNIT 1 piece
8810009560 Screw PH B0 2×6 ZK IC-F4TR CHASSIS 6 pieces

Addresses are provided on the inside back cover for your convenience.



REPAIR NOTES

1. Make sure a problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a signal generator or a sweep generator.
7. **ALWAYS** connect a 40 dB or 50 dB attenuator between the transceiver and a deviation meter or spectrum analyser when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

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SECTION 1 SPECIFICATIONS

■ GENERAL

| | |
|-------------------------------------|---|
| Frequency coverage | : 450.000–490.000 MHz |
| Type of emission | : 16K0F3E (25 kHz) 11K0F3E (12.5 kHz) |
| Antenna impedance | : 50 Ω nominal |
| Power supply requirement | : 9.6 V DC (negative ground; supplied battery pack) |
| Current drain at 9.6 V DC (approx.) | : Transmit 1.4 A (at 4 W) 700 mA (at 1W) Receive 280 mA (max. audio) 110 mA (stan-by) |
| Frequency error | : ± 2.5 ppm |
| Usable temperature range | : -30°C to $+60^{\circ}\text{C}$; $+22^{\circ}\text{F}$ to $+140^{\circ}\text{F}$ |
| Dimensions (proj. not included) | : 57(W) \times 140(H) \times 37(D) mm; 2 $\frac{1}{4}$ (W) \times 5 $\frac{1}{2}$ (H) \times 1 $\frac{15}{32}$ (D) inch |
| Weight (BP-196) | : 390 g; 13.8 oz |

■ TRANSMITTER

| | |
|-------------------------------|--|
| Output power | : High 4 W Low 1 W |
| Modulation system | : Variable reactance frequency modulation |
| Max. frequency deviation | : ± 5.0 kHz (25 kHz) ± 2.5 kHz (12.5 kHz) |
| Spurious emissions | : 70 dB typical |
| Adjacent channel power | : 75 dB typical (25 kHz) 70 dB typical (12.5 kHz) |
| Transmitter audio distortion | : Less than 5 % at 1 kHz, 60 % deviation |
| Residual modulation | : 40 dB (25 kHz) 34 dB (12.5 kHz) |
| Limiting charact of modulator | : 60–100 % of max.deviation |
| Ext. microphone connector | : 3-conductor 2.5(d) mm ($\frac{1}{10}$ ")/2 k Ω |

■ RECEIVER

| | |
|------------------------------------|---|
| Receive system | : Double-conversion superheterodyne system |
| Intermediate frequencies | : 1st IF 47.250 MHz, 2nd IF 450 kHz |
| Sensitivity | : 0.3 μV at 12 dB SINAD |
| Squelch sencitivity (at threshold) | : 0.3 μV typical |
| Adjcent channel selectivity | : 70 dB typical (25 kHz) 65 dB typical (12.5 kHz) |
| Spurious response | : 70 dB typical |
| Inter modulation rejection ratio | : 75 dB typical |
| Hum and noise | : 48 dB typical (25 kHz) 34 dB typical (12.5 kHz) |
| Audio output power (at 9.6 V DC) | : 500 mW typical at 5% distortion with an 8 Ω load |
| Ext. speaker connector | : 3-conductor 3.5(d) mm ($\frac{1}{8}$ ")/8 Ω |

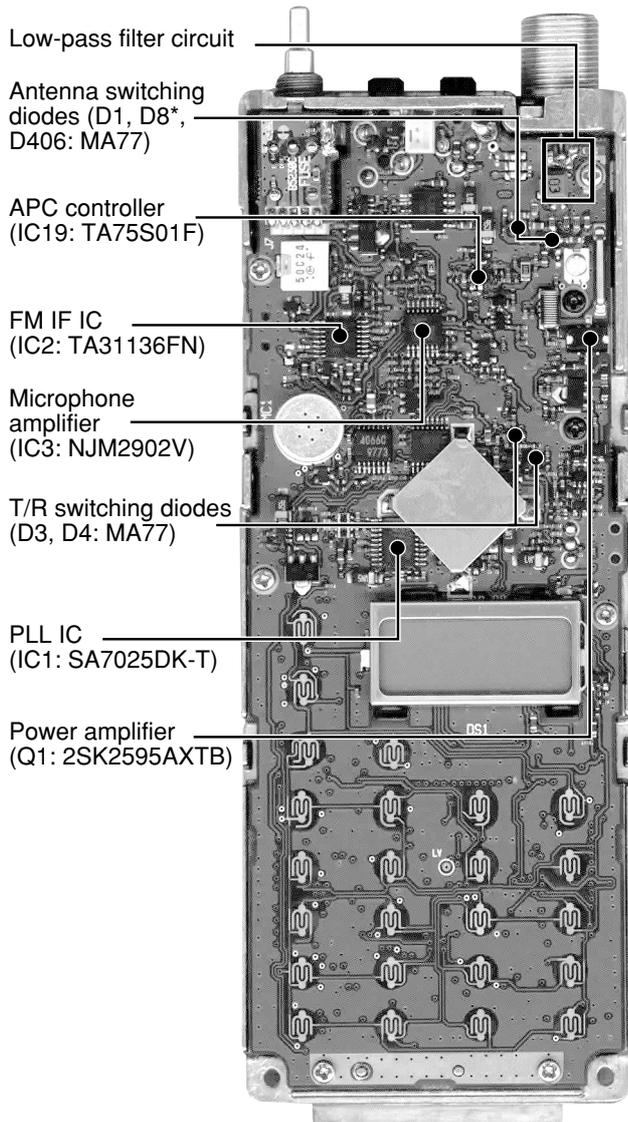
Measurements made in accordance with EIA/TIA-603

All stated specifications are subject to change without notice or obligation.

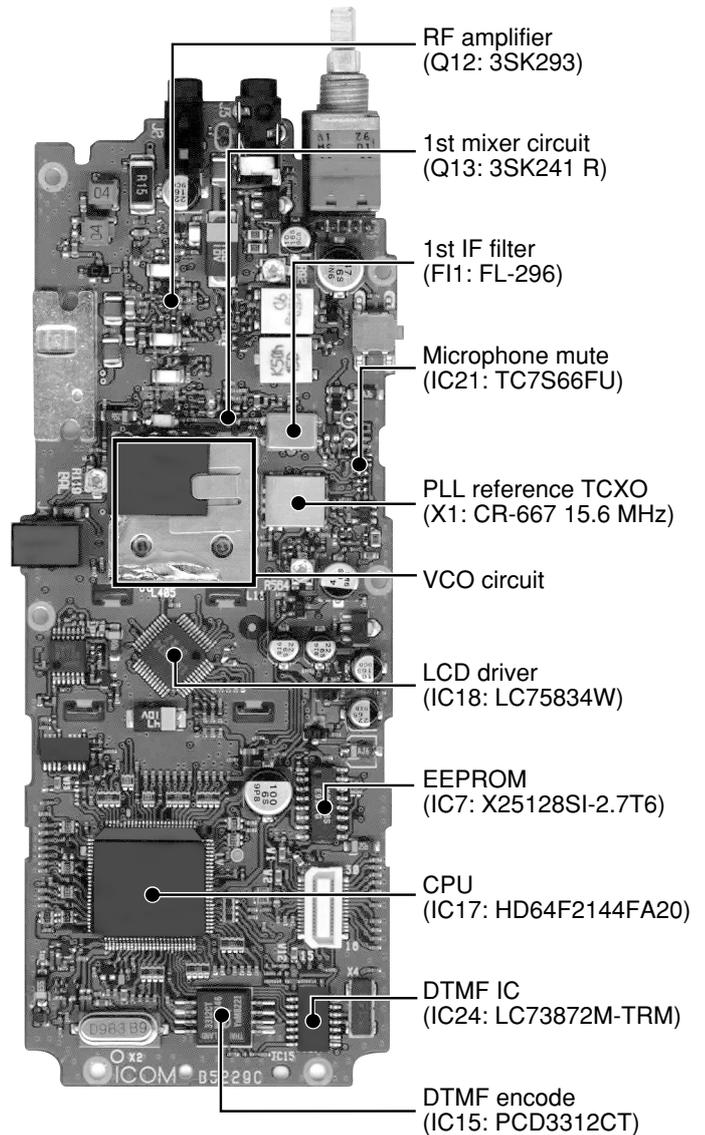
SECTION 2 INSIDE VIEWS

• MAIN UNIT

TOP VIEW



BOTTOM VIEW

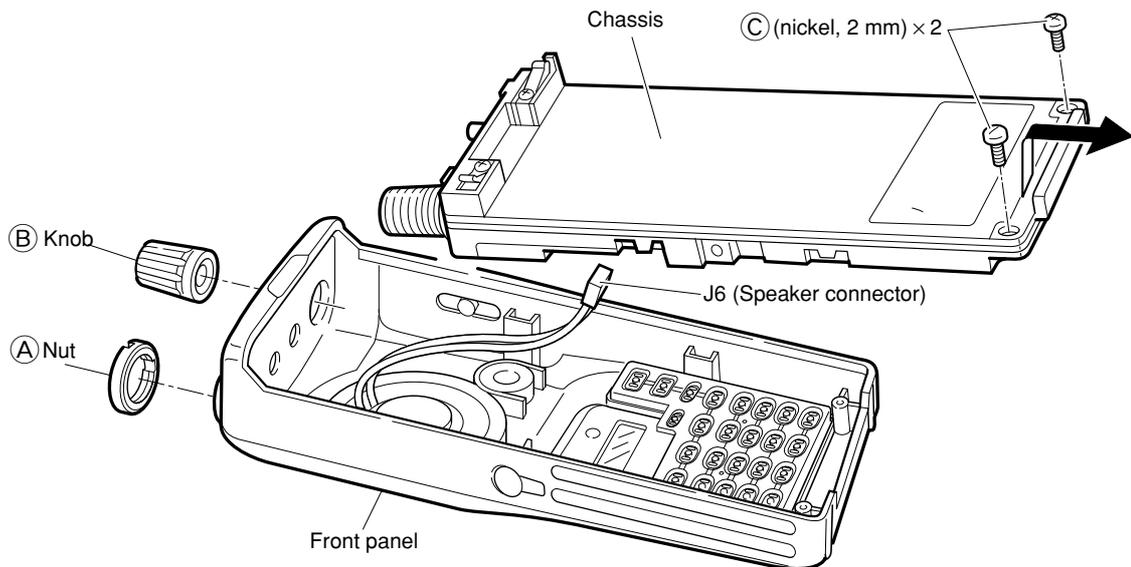


Note: * Located under side of the point.

SECTION 3 DISASSEMBLY INSTRUCTION

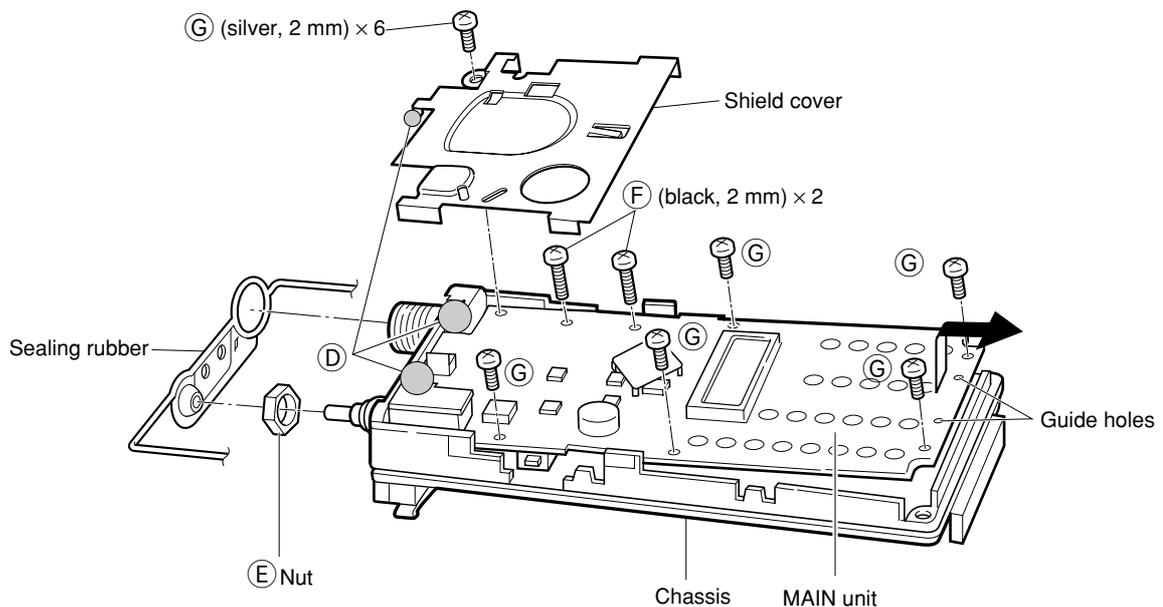
• Removing the chassis panel

- ① Unscrew 1 nut (A), and remove 1 nob (B).
- ② Unscrew 2 screws (C).
- ③ Take off the chassis in the direction of the arrow.
- ④ Unplug J6 to separate front panel and chassis.



• Removing the MAIN unit

- ① Remove the sealing rubber.
- ② Unsolder 3 points (D), and unscrew 1 nut (E).
- ③ Unscrew 2 screws (F) and 6 screws (G) (silver, 2 mm) to separate the chassis and MAIN unit.
- ④ Take off the MAIN unit in the direction of the arrow.



SECTION 4 CIRCUIT DESCRIPTION

4-1 RECEIVER CIRCUITS

4-1-1 ANTENNA SWITCHING CIRCUIT

Received signals are passed through the low-pass filter (L1–L3, C3–C5, C7). The filtered signals are applied to the $\frac{1}{4}$ type antenna switching circuit (D406, D8).

The antenna switching circuit functions as a low-pass filter while receiving. However, its impedance becomes very high while D406 and D8 are turned ON. Thus transmit signals are blocked from entering the receiver circuits. The antenna switching circuit employs a $\frac{1}{4}$ type diode switching system.

The passed signals are then applied to the RF amplifier circuit.

4-1-2 RF CIRCUIT

The RF circuit amplifies signals within the range of frequency coverage and filters out-of-band signals.

The signals from the antenna switching circuit are amplified at the RF amplifier (Q12) after passing through the tunable bandpass filter (D10, L17). The amplified signals are applied to the 1st mixer circuit (Q13) after out-of-band signals are suppressed at the tunable bandpass filter (D401, L18, D11, L402, D12, L19).

Varactor diodes are employed at the bandpass filters that track the filters and are controlled by the CPU (IC17) via the expander IC (IC10) using T1–T4 signals. These diodes tune the centre frequency of an RF passband for wide bandwidth receiving and good image response rejection.

4-1-3 1ST MIXER AND 1ST IF CIRCUITS

The 1st mixer circuit converts the received signal into a fixed frequency of the 1st IF signal with a PLL output frequency. By changing the PLL frequency, only the desired frequency will pass through a crystal filter at the next stage of the 1st mixer.

The signals from the RF circuit are mixed at the 1st mixer (Q13) with a 1st LO signal coming from the VCO circuit to produce a 47.25 MHz 1st IF signal.

The 1st IF signal is applied to a crystal filter (F11) to suppress out-of-band signals. The filtered 1st IF signal is applied to the IF amplifier (Q400), then applied to the 2nd mixer circuit (IC2, pin 16).

4-1-4 2ND IF AND DEMODULATOR CIRCUITS

The 2nd mixer circuit converts the 1st IF signal into a 2nd IF signal. A double conversion superheterodyne system (which converts receive signals twice) improves the image rejection ratio and obtains stable receiver gain.

The 1st IF signal from the IF amplifier is applied to the 2nd mixer section of the FM IF IC (IC2, pin 16), and is mixed with the 2nd LO signal to be converted into a 450 kHz 2nd IF signal.

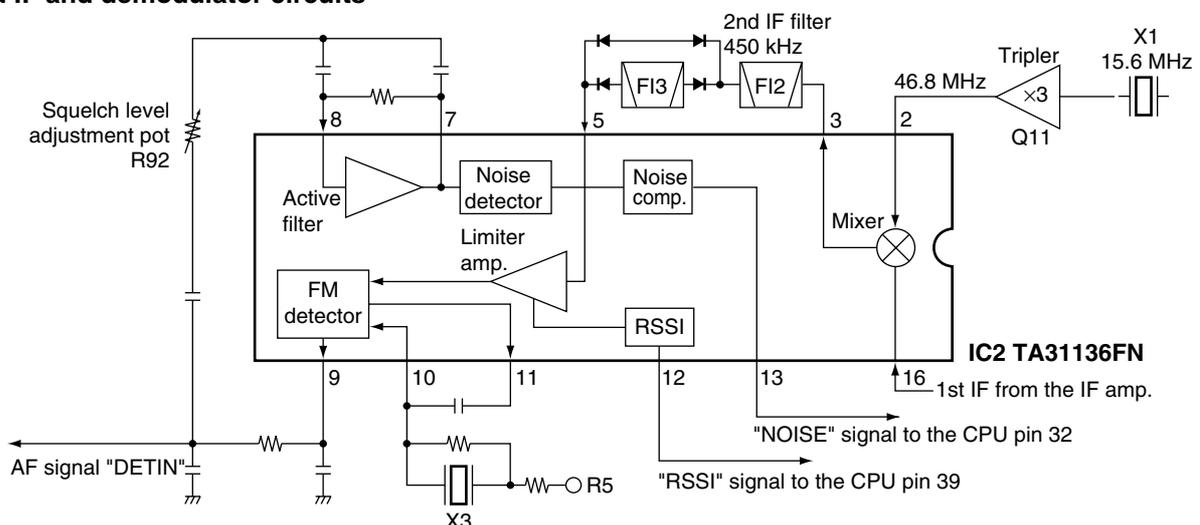
The FM IF IC contains the 2nd mixer, limiter amplifier, quadrature detector and active filter circuits. A 2nd LO signal (46.8 MHz) is produced at the PLL circuit by tripling its reference frequency.

The 2nd IF signal from the 2nd mixer (IC2, pin 3) passes through ceramic filters (F12, F13) during narrow channel spacing selection or F12 only (bypassing F13) during wide channel spacing selection to remove unwanted heterodyned frequencies. It is then amplified at the limiter amplifier (IC2, pin 5) and applied to the quadrature detector (IC2, pins 10, 11) to demodulate the 2nd IF signal into AF signals.

4-1-5 AF CIRCUIT

AF signals from the FM IF IC (IC2, pin 9) are applied to the analog switch (IC4, pin 1) via the high-pass filter circuits (IC3a, pins 3, 1 and IC3b, pins 5, 7). The output signals from pin 11 (IC4) are applied to the AF power amplifier (IC5, pin 4) after being passed through the [VOL] control (VR board, R1).

• 2nd IF and demodulator circuits



The applied AF signals are amplified at the AF power amplifier circuit (IC5, pin 4) to obtain the specified audio level. The amplified AF signals, output from pin 10, are applied to the internal speaker (SP1) via the [SP] jack when no plug is connected to the jack.

4-1-6 SQUELCH CIRCUIT

A squelch circuit cuts out AF signals when no RF signals are received. By detecting noise components in the AF signals, the squelch switches the AF mute switch.

A portion of the AF signals from the FM IF IC (IC2, pin 9) are applied to the active filter section (IC2, pin 8) where noise components are amplified and detected with an internal noise detector. The squelch level adjustment pot (R92) is connected in parallel to the active filter input (pin 8) to control the input noise level.

The active filter section amplifies noise components. The filtered signals are rectified at the noise detector section and converted into "NOISE" (pulse type) signals at the noise comparator section (IC2, pin13). The "NOISE" signal is applied to the CPU (IC17, pin 32).

The CPU detects the receiving signal strength from the number of the pulses, and outputs an "RMUTE" signal from pin 94. This signal controls the analog switch (IC4) to cut the AF signal line.

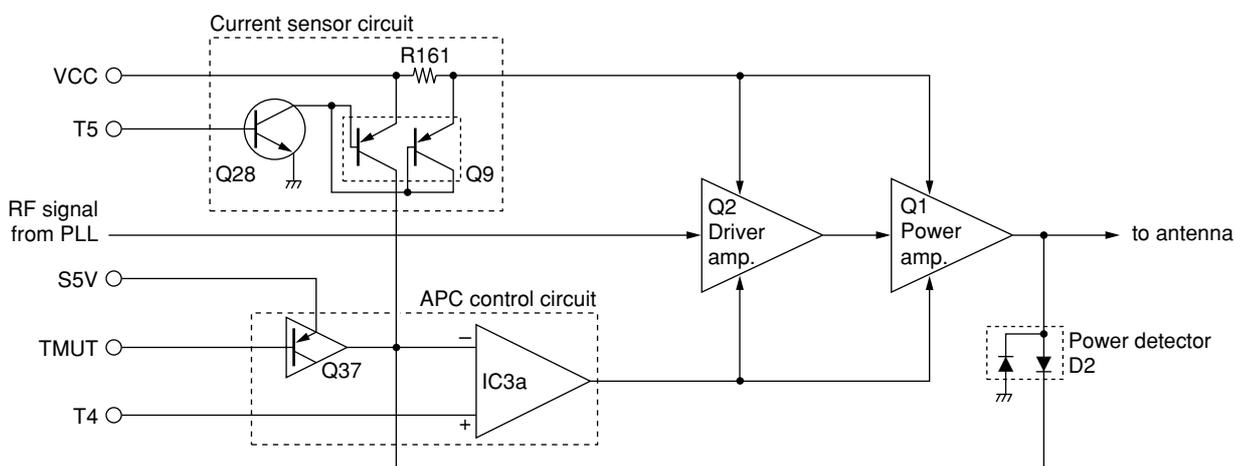
4-2 TRANSMITTER CIRCUITS

4-2-1 MICROPHONE AMPLIFIER CIRCUIT

The microphone amplifier circuit amplifies audio signals with +6 dB/octave pre-emphasis characteristics from the microphone to a level needed for the modulation circuit.

The AF signals from the microphone are applied to the microphone amplifier circuit (IC3c, pin 10). The amplified AF signals are passed through the deviation adjustment pot (R584), analog switch (IC4, pins 2–4) and low-pass filter circuit (IC3d, pins 13, 14). The filtered AF signals are applied to the modulator circuit after being passed through the analog switch (IC4, pins 8–10) and the modulation balance adjustment pot (R119).

• APC circuit



4-2-2 MODULATION CIRCUIT

The modulation circuit modulates the VCO oscillating signal (RF signal) using the microphone audio signal.

The audio signals change the reactance of a diode (D404) to modulate an oscillated signal at the TX-VCO circuit (Q7). The oscillated signal is amplified at the buffer-amplifiers (Q6, Q4), then applied to the T/R switching circuit (D3, D4).

4-2-3 DRIVE/POWER AMPLIFIER CIRCUITS

The signal from the TX-VCO circuit passes through the T/R switching circuit (D3) and is amplified at the buffer (Q403) pre-drive (Q3), drive (Q2) and power (Q1) amplifiers to obtain 4 W of RF power (at 9.6 V DC). The amplified signal passes through the antenna switching circuit (D1), and low-pass filter and is then applied to the antenna connector.

The bias current of the drive (Q2) and power (Q1) amplifiers is controlled by the APC circuit.

4-2-4 CURRENT DETECTOR CIRCUIT

The current detector circuit (Q9, Q28) detects the total driving current of the drive and the power amplifiers, using the current sensor (R161). The differential amplifier (Q9) detects the voltage difference of the current sensor input and output voltages, then outputs control voltage to the CPU (IC17, pin 41).

4-2-5 POWER DETECTOR CIRCUIT

The power detector circuit (D2) detects the transmit power output level and converts it into DC voltage. The detected signal is applied to the APC circuit (IC19).

4-2-6 APC CIRCUIT

The APC circuit (IC19, Q37) protects the drive and the power amplifiers from excessive current drive, and selects HIGH or LOW output power.

The signal output from the power detector circuit (D2) is applied to the differential amplifier (IC19, pin 3), and the "T4" signal from the expander (IC10, pin 14), controlled by the CPU (IC17), is applied to the other input for reference.

When the driving current is increased, input voltage of the differential amplifier (IC19, pin 3) will be increased. In such cases, the differential amplifier output voltage (pin 4) is decreased to reduce the driving current.

4-3 PLL CIRCUIT

A PLL circuit provides stable oscillation of the transmit frequency and receive 1st LO frequency. The PLL output compares the phase of the divided VCO frequency to the reference frequency. The PLL output frequency is controlled by the divided ratio (N-data) of a programmable divider.

The PLL circuit contains a separate TX-VCO circuit (Q7, D403, L405, C418, C421–C423, C475) and RX-VCO circuit (Q8, D5, L11, C410–C414). The oscillated signal is amplified at the buffer-amplifiers (Q6, Q4) and then applied to the T/R switching circuit (D3, D4). The signal from the TX-VCO circuit is applied to the drive amplifier circuit and the RX-VCO signal to the 1st mixer circuit via the attenuator (R447–R449).

A portion of the VCO signal from the buffer amplifier (Q6) is amplified at the buffer amplifier (Q5) and is then fed back to the PLL IC (IC1, pin 5).

The PLL IC contains a prescaler, programmable counter, programmable divider phase detector and etc. The entered signal is divided at the prescaler and programmable counter section by the N-data ratio from the CPU. The divided signal is detected on phase at the phase detector using the reference frequency.

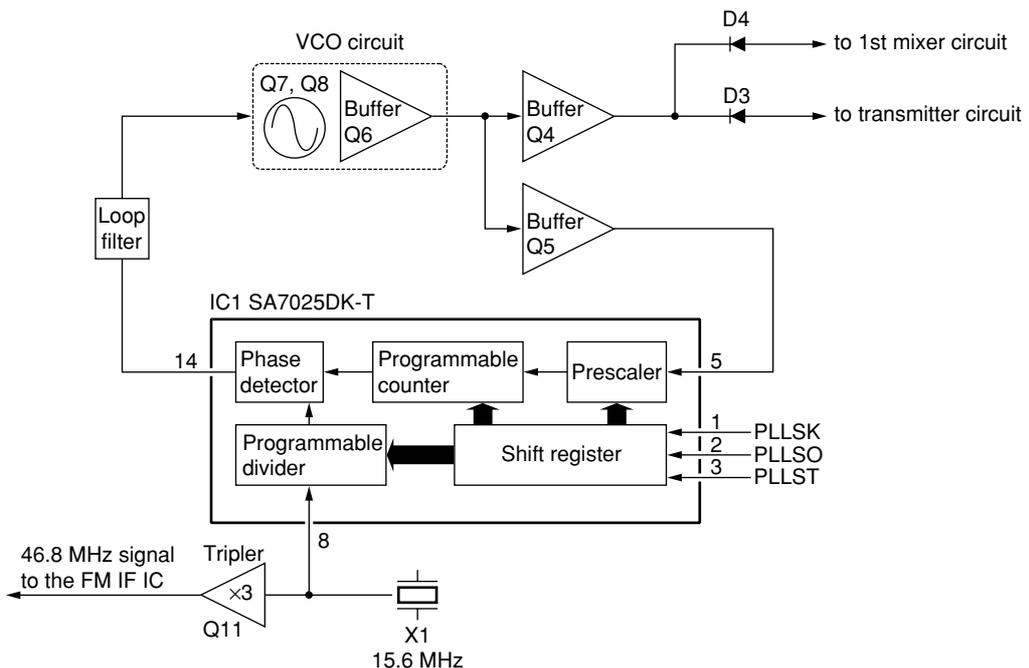
If the oscillated signal drifts, its phase changes from that of the reference frequency, causing a lock voltage change to compensate for the drift in the oscillated frequency.

4-4 POWER SUPPLY CIRCUITS

VOLTAGE LINE

| Line | Description |
|------|--|
| HV | The voltage from the attached battery pack. |
| VCC | The same voltage as the HV line (battery voltage) which is controlled by the power switch ([VOL] control). |
| CPU5 | Common 5 V converted from the VCC line by the reference regulator circuit (IC6). The output voltage is applied to the CPU (IC17) and the 5V regulator circuit. |
| 5V | Common 5 V converted from the VCC line by the 5 V regulator circuit (Q18, Q19) using the reference regulator (IC6). |
| T5 | 5 V for transmitter circuits regulated by the T5 regulator circuit (Q22). |
| R5 | 5 V for receiver circuits regulated by the R5 regulator circuit (Q21). |
| S5 | Common 5 V converted from the 5V line by the S5 regulator circuit (Q20). |
| OPT | The same voltage as the 5V line for the optional HM-75A or HS-51 through a resistor (R132). |

• PLL circuit



4-5 PORT ALLOCATIONS**CPU (IC17)**

| Pin number | Port name | Description |
|------------|-----------|---|
| 1 | RES | Input port for the reset signal. |
| 5 | MD1 | Input port for writing control signal. Low : Writing to CPU (IC17) |
| 10 | CSHIFT | Outputs CPU clock shift signal. |
| 11 | MODEL | Input port for model detect signal. |
| 13 | RXD | Input port for the cloning data from the buffer (D27). |
| 14 | TXD | Output port for the cloning data to the buffer (Q31). |
| 16 | DTMFSD | Outputs data signal for the DTMF encoder (IC15). |
| 18 | DTMFCK | Outputs clock signal for the DTMF encoder (IC15). |
| 19 | DAST | Outputs strobe signals to the expander IC (IC10). |
| 20 | DTACK | Input port for the DTMF clock signal from the DTMF decoder (IC24). |
| 21 | DTSD | Input port for the DTMF decoding signal from the DTMF decoder (IC24). |
| 26 | SN RX | I/O port for the optional unit. |
| 29 | BWC | Outputs bandwidth control signal for the data filter (IC12). |
| 32 | NOISE | Input port for noise signals (pulse-type) for noise squelch operation. |
| 33 | MMUTE | Outputs mic. audio mute control signal to the audio switch (IC25). High : While DTMF signals are being transmitted, etc. |
| 38 | BATIN | Input port for battery voltage detection. |
| 39 | RSSI | Input port for receiving signal strength level detection. |
| 40 | TEMPS | Input port for the internal temperature detection. |
| 41 | ISENS | Input port for the current detection signal from the current sensor circuit (Q9, Q28, R161). |
| 42 | LVIN | Input port for PLL lock voltage. |
| 43 | TDET | Input port for the subaudible tone decoding. |
| 44 | SAUD | Output port for the subaudible tone |
| 49 | MSO | Outputs serial signal for the LCD driver, EEPROM and etc. |
| 50 | MSI | Input port for serial signal from the LCD driver, EEPROM and etc. |
| 51 | MSCK | Outputs clock signal for the LCD driver, EEPROM and etc. |
| 52 | R5C | Outputs R5 regulator control signal. Low: While receiving |

| Pin number | Port name | Description |
|------------|--------------|---|
| 53 | BEEP | Outputs beep audio signals. |
| 54 | T5C | Outputs T5 regulator control signal. Low: While transmitting |
| 55 | TMUT | Outputs transmit mute signal. High : During unlock or while muted |
| 57 | VCOSW | Outputs VCO switching signal. High : While transmitting |
| 60 | ULOCK | Input port for the PLL unlock signal. High : During unlock |
| 62 | PLLST | Outputs strobe signals for the PLL IC (IC1). |
| 63 | PLLSD | Outputs data signal for the PLL IC (IC1). |
| 64 | PLLCK | Outputs clock signal for the PLL IC (IC1). |
| 65 | W/N | Outputs N/W switch control signal. High : While narrow is selected |
| 78 | CLR/ CODE | I/O port for the optional unit. |
| 79 | OPTB | I/O port for the optional unit. |
| 81 | BKLED | Outputs LCD backlight control signal. High : LCD backlight is ON |
| 84 | RMUTE | Outputs the analog switch (IC4) control signal (incl. beep). Low : While squelched, etc. |
| 85 | AFON | Outputs the control signal for the AF amplifier regulator circuit. High: While AF amp. is activated. |
| 90 | PTTIN | Input port for the PTT control signal from the PTT control switch (Q17). |
| 91 | TXLED | Outputs TX LED control signal. |
| 93 | S5C | Outputs S5 regulator control signal. |
| 94 | FSW | Outputs high-pass filter's characteristics select signal. High : During CTCSS operation |
| 95 | SN TR | I/O port for the optional unit. |
| 96 | EEPCS | Outputs chip select signal for EEPROM. |
| 97 | XTXD | Output port for the programming data to a flash writer. |
| 98 | XRXD | Input port for the programming data from a flash writer. |
| 99 | DTSTD | Input port for data signal from DTMF decoder (IC24). |

SECTION 6 PARTS LIST

[MAIN UNIT]

| REF NO. | ORDER NO. | | DESCRIPTION |
|---------|------------|--------------|----------------------|
| IC1 | 1130009130 | S.IC | SA7025DK-T |
| IC2 | 1110003490 | S.IC | TA31136FN (D,EL) |
| IC3 | 1110003780 | S.IC | NJM2902V-TE1 |
| IC4 | 1130008090 | S.IC | BU4066BCFV-E1 |
| IC5 | 1110001810 | S.IC | TA7368F (TP1) |
| IC6 | 1180001940 | S.IC | S-81250SGUP-DQD-T1 |
| IC7 | 1130008400 | S.IC | X25128SI-2.7T6 |
| IC10 | 1110003690 | S.IC | M62354GP 75EC |
| IC11 | 1110004880 | S.IC | S-80842ALNP-EA6-T2 |
| IC12 | 1110003780 | S.IC | NJM2902V-TE1 |
| IC13 | 1130006220 | S.IC | TC4W53FU (TE12L) |
| IC15 | 1130007770 | S.IC | PCD3312CT |
| IC16 | 1130006220 | S.IC | TC4W53FU (TE12L) |
| IC17 | 1140007600 | S.IC | HD64F2144FA20 |
| IC18 | 1130009090 | S.IC | LC75834W |
| IC19 | 1110002750 | S.IC | TA75S01F (TE85R) |
| IC20 | 1110002750 | S.IC | TA75S01F (TE85R) |
| IC21 | 1130007020 | S.IC | TC7S66FU (TE85R) |
| IC22 | 1130008560 | S.IC | TC75S51F (TE85L) |
| IC23 | 1110002750 | S.IC | TA75S01F (TE85R) |
| IC24 | 1130009700 | S.IC | LC73872M-TRM |
| IC25 | 1110002750 | S.IC | TA75S01F (TE85R) |
| Q1 | 1560000950 | S.FET | 2SK2595AXTB |
| Q2 | 1560000960 | S.FET | 2SK2596BXTL |
| Q3 | 1530002620 | S.TRANSISTOR | 2SC3585 R44-T2B |
| Q4 | 1530003310 | S.TRANSISTOR | 2SC5107-O (TE85R) |
| Q5 | 1530003310 | S.TRANSISTOR | 2SC5107-O (TE85R) |
| Q6 | 1530003310 | S.TRANSISTOR | 2SC5107-O (TE85R) |
| Q7 | 1530002920 | S.TRANSISTOR | 2SC4226-T2 R25 |
| Q8 | 1530002920 | S.TRANSISTOR | 2SC4226-T2 R25 |
| Q9 | 1590002160 | S.TRANSISTOR | XP6401-(TX) |
| Q11 | 1530002060 | S.TRANSISTOR | 2SC4081 T107 R |
| Q12 | 1580000730 | S.FET | 3SK293 (TE85L) |
| Q13 | 1580000680 | S.FET | 3SK241-R (TX) |
| Q15 | 1520000460 | S.TRANSISTOR | 2SB1132 T100 R |
| Q16 | 1590001190 | S.TRANSISTOR | XP6501-(TX) .AB |
| Q17 | 1590002530 | S.TRANSISTOR | UN911H (TX) |
| Q18 | 1520000460 | S.TRANSISTOR | 2SB1132 T100 R |
| Q19 | 1590001190 | S.TRANSISTOR | XP6501-(TX) .AB |
| Q20 | 1510000580 | S.TRANSISTOR | 2SA1362-GR (TE85R) |
| Q21 | 1510000580 | S.TRANSISTOR | 2SA1362-GR (TE85R) |
| Q22 | 1510000580 | S.TRANSISTOR | 2SA1362-GR (TE85R) |
| Q23 | 1530002060 | S.TRANSISTOR | 2SC4081 T107 R |
| Q25 | 1530000160 | S.TRANSISTOR | 2SC2712-Y (TE85RTEM) |
| Q27 | 1520000460 | S.TRANSISTOR | 2SB1132 T100 R |
| Q28 | 1530002060 | S.TRANSISTOR | 2SC4081 T107 R |
| Q31 | 1590000660 | S.TRANSISTOR | DTC144TU T107 |
| Q34 | 1560000540 | S.FET | 2SK880-Y (TE85R) |
| Q37 | 1590000720 | S.TRANSISTOR | DTA144EUA T106 |
| Q400 | 1530002600 | S.TRANSISTOR | 2SC4215-O (TE85R) |
| Q401 | 1590001400 | S.TRANSISTOR | XP1214 (TX) |
| Q402 | 1590001400 | S.TRANSISTOR | XP1214 (TX) |
| Q403 | 1530003310 | S.TRANSISTOR | 2SC5107-O (TE85R) |
| Q404 | 1530002850 | S.TRANSISTOR | 2SC4116-BL (TE85R) |
| Q405 | 1590000430 | S.TRANSISTOR | DTC144EUA T106 |
| Q407 | 1590000720 | S.TRANSISTOR | DTA144EUA T106 |
| Q413 | 1590000430 | S.TRANSISTOR | DTC144EUA T106 |
| Q415 | 1590000430 | S.TRANSISTOR | DTC144EUA T106 |
| Q417 | 1590000430 | S.TRANSISTOR | DTC144EUA T106 |
| Q419 | 1590001650 | S.TRANSISTOR | XP4601 (TX) |
| Q420 | 1560000810 | S.FET | 2SK1069-4-TL |
| Q422 | 1590000430 | S.TRANSISTOR | DTC144EUA T106 |
| Q425 | 1560000810 | S.FET | 2SK1069-4-TL |
| Q426 | 1560000810 | S.FET | 2SK1069-4-TL |
| Q427 | 1560000840 | S.FET | 2SK1829 (TE85R) |
| D1 | 1790000620 | S.DIODE | MA77 (TX) |
| D2 | 1790000490 | S.DIODE | HSM88AS-TR |
| D3 | 1790000620 | S.DIODE | MA77 (TX) |
| D4 | 1790000620 | S.DIODE | MA77 (TX) |
| D5 | 1720000370 | S.VARICAP | HVU350TRF |
| D8 | 1790000620 | S.DIODE | MA77 (TX) |

[MAIN UNIT]

| REF NO. | ORDER NO. | | DESCRIPTION |
|---------|------------|-----------------|-------------------------|
| D10 | 1720000370 | S.VARICAP | HVU350TRF |
| D11 | 1720000370 | S.VARICAP | HVU350TRF |
| D12 | 1720000370 | S.VARICAP | HVU350TRF |
| D15 | 1790001250 | S.DIODE | MA2S111-(TX) |
| D24 | 1750000130 | S.DIODE | DA204U T107 |
| D25 | 1790000670 | S.DIODE | SB07-03C-TB |
| D27 | 1750000130 | S.DIODE | DA204U T107 |
| D400 | 1790001210 | S.DIODE | 1SS375-TL |
| D401 | 1720000370 | S.VARICAP | HVU350TRF |
| D402 | 1790001210 | S.DIODE | 1SS375-TL |
| D403 | 1720000370 | S.VARICAP | HVU350TRF |
| D404 | 1720000520 | S.VARICAP | 1T365-01-T8A |
| D405 | 1720000360 | S.DIODE | HSU88TRF |
| D406 | 1790000620 | S.DIODE | MA77 (TX) |
| D407 | 1790001250 | S.DIODE | MA2S111-(TX) |
| D408 | 1790001250 | S.DIODE | MA2S111-(TX) |
| D409 | 1790000620 | S.DIODE | MA77 (TX) |
| D410 | 1160000060 | S.DIODE | DAN202U T107 |
| D411 | 1160000060 | S.DIODE | DAN202U T107 |
| D412 | 1750000520 | S.DIODE | DAN222TL |
| D413 | 1790001250 | S.DIODE | MA2S111-(TX) |
| F11 | 2010002310 | S.MONOLITH | FL-296 (47.250 MHz) |
| F12 | 2020001580 | S.CERAMIC | PBFC450P15D |
| F13 | 2020001570 | S.CERAMIC | PBFC450P9D |
| F14 | 2040001440 | S.LC | NFM60R20T152 |
| X1 | 6050010960 | S.XTAL | CR-667 (15.600 MHz) |
| X2 | 6050009870 | S.XTAL | CR-567 (9.8304 MHz) |
| X3 | 6070000210 | S.DISCRIMINATOR | CDBCA450CX24 |
| X4 | 6060000550 | S.CERAMIC | PBRC 3.58AR |
| L1 | 6200005780 | S.COIL | 33CS-Y655LY-03K=P3 |
| L2 | 6200005770 | S.COIL | 33CS-Y655LY-04K=P3 |
| L3 | 6200005770 | S.COIL | 33CS-Y655LY-04K=P3 |
| L5 | 6110003230 | S.COIL | LA-515 |
| L6 | 6200009070 | S.COIL | LQW1608A18NG00 |
| L7 | 6200005700 | S.COIL | ELJRE 22NG-F |
| L8 | 6200005710 | S.COIL | ELJRE 27NG-F |
| L9 | 6200005710 | S.COIL | ELJRE 27NG-F |
| L11 | 6200003690 | S.COIL | MC152-E558ANA-100051=P3 |
| L12 | 6200003550 | S.COIL | MLF1608A 4R7K-T |
| L13 | 6200003960 | S.COIL | MLF1608A 1R0K-T |
| L14 | 6200005680 | S.COIL | ELJRE 15NG-F |
| L15 | 6200009220 | S.COIL | LQW1608A15NG00 |
| L17 | 6200002320 | S.COIL | LQN 1A 8N8J04 |
| L18 | 6200002320 | S.COIL | LQN 1A 8N8J04 |
| L19 | 6200002320 | S.COIL | LQN 1A 8N8J04 |
| L20 | 6200004480 | S.COIL | MLF1608D R82K-T |
| L21 | 6200005740 | S.COIL | ELJRE 47NG-F |
| L22 | 6200004660 | S.COIL | MLF1608A 1R8K-T |
| L24 | 6200004480 | S.COIL | MLF1608D R82K-T |
| L25 | 6200004480 | S.COIL | MLF1608D R82K-T |
| L26 | 6200003590 | S.COIL | EXCCL3225U1 |
| L27 | 6200003590 | S.COIL | EXCCL3225U1 |
| L400 | 6200007740 | S.COIL | LQN21A 47NJ04 |
| L401 | 6200009220 | S.COIL | LQW1608A15NG00 |
| L402 | 6200002320 | S.COIL | LQN 1A 8N8J04 |
| L403 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L404 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L405 | 6200004110 | S.COIL | MC152-E558ANA-100050 |
| L406 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L407 | 6200003550 | S.COIL | MLF1608A 4R7K-T |
| L409 | 6200003550 | S.COIL | MLF1608A 4R7K-T |
| L410 | 6200003960 | S.COIL | MLF1608A 1R0K-T |
| L411 | 6200005710 | S.COIL | ELJRE 27NG-F |
| L412 | 6200003960 | S.COIL | MLF1608A 1R0K-T |
| L414 | 6200003540 | S.COIL | MLF1608D R22K-T |
| L415 | 6200003590 | S.COIL | EXCCL3225U1 |
| L417 | 6200003550 | S.COIL | MLF1608A 4R7K-T |
| L418 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L419 | 6200004780 | S.COIL | MLF1608A 1R5K-T |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|-------------|------------------------|
| L420 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L421 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L422 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L423 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L424 | 6200004780 | S.COIL | MLF1608A 1R5K-T |
| L425 | 6200005650 | S.COIL | ELJRE 8N2Z-F |
| L426 | 6200005650 | S.COIL | ELJRE 8N2Z-F |
| L427 | 6200005670 | S.COIL | ELJRE 12NG-F |
| L428 | 6200006770 | S.COIL | ELJRE 1N5Z-F |
| R1 | 7030003670 | S.RESISTOR | ERJ3GEYJ 823 V (82 kΩ) |
| R2 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R3 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R7 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R8 | 7030005210 | S.RESISTOR | ERJ2GEJ 822 X (8.2 kΩ) |
| R9 | 7030005210 | S.RESISTOR | ERJ2GEJ 822 X (8.2 kΩ) |
| R12 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R13 | 7030005530 | S.RESISTOR | ERJ2GEJ 100 X (10 Ω) |
| R14 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R15 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R17 | 7030005040 | S.RESISTOR | ERJ2GEJ 472 X (4.7 kΩ) |
| R18 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R19 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R20 | 7030005070 | S.RESISTOR | ERJ2GEJ 683 X (68 kΩ) |
| R21 | 7030004990 | S.RESISTOR | ERJ2GEJ 221 X (220 Ω) |
| R22 | 7030005070 | S.RESISTOR | ERJ2GEJ 683 X (68 kΩ) |
| R23 | 7030004990 | S.RESISTOR | ERJ2GEJ 221 X (220 Ω) |
| R40 | 7030007060 | S.RESISTOR | ERJ2GEJ 684 X (680 kΩ) |
| R41 | 7030005580 | S.RESISTOR | ERJ2GEJ 560 X (56 Ω) |
| R42 | 7410000950 | S.ARRAY | EXB-V8V 102 JV (1 kΩ) |
| R44 | 7030007570 | S.RESISTOR | ERJ2GEJ 122 X (1.2 kΩ) |
| R46 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R52 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R53 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R54 | 7030005100 | S.RESISTOR | ERJ2GEJ 154 X (150 kΩ) |
| R59 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R62 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R63 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R64 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R65 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R66 | 7030005100 | S.RESISTOR | ERJ2GEJ 154 X (150 kΩ) |
| R67 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R68 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R69 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R70 | 7030005040 | S.RESISTOR | ERJ2GEJ 472 X (4.7 kΩ) |
| R72 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R75 | 7030008280 | S.RESISTOR | ERJ2GEJ 271 X (270 Ω) |
| R77 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R82 | 7030007290 | S.RESISTOR | ERJ2GEJ 222 X (2.2 kΩ) |
| R83 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R84 | 7030004970 | S.RESISTOR | ERJ2GEJ 470 X (47 Ω) |
| R85 | 7030005030 | S.RESISTOR | ERJ2GEJ 152 X (1.5 kΩ) |
| R86 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R87 | 7030009270 | S.RESISTOR | ERJ2GEJ 821 X (820 Ω) |
| R88 | 7030005230 | S.RESISTOR | ERJ2GEJ 334 X (330 kΩ) |
| R89 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R90 | 7030005030 | S.RESISTOR | ERJ2GEJ 152 X (1.5 kΩ) |
| R92 | 7310004110 | S.TRIMMER | EVM-1YSX50 B54 (503) |
| R94 | 7030007350 | S.RESISTOR | ERJ2GEJ 393 X (39 kΩ) |
| R95 | 7030007290 | S.RESISTOR | ERJ2GEJ 222 X (2.2 kΩ) |
| R97 | 7030005060 | S.RESISTOR | ERJ2GEJ 333 X (33 kΩ) |
| R98 | 7030005230 | S.RESISTOR | ERJ2GEJ 334 X (330 kΩ) |
| R99 | 7030007340 | S.RESISTOR | ERJ2GEJ 153 X (15 kΩ) |
| R100 | 7030008400 | S.RESISTOR | ERJ2GEJ 182 X (1.8 kΩ) |
| R103 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R104 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R105 | 7030004990 | S.RESISTOR | ERJ2GEJ 221 X (220 Ω) |
| R107 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R108 | 7030008300 | S.RESISTOR | ERJ2GEJ 184 X (180 kΩ) |
| R109 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R112 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R114 | 7030005060 | S.RESISTOR | ERJ2GEJ 333 X (33 kΩ) |
| R116 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R117 | 7030008400 | S.RESISTOR | ERJ2GEJ 182 X (1.8 kΩ) |
| R119 | 7310004090 | S.TRIMMER | EVM-1YSX50 B14 (103) |
| R120 | 7030005070 | S.RESISTOR | ERJ2GEJ 683 X (68 kΩ) |
| R121 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R122 | 7030009700 | S.RESISTOR | ERJ2GEJ 202 X (2 kΩ) |
| R123 | 7030007290 | S.RESISTOR | ERJ2GEJ 222 X (2.2 kΩ) |
| R124 | 7030009140 | S.RESISTOR | ERJ2GEJ 272 X (2.7 kΩ) |

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|-------------|------------------------|
| R125 | 7030005600 | S.RESISTOR | ERJ2GEJ 273 X (27 kΩ) |
| R126 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R127 | 7030003200 | S.RESISTOR | ERJ3GEYJ 100 V (10 Ω) |
| R128 | 7030003200 | S.RESISTOR | ERJ3GEYJ 100 V (10 Ω) |
| R130 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R131 | 7030005000 | S.RESISTOR | ERJ2GEJ 471 X (470 Ω) |
| R132 | 7030005000 | S.RESISTOR | ERJ2GEJ 471 X (470 Ω) |
| R133 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R134 | 7030007290 | S.RESISTOR | ERJ2GEJ 222 X (2.2 kΩ) |
| R135 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R137 | 7030005040 | S.RESISTOR | ERJ2GEJ 472 X (4.7 kΩ) |
| R139 | 7030005040 | S.RESISTOR | ERJ2GEJ 472 X (4.7 kΩ) |
| R141 | 7030005040 | S.RESISTOR | ERJ2GEJ 472 X (4.7 kΩ) |
| R144 | 7030005060 | S.RESISTOR | ERJ2GEJ 333 X (33 kΩ) |
| R146 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R147 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R148 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R149 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R153 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R154 | 7030008290 | S.RESISTOR | ERJ2GEJ 183 X (18 kΩ) |
| R155 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R156 | 7030000160 | S.RESISTOR | MCR10EZJH 15 Ω (150) |
| R157 | 7030000160 | S.RESISTOR | MCR10EZJH 15 Ω (150) |
| R158 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R160 | 7030000290 | S.RESISTOR | MCR10EZJH 180 Ω (181) |
| R161 | 7030007330 | S.RESISTOR | ERJ1WRSJR15U (0.15 Ω) |
| R162 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R163 | 7030005060 | S.RESISTOR | ERJ2GEJ 333 X (33 kΩ) |
| R164 | 7030009140 | S.RESISTOR | ERJ2GEJ 272 X (2.7 kΩ) |
| R165 | 7030008400 | S.RESISTOR | ERJ2GEJ 182 X (1.8 kΩ) |
| R167 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R174 | 7030007340 | S.RESISTOR | ERJ2GEJ 153 X (15 kΩ) |
| R176 | 7030008410 | S.RESISTOR | ERJ2GEJ 392 X (3.9 kΩ) |
| R178 | 7030008410 | S.RESISTOR | ERJ2GEJ 392 X (3.9 kΩ) |
| R181 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R182 | 7510001240 | S.THEMISTOR | ERTJ0EV 473 J (47K) |
| R184 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R185 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R186 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (4.7 kΩ) |
| R205 | 7030005030 | S.RESISTOR | ERJ2GEJ 152 X (1.5 kΩ) |
| R208 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R209 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R210 | 7030007290 | S.RESISTOR | ERJ2GEJ 222 X (2.2 kΩ) |
| R214 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R215 | 7030005520 | S.RESISTOR | RR0816R-334-D (330 kΩ) |
| R216 | 7030005630 | S.RESISTOR | RR0816R-154-D (150 kΩ) |
| R400 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R403 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R404 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R405 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R406 | 7030008280 | S.RESISTOR | ERJ2GEJ 271 X (270 Ω) |
| R407 | 7030005310 | S.RESISTOR | ERJ2GEJ 124 X (120 kΩ) |
| R408 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R409 | 7030005530 | S.RESISTOR | ERJ2GEJ 100 X (10 Ω) |
| R410 | 7030007300 | S.RESISTOR | ERJ2GEJ 332 X (3.3 kΩ) |
| R411 | 7030009140 | S.RESISTOR | ERJ2GEJ 272 X (2.7 kΩ) |
| R412 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R413 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R414 | 7030005000 | S.RESISTOR | ERJ2GEJ 471 X (470 Ω) |
| R415 | 7030005530 | S.RESISTOR | ERJ2GEJ 100 X (10 Ω) |
| R416 | 7030007300 | S.RESISTOR | ERJ2GEJ 332 X (3.3 kΩ) |
| R417 | 7030007300 | S.RESISTOR | ERJ2GEJ 332 X (3.3 kΩ) |
| R419 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R420 | 7030009280 | S.RESISTOR | ERJ2GE 391 X (390 Ω) |
| R421 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R422 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R424 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R438 | 7030005230 | S.RESISTOR | ERJ2GEJ 334 X (330 kΩ) |
| R439 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R441 | 7510001290 | S.THEMISTOR | ERTJ0ER 472 J (4.7K) |
| R442 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R443 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R444 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R445 | 7030004990 | S.RESISTOR | ERJ2GEJ 221 X (220 Ω) |
| R446 | 7030005720 | S.RESISTOR | ERJ2GEJ 563 X (56 kΩ) |
| R447 | 7030005000 | S.RESISTOR | ERJ2GEJ 471 X (470 Ω) |
| R448 | 7030003210 | S.RESISTOR | ERJ3GEYJ 120 V (12 Ω) |
| R449 | 7030005000 | S.RESISTOR | ERJ2GEJ 471 X (470 Ω) |
| R450 | 7030007290 | S.RESISTOR | ERJ2GEJ 222 X (2.2 kΩ) |
| R451 | 7030005160 | S.RESISTOR | ERJ2GEJ 105 X (1 MΩ) |
| R452 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|-------------|-------------------------|
| R453 | 7030005230 | S.RESISTOR | ERJ2GEJ 334 X (330 kΩ) |
| R455 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R456 | 7030005030 | S.RESISTOR | ERJ2GEJ 152 X (1.5 kΩ) |
| R457 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R458 | 7030005600 | S.RESISTOR | ERJ2GEJ 273 X (27 kΩ) |
| R459 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R460 | 7030004990 | S.RESISTOR | ERJ2GEJ 221 X (220 Ω) |
| R464 | 7030008410 | S.RESISTOR | ERJ2GEJ 392 X (3.9 kΩ) |
| R465 | 7030007250 | S.RESISTOR | ERJ2GEJ 220 X (22 Ω) |
| R466 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R467 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R468 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R469 | 7030009140 | S.RESISTOR | ERJ2GEJ 272 X (2.7 kΩ) |
| R470 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R471 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R472 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R473 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R474 | 7030005230 | S.RESISTOR | ERJ2GEJ 334 X (330 kΩ) |
| R480 | 7030005230 | S.RESISTOR | ERJ2GEJ 334 X (330 kΩ) |
| R481 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R482 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R483 | 7030007340 | S.RESISTOR | ERJ2GEJ 153 X (15 kΩ) |
| R484 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R485 | 7030009140 | S.RESISTOR | ERJ2GEJ 272 X (2.7 kΩ) |
| R486 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R487 | 7030007340 | S.RESISTOR | ERJ2GEJ 153 X (15 kΩ) |
| R491 | 7030009700 | S.RESISTOR | ERJ2GEJ 202 X (2 kΩ) |
| R492 | 7030009710 | S.RESISTOR | ERJ2GEJ 203 X (20 kΩ) |
| R493 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R494 | 7030008410 | S.RESISTOR | ERJ2GEJ 392 X (3.9 kΩ) |
| R495 | 7030005530 | S.RESISTOR | ERJ2GEJ 100 X (10 Ω) |
| R496 | 7030009700 | S.RESISTOR | ERJ2GEJ 202 X (2 kΩ) |
| R497 | 7030009700 | S.RESISTOR | ERJ2GEJ 202 X (2 kΩ) |
| R498 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R500 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R503 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R504 | 7030007300 | S.RESISTOR | ERJ2GEJ 332 X (3.3 kΩ) |
| R505 | 7410000950 | S.ARRAY | EXB-V8V 102 JV (1 kΩ) |
| R508 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R509 | 7030007350 | S.RESISTOR | ERJ2GEJ 393 X (39 kΩ) |
| R512 | 7030008400 | S.RESISTOR | ERJ2GEJ 182 X (1.8 kΩ) |
| R514 | 7030008290 | S.RESISTOR | ERJ2GEJ 183 X (18 kΩ) |
| R516 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R517 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R519 | 7410000750 | S.ARRAY | EXB-V4V 104JV (100 kΩ) |
| R520 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R521 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R522 | 7030005600 | S.RESISTOR | ERJ2GEJ 273 X (27 kΩ) |
| R523 | 7030005600 | S.RESISTOR | ERJ2GEJ 273 X (27 kΩ) |
| R524 | 7030005600 | S.RESISTOR | ERJ2GEJ 273 X (27 kΩ) |
| R525 | 7410000770 | S.ARRAY | EXB-V4V 102 JV (1 kΩ) |
| R526 | 7410000850 | S.ARRAY | EXB-V4V 151 JV (150 Ω) |
| R527 | 7410000950 | S.ARRAY | EXB-V8V 102 JV (1 kΩ) |
| R528 | 7410000950 | S.ARRAY | EXB-V8V 102 JV (1 kΩ) |
| R529 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R530 | 7410000770 | S.ARRAY | EXB-V4V 102 JV (1 kΩ) |
| R531 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R532 | 7410000770 | S.ARRAY | EXB-V4V 102 JV (1 kΩ) |
| R533 | 7410000770 | S.ARRAY | EXB-V4V 102 JV (1 kΩ) |
| R534 | 7410000950 | S.ARRAY | EXB-V8V 102 JV (1 kΩ) |
| R535 | 7410000770 | S.ARRAY | EXB-V4V 102JV (1 kΩ) |
| R536 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R537 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R538 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R539 | 7410000950 | S.ARRAY | EXB-V8V 102 JV (1 kΩ) |
| R540 | 7410000950 | S.ARRAY | EXB-V8V 102 JV (1 kΩ) |
| R545 | 7030008370 | S.RESISTOR | ERJ2GEJ 561 X (560 Ω) |
| R547 | 7030005720 | S.RESISTOR | ERJ2GEJ 563 X (56 kΩ) |
| R548 | 7410000730 | S.ARRAY | EXB-V8V 104 JV (100 kΩ) |
| R549 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R550 | 7030005070 | S.RESISTOR | ERJ2GEJ 683 X (68 kΩ) |
| R551 | 7030007600 | S.RESISTOR | RR0816R-913-D (91 kΩ) |
| R552 | 7030007290 | S.RESISTOR | ERJ2GEJ 222 X (2.2 kΩ) |
| R553 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R555 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R556 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R557 | 7030006610 | S.RESISTOR | ERJ2GEJ 394 X (390 kΩ) |
| R558 | 7030006610 | S.RESISTOR | ERJ2GEJ 394 X (390 kΩ) |
| R559 | 7410000770 | S.ARRAY | EXB-V4V 102 JV (1 kΩ) |
| R560 | 7410000750 | S.ARRAY | EXB-V4V 104 JV (100 kΩ) |
| R561 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|----------------|-------------------------------|
| R562 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R563 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R564 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R565 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R566 | 7030009530 | S.RESISTOR | ERJ2GEJ 270 X (27 Ω) |
| R567 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R568 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R569 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R571 | 7030005040 | S.RESISTOR | ERJ2GEJ 472 X (4.7 kΩ) |
| R572 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R573 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R574 | 7030005110 | S.RESISTOR | ERJ2GEJ 224 X (220 kΩ) |
| R575 | 7030005120 | S.RESISTOR | ERJ2GEJ 102 X (1 kΩ) |
| R578 | 7030008290 | S.RESISTOR | ERJ2GEJ 183 X (18 kΩ) |
| R579 | 7410000770 | S.ARRAY | EXB-V4V 102JV (1 kΩ) |
| R581 | 7030007350 | S.RESISTOR | ERJ2GEJ 393 X (39 kΩ) |
| R582 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R584 | 7310004090 | S.TRIMMER | EVM-1YSX50 B14 (103) |
| R585 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R586 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R587 | 7030005220 | S.RESISTOR | ERJ2GEJ 223 X (22 kΩ) |
| R589 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R590 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R591 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R592 | 7030005720 | S.RESISTOR | ERJ2GEJ 563 X (56 kΩ) |
| R593 | 7030005060 | S.RESISTOR | ERJ2GEJ 333 X (33 kΩ) |
| R594 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R595 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R596 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R597 | 7030005040 | S.RESISTOR | ERJ2GEJ 472 X (4.7 kΩ) |
| R598 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R599 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R600 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R601 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R602 | 7030007340 | S.RESISTOR | ERJ2GEJ 153 X (15 kΩ) |
| R603 | 7030008400 | S.RESISTOR | ERJ2GEJ 182 X (1.8 kΩ) |
| R604 | 7030005170 | S.RESISTOR | ERJ2GEJ 474 X (470 kΩ) |
| R605 | 7030008300 | S.RESISTOR | ERJ2GEJ 184 X (180 kΩ) |
| R606 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R607 | 7030009320 | S.RESISTOR | ERJ2GEJ 4R7 X (4.7 Ω) |
| R608 | 7030005090 | S.RESISTOR | ERJ2GEJ 104 X (100 kΩ) |
| R609 | 7030003500 | S.RESISTOR | ERJ3GEYJ 332 V (3.3 kΩ) |
| R610 | 7030003500 | S.RESISTOR | ERJ3GEYJ 332 V (3.3 kΩ) |
| R611 | 7030005240 | S.RESISTOR | ERJ2GEJ 473 X (47 kΩ) |
| R612 | 7030007280 | S.RESISTOR | ERJ2GEJ 331 X (330 Ω) |
| R613 | 7510001240 | S.THERMISTOR | ERTJ0EV 473 J (47K) |
| R614 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R615 | 7030009290 | S.RESISTOR | ERJ2GEJ 562 X (5.6 kΩ) |
| R616 | 7510001240 | S.THERMISTOR | ERTJ0EV 473 J (47K) |
| R617 | 7030008010 | S.RESISTOR | ERJ2GEJ 123 X (12 kΩ) |
| R618 | 7030005050 | S.RESISTOR | ERJ2GEJ 103 X (10 kΩ) |
| R619 | 7030005170 | S.RESISTOR | ERJ2GEJ 474 X (470 kΩ) |
| C3 | 4030006990 | S.CERAMIC | C1608 CH 1H 080D-T-A |
| C4 | 4030009500 | S.CERAMIC | C1608 CH 1H 0R5B-T-A |
| C5 | 4030009920 | S.CERAMIC | C1608 CH 1H 050B-T-A |
| C7 | 4030009530 | S.CERAMIC | C1608 CH 1H 030B-T-A |
| C8 | 4030010760 | S.CERAMIC | C1608 CH 1H 331J-T-A |
| C9 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C10 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C11 | 4030006990 | S.CERAMIC | C1608 CH 1H 080D-T-A |
| C12 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C13 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C14 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C15 | 4030014160 | S.CERAMIC | ECUE1H270JCQ [24 keys] |
| | 4030009780 | S.CERAMIC | C1005 CH 1E 270J-T-A [7 keys] |
| C16 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C17 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C18 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C19 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C20 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C21 | 4510005310 | S.ELECTROLYTIC | ECEV1CA220SR |
| C22 | 4030014060 | S.CERAMIC | ECUE1H3R5BCQ |
| C24 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C25 | 4030014120 | S.CERAMIC | ECUE1H100CCQ |
| C26 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C27 | 4030014080 | S.CERAMIC | ECUE1H050BCQ |
| C28 | 4030014130 | S.CERAMIC | ECUE1H120JCQ |
| C30 | 4030014130 | S.CERAMIC | ECUE1H120JCQ |
| C31 | 4030014080 | S.CERAMIC | ECUE1H050BCQ |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|----------------|----------------------|
| C32 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C33 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C42 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C47 | 4030014200 | S.CERAMIC | ECUE1H101JCQ |
| C48 | 4550006410 | S.TANTALUM | ECST1VY334R |
| C50 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C51 | 4030014120 | S.CERAMIC | ECUE1H100CCQ |
| C52 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C53 | 4030014080 | S.CERAMIC | ECUE1H050BCQ |
| C54 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C55 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C56 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C57 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C58 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C59 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C60 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C61 | 4030014090 | S.CERAMIC | ECUE1H060CCQ |
| C62 | 4030014090 | S.CERAMIC | ECUE1H060CCQ |
| C63 | 4030014120 | S.CERAMIC | ECUE1H100CCQ |
| C65 | 4030014070 | S.CERAMIC | ECUE1H040BCQ |
| C66 | 4030014070 | S.CERAMIC | ECUE1H040BCQ |
| C67 | 4030014050 | S.CERAMIC | ECUE1H030BCQ |
| C71 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C73 | 4030016950 | S.CERAMIC | ECJ0EB1A473K |
| C75 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C76 | 4030011770 | S.CERAMIC | C1608 CH 1H 060B-T-A |
| C77 | 4030014050 | S.CERAMIC | ECUE1H030BCQ |
| C78 | 4030014090 | S.CERAMIC | ECUE1H060CCQ |
| C79 | 4030014070 | S.CERAMIC | ECUE1H040BCQ |
| C83 | 4030014420 | S.CERAMIC | ECUE1H0R5BCQ |
| C84 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C85 | 4030014090 | S.CERAMIC | ECUE1H060CCQ |
| C86 | 4030014050 | S.CERAMIC | ECUE1H030BCQ |
| C87 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C88 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C89 | 4030014420 | S.CERAMIC | ECUE1H0R5BCQ |
| C90 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C91 | 4030014080 | S.CERAMIC | ECUE1H050BCQ |
| C92 | 4030014110 | S.CERAMIC | ECUE1H080CCQ |
| C93 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C94 | 4030014420 | S.CERAMIC | ECUE1H0R5BCQ |
| C95 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C96 | 4030014100 | S.CERAMIC | ECUE1H070CCQ |
| C97 | 4030014070 | S.CERAMIC | ECUE1H040BCQ |
| C98 | 4030014150 | S.CERAMIC | ECUE1H220JCQ |
| C99 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C104 | 4030016950 | S.CERAMIC | ECJ0EB1A473K |
| C105 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C106 | 4030014120 | S.CERAMIC | ECUE1H100CCQ |
| C107 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C108 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C109 | 4030014110 | S.CERAMIC | ECUE1H080CCQ |
| C110 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C112 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C113 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C114 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C115 | 4030014200 | S.CERAMIC | ECUE1H101JCQ |
| C116 | 4030014190 | S.CERAMIC | ECUE1H680JCQ |
| C117 | 4550006700 | S.TANTALUM | ECST1AY106R |
| C118 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C120 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C121 | 4030014220 | S.CERAMIC | ECUE1E471KBQ |
| C122 | 4030014220 | S.CERAMIC | ECUE1E471KBQ |
| C123 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C124 | 4030016950 | S.CERAMIC | ECJ0EB1A473K |
| C126 | 4030016950 | S.CERAMIC | ECJ0EB1A473K |
| C128 | 4030012600 | S.CERAMIC | C2012 JB 1A 105M-T-A |
| C129 | 4550006540 | S.TANTALUM | ECST1CY475R |
| C130 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C131 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C132 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C133 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C134 | 4030014330 | S.CERAMIC | ECUE1H221JCQ |
| C135 | 4030017030 | S.CERAMIC | ECJ0EB1A273K |
| C136 | 4030017050 | S.CERAMIC | ECUE1E272KBQ |
| C137 | 4030017040 | S.CERAMIC | ECJ0EB1A333K |
| C139 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C140 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C144 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C145 | 4510004630 | S.ELECTROLYTIC | ECEV1CA100SR |
| C146 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|----------------|----------------------|
| C147 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C148 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C149 | 4030016960 | S.CERAMIC | ECJ0EB1C183K |
| C150 | 4550006200 | S.TANTALUM | ECST0JY106R |
| C151 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C152 | 4030016950 | S.CERAMIC | ECJ0EB1A473K |
| C153 | 4550006670 | S.TANTALUM | ECST1AD107R |
| C154 | 4550006320 | S.TANTALUM | ECST0JY475R |
| C155 | 4510004630 | S.ELECTROLYTIC | ECEV1CA100SR |
| C156 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C157 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C158 | 4510004540 | S.ELECTROLYTIC | ECEV0JA470SR |
| C159 | 4550006320 | S.TANTALUM | ECST0JY475R |
| C160 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C161 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C162 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C163 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C164 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C165 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C166 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C167 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C168 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C169 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C170 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C171 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C172 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C173 | 4510004640 | S.ELECTROLYTIC | ECEV1CA470SP |
| C174 | 4510005430 | S.ELECTROLYTIC | ECEV0JA220SR |
| C175 | 4510005430 | S.ELECTROLYTIC | ECEV0JA220SR |
| C176 | 4510005430 | S.ELECTROLYTIC | ECEV0JA220SR |
| C177 | 4550006170 | S.TANTALUM | ECST1AY225R |
| C179 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C180 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C181 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C182 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C183 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C184 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C185 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C186 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C187 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C189 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C190 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C191 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C193 | 4030014100 | S.CERAMIC | ECUE1H070CCQ |
| C194 | 4030014150 | S.CERAMIC | ECUE1H220JCQ |
| C195 | 4030014170 | S.CERAMIC | ECUE1H330JCQ |
| C196 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C197 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C200 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C201 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C202 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C204 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C205 | 4030007040 | S.CERAMIC | C1608 CH 1H 180J-T-A |
| C206 | 4030009570 | S.CERAMIC | C1608 CH 1H 0R3B-T-A |
| C207 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C208 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C209 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C210 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C211 | 4550006320 | S.TANTALUM | ECST0JY475R |
| C212 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C217 | 4030016950 | S.CERAMIC | ECJ0EB1A473K |
| C223 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C224 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C229 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C230 | 4550006140 | S.TANTALUM | ECST1EY474R |
| C231 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C232 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C233 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C234 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C237 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C238 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C239 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C240 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C241 | 4550006200 | S.TANTALUM | ECST0JY106R |
| C242 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C243 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C244 | 4030016790 | S.CERAMIC | ECJ0EB1C103K |
| C400 | 4030014120 | S.CERAMIC | ECUE1H100CCQ |
| C401 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C402 | 4030014110 | S.CERAMIC | ECUE1H080CCQ |
| C403 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION |
|---------|------------|--------------------------------|
| C404 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C405 | 4030014070 | S.CERAMIC ECUE1H040BCQ |
| C406 | 4030014110 | S.CERAMIC ECUE1H080CCQ |
| C407 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C408 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C410 | 4030014110 | S.CERAMIC ECUE1H080CCQ |
| C412 | 4030008190 | S.CERAMIC C1608 UJ 1H 040C-T-A |
| C413 | 4030014090 | S.CERAMIC ECUE1H060CCQ |
| C414 | 4030014100 | S.CERAMIC ECUE1H070CCQ |
| C415 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C416 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C417 | 4030014420 | S.CERAMIC ECUE1H0R5BCQ |
| C418 | 4030014290 | S.CERAMIC ECUE1H090CCQ |
| C419 | 4030016820 | S.CERAMIC ECUE1HR75BCQ |
| C421 | 4030008210 | S.CERAMIC C1608 UJ 1H 060D-T-A |
| C422 | 4030014080 | S.CERAMIC ECUE1H050BCQ |
| C423 | 4030014080 | S.CERAMIC ECUE1H050BCQ |
| C424 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C426 | 4030013850 | S.CERAMIC ECUE1E102KBQ |
| C427 | 4030014420 | S.CERAMIC ECUE1H0R5BCQ |
| C432 | 4030013850 | S.CERAMIC ECUE1E102KBQ |
| C436 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C447 | 4510005320 | S.ELECTROLYTIC ECEV0JA101SP |
| C448 | 4030014130 | S.CERAMIC ECUE1H120JCQ |
| C449 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C450 | 4030014070 | S.CERAMIC ECUE1H040BCQ |
| C451 | 4030014140 | S.CERAMIC ECUE1H150JCQ |
| C452 | 4030014050 | S.CERAMIC ECUE1H030BCQ |
| C455 | 4030014120 | S.CERAMIC ECUE1H100CCQ |
| C456 | 4550006200 | S.TANTALUM ECST0JY106R |
| C458 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C459 | 4030014050 | S.CERAMIC ECUE1H030BCQ |
| C460 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C463 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C464 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C466 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C467 | 4610001590 | S.TRIMMER TZC03R100A110 10P |
| C468 | 4030012600 | S.CERAMIC C2012 JB 1A 105M-T-A |
| C469 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C470 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C471 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C472 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C473 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C474 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C475 | 4030014000 | S.CERAMIC ECUE1H1R5BCQ |
| C476 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C477 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C479 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C481 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C483 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C486 | 4030014080 | S.CERAMIC ECUE1H050BCQ |
| C487 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C491 | 4550006450 | S.TANTALUM ECST1EY105R |
| C493 | 4030016760 | S.CERAMIC ECUE1E472KBQ |
| C494 | 4030016760 | S.CERAMIC ECUE1E472KBQ |
| C495 | 4030016760 | S.CERAMIC ECUE1E472KBQ |
| C496 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C497 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C499 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C500 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C501 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C502 | 4030016920 | S.CERAMIC ECUE1H222KBQ |
| C503 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C504 | 4550006300 | S.TANTALUM ECST1AY475R |
| C505 | 4030017060 | S.CERAMIC ECUE1E332KBQ |
| C506 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C507 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C508 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C509 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C510 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C511 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C513 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C514 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C515 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C516 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C517 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C518 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C519 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C520 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C521 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C522 | 4030013850 | S.CERAMIC ECUE1E102KBQ |

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION |
|---------|------------|------------------------|
| C523 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C524 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C525 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C526 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C527 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C528 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C529 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C530 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C531 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C532 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C533 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C534 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C535 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C536 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C537 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C538 | 4030014230 | S.CERAMIC ECUE1E681KBQ |
| C539 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C542 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C543 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C544 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C545 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C546 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C547 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C548 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C549 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C550 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C551 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C552 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C553 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C554 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C555 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C556 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C557 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C558 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C560 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C561 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C562 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C563 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C564 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C565 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C566 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C567 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C568 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C570 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C571 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C572 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C573 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C574 | 4030014220 | S.CERAMIC ECUE1E471KBQ |
| C575 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C576 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C577 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C580 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C581 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C582 | 4030014170 | S.CERAMIC ECUE1H330JCQ |
| C583 | 4030016950 | S.CERAMIC ECJ0EB1A473K |
| C584 | 4030016950 | S.CERAMIC ECJ0EB1A473K |
| C585 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C586 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C589 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C590 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C591 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C592 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C593 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C594 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C595 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C596 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C597 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C598 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C600 | 4550006810 | S.TANTALUM ECST1VY473R |
| C601 | 4030016790 | S.CERAMIC ECJ0EB1C103K |
| C602 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C603 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C604 | 4030014490 | S.CERAMIC ECUE1E331KBQ |
| C605 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C606 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C607 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C608 | 4550006170 | S.TANTALUM ECST1AY225R |
| C609 | 4030016930 | S.CERAMIC ECJ0EB1A104K |
| C610 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C611 | 4030014180 | S.CERAMIC ECUE1H470JCQ |
| C612 | 4030014180 | S.CERAMIC ECUE1H470JCQ |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|-------------|-----------------------------|
| C613 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C614 | 4030014220 | S.CERAMIC | ECUE1E471KBQ |
| C615 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C616 | 4030014220 | S.CERAMIC | ECUE1E471KBQ |
| C617 | 4030014220 | S.CERAMIC | ECUE1E471KBQ |
| C618 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C619 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C622 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C623 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C624 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C625 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C626 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C627 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C628 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C629 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C630 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C631 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C632 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C633 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C634 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C635 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C636 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C637 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C638 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C639 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C640 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C641 | 4030014280 | S.CERAMIC | ECUE1H0R3BCQ |
| C642 | 4030014420 | S.CERAMIC | ECUE1H0R5BCQ |
| C643 | 4030016820 | S.CERAMIC | ECUE1HR75BCQ |
| C644 | 4030016750 | S.CERAMIC | ECUE1H910JCQ |
| C645 | 4550006320 | S.TANTALUM | ECST0J475R |
| C646 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C647 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C648 | 4550006690 | S.TANTALUM | ECST1AC476R |
| C651 | 4030012610 | S.CERAMIC | C2012 JB 1C 474K-T-A |
| C652 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C653 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C654 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C655 | 4030013850 | S.CERAMIC | ECUE1E102KBQ |
| C656 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| C657 | 4030014070 | S.CERAMIC | ECUE1H040BCQ |
| C658 | 4030014050 | S.CERAMIC | ECUE1H030BCQ |
| C659 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C662 | 4030014200 | S.CERAMIC | ECUE1H101JCQ |
| C665 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C666 | 4030016930 | S.CERAMIC | ECJ0EB1A104K |
| C667 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C668 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| J2 | 6450001680 | CONNECTOR | HSJ1122-010010 |
| J3 | 6450001690 | CONNECTOR | HSJ1456-01-220 |
| J4 | 6450000870 | CONNECTOR | HEC2711-01-020 |
| J6 | 6510007080 | CONNECTOR | PI28A-02M |
| J7 | 6910010850 | CONNECTOR | IMS A-9230B-1-05Z080-T |
| J8 | 6510021330 | S.CONNECTOR | AXK530145P |
| DS1 | 5030001640 | LCD | LM-1761B |
| DS2 | 5010000160 | S.LED | LNJ310M6URA |
| DS3 | 5010000160 | S.LED | LNJ310M6URA |
| DS4 | 5040002190 | S.LED | LNJ808R8ERA |
| MC1 | 7700002160 | MICROPHON | KUC3523-040245 |
| S1 | 2230000900 | S.SWITCH | JPM1990-2013R |
| SP1 | 2510000960 | SPEAKER | K036NA500-26 |
| W1 | 7030003860 | S.JUMPER | ERJ3GE JPW V |
| W2 | 7030003860 | S.JUMPER | ERJ3GE JPW V |
| W6 | 6910012670 | S.JUMPER | MJ-0.4 |
| W10 | 7030003860 | S.JUMPER | ERJ3GE JPW V [24 keys] only |
| W12 | 7030003860 | S.JUMPER | ERJ3GE JPW V |
| W13 | 7030003860 | S.JUMPER | ERJ3GE JPW V |
| W14 | 7030003860 | S.JUMPER | ERJ3GE JPW V |
| W15 | 7030003860 | S.JUMPER | ERJ3GE JPW V |

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|-------------|------------------|
| W16 | 7030003860 | S.JUMPER | ERJ3GE JPW V |
| W17 | 7030003860 | S.JUMPER | ERJ3GE JPW V |
| WS1 | 8600035811 | CABLE | FX1923 P01MA-1 |
| EP1 | 0910050625 | PCB | B 5229E |
| EP2 | 8930042590 | LCD CONTACT | SRCN-1922-SP-N-W |

[VR BOARD]

| REF NO. | ORDER NO. | DESCRIPTION | |
|---------|------------|-------------|-------------------------|
| R1 | 7210002950 | VARIABLE | RV-312 |
| R2 | 7030004980 | S.RESISTOR | ERJ2GEJ 101 X (100 Ω) |
| R3 | 7030003480 | S.RESISTOR | ERJ3GEYJ 222 V (2.2 kΩ) |
| C1 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C2 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C3 | 4030014180 | S.CERAMIC | ECUE1H470JCQ |
| C4 | 4030014490 | S.CERAMIC | ECUE1E331KBQ |
| F1 | 5210000710 | S.FUSE | KAB 2402 322 NA29 |
| EP1 | 0910050634 | PCB | B 5230D |

S.=Surface mount

SECTION 7 MECHANICAL PARTS AND DISASSEMBLY

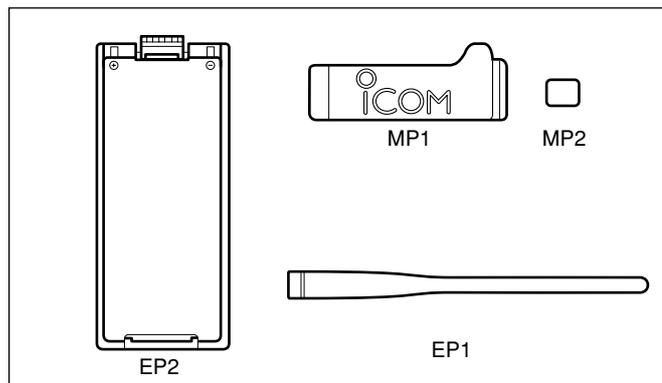
7-1 CABINET PARTS

7-2 ACCESSORIES

[CHASSIS PARTS]

| REF NO. | ORDER NO. | DESCRIPTION | QTY. |
|---------|------------|---|------|
| MP1 | 8010016822 | 1922 chassis-2 | 1 |
| MP2 | 8210014731 | 1922 front panel (B) assembly [24 keys] | 1 |
| | 8210015161 | 2066 front panel (A) assembly [7 keys] | 1 |
| MP4 | 8210014330 | 1922 contact base | 1 |
| MP5 | 8610010420 | Knob N-261 | 1 |
| MP6 | 8930051540 | 1922 10-key (B) [24 keys] | 1 |
| | 8930043970 | 2065 7-key [7 keys] | 1 |
| MP7 | 8930042070 | 1922 MIC cap | 1 |
| MP9 | 8930042030 | 1922 main seal | 1 |
| MP10 | 8110006050 | 1922 OPT cover | 1 |
| MP11 | 8930042050 | 1922 DC cap | 1 |
| MP12 | 8930042090 | 1922 plus terminal | 1 |
| MP13 | 8930042080 | 1922 minus terminal | 1 |
| MP17 | 8310048520 | 1922 window plate (I) | 1 |
| MP19 | 8930051530 | 1922 rear sheet (AV) | 1 |
| MP21 | 8930042350 | 1922 MIC sheet | 1 |
| MP22 | 8930042560 | 1922 OPT sheet | 1 |
| MP24 | 8830001250 | Nut ANT connector-101 | 1 |
| MP25 | 8830001010 | Hex nut (A) | 1 |
| MP26 | 8810000100 | Screw PH M2 x 4 ZK | 2 |
| MP27 | 8810009510 | Screw B0 2 x 4 NI-ZU (BT) | 6 |
| MP28 | 8810009510 | Screw PH B0 2 x 4 NI-ZU (BT) | 1 |
| MP29 | 8810009510 | Screw PH B0 2 x 4 NI-ZU (BT) | 2 |
| MP30 | 8810009560 | Screw PH B0 2 x 6 ZK (BT) | 2 |
| MP31 | 8810009560 | Screw PH B0 2 x 6 ZK (BT) | 2 |
| MP34 | 8930043210 | 1922 A-rear sheet | 1 |
| MP36 | 8950004671 | ANT connector-101A | 1 |
| MP37 | 8510011260 | 1923 shield cover | 1 |
| MP38 | 8930043760 | 1923 MIC seal | 1 |
| MP39 | 8930052330 | Sponge (GN) | 1 |
| MP40 | 8930043610 | Isolating sheet (EZ) | 1 |

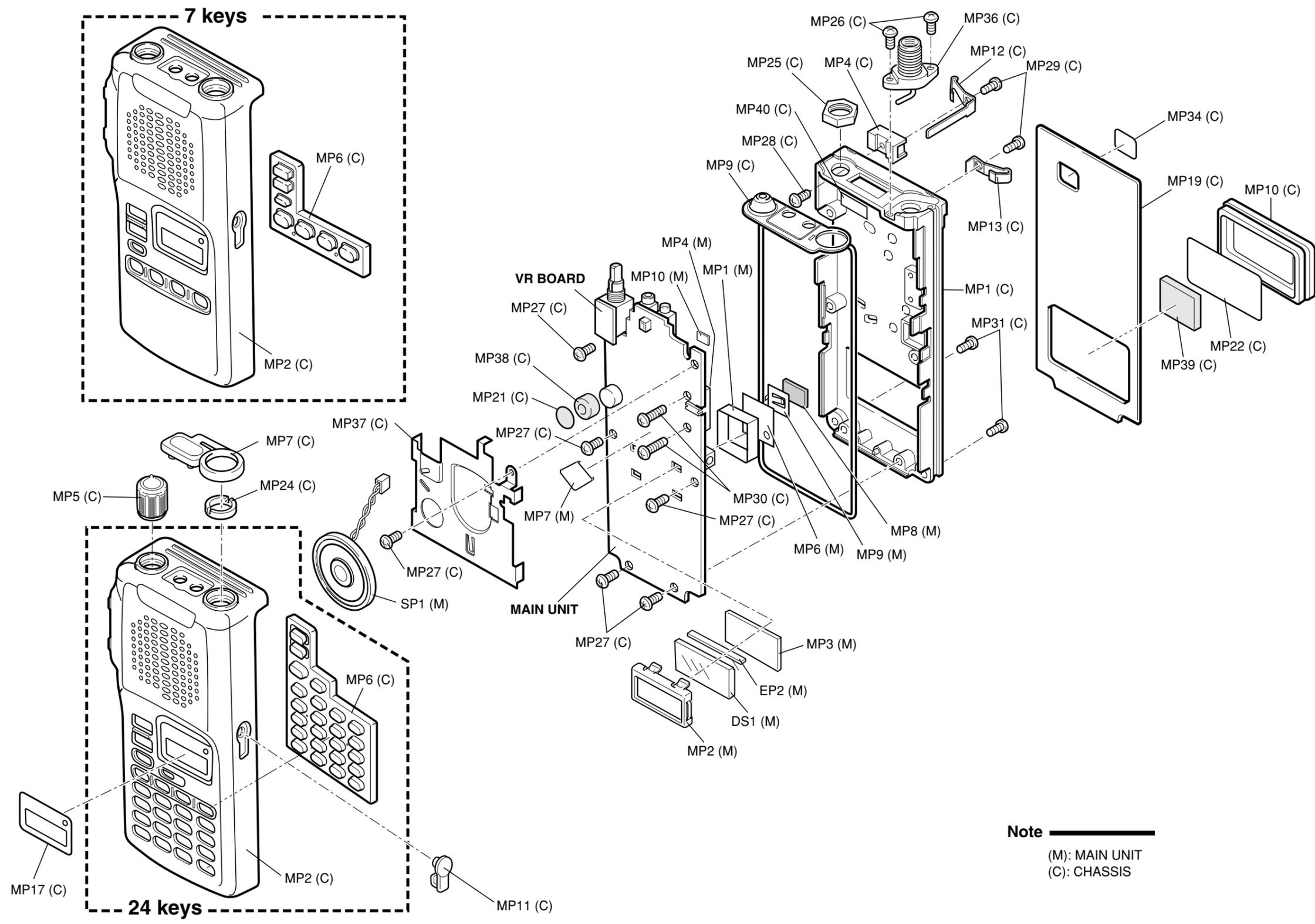
| REF NO. | ORDER NO. | DESCRIPTION | QTY. |
|---------|------------------|--------------------|------|
| EP1 | Optional product | Antenna FA-SC56U-2 | 1 |
| EP2 | Optional product | Battery BP-196 | 1 |
| MP1 | Optional product | 1922 belt clip | 1 |



Screw abbreviations: PH: Pan head B0: Self-tapping
 NI : Nickel ZK: Black

[MAIN UNIT]

| REF NO. | ORDER NO. | DESCRIPTION | QTY. |
|---------|------------|------------------------------|------|
| DS1 | 5030001640 | LCD LM-1761B | 1 |
| SP1 | 2510000960 | K036NA500-26A27 | 1 |
| EP2 | 8930042590 | LCD contact SRCN-1922-SP-N-W | 1 |
| MP1 | 8510011111 | 1922 VCO case-1 | 1 |
| MP2 | 8930042060 | 1922 LCD holder | 1 |
| MP3 | 8210014380 | 1922 Reflector | 1 |
| MP4 | 8410002081 | 1922 PA heatsink-1 | 1 |
| MP6 | 8510011180 | 1923 VCO cover | 1 |
| MP7 | 8510011230 | 1923 VCO shield | 1 |
| MP8 | 8930046590 | Sponge (FO) | 1 |
| MP9 | 8510009971 | 1591 shield plate-1 | 1 |
| MP10 | 8930038670 | Ferrite sheet | 1 |



Note _____
 (M): MAIN UNIT
 (C): CHASSIS

SECTION 8 SEMI-CONDUCTOR INFORMATIONS

8 - 1 TRANSISTORS AND FET'S

| NAME | SYMBOL | INSIDE VIEW |
|--|---|-------------|
| 2SA1362-GR | AEG | |
| 2SB1132 - R | BAR | |
| 2SC2712 - Y 2SC3585 R44 2SC4081 - R 2SC4116 - BL 2SC4215 - O 2SC4226 - R25 2SC5107 - O | LY R44 BR LL QO R25 MFO | |
| 2SK880 - Y | XY | |
| 2SK1069-4-TL | FJ | |
| 2SK1829 | KI | |
| 2SK2595AXTB | AX | |

| NAME | SYMBOL | INSIDE VIEW |
|---------------------------------------|----------------|-------------|
| 2SK2596BXTL | BX | |
| 3SK239XR - TL 3SK241 - R 3SK293 | XR DU UF | |
| DTA144EU UN911H | 16 6P | |
| DTC114EUA | 14 | |
| DTC144TU T107 | 06 | |
| XP1214 | 9H | |
| XP4601 | 5C | |

| NAME | SYMBOL | INSIDE VIEW |
|-------------|--------|-------------|
| XP6401 | 5O | |
| XP6501 - AB | 5N | |

| NAME | SYMBOL | INSIDE VIEW |
|-------------------|-----------|-------------|
| HVU350TRF | 4 | |
| MA77 | 4B | |
| MA111 DAN222TL | 1B N-4 | |
| SB07-03C-TB | J | |

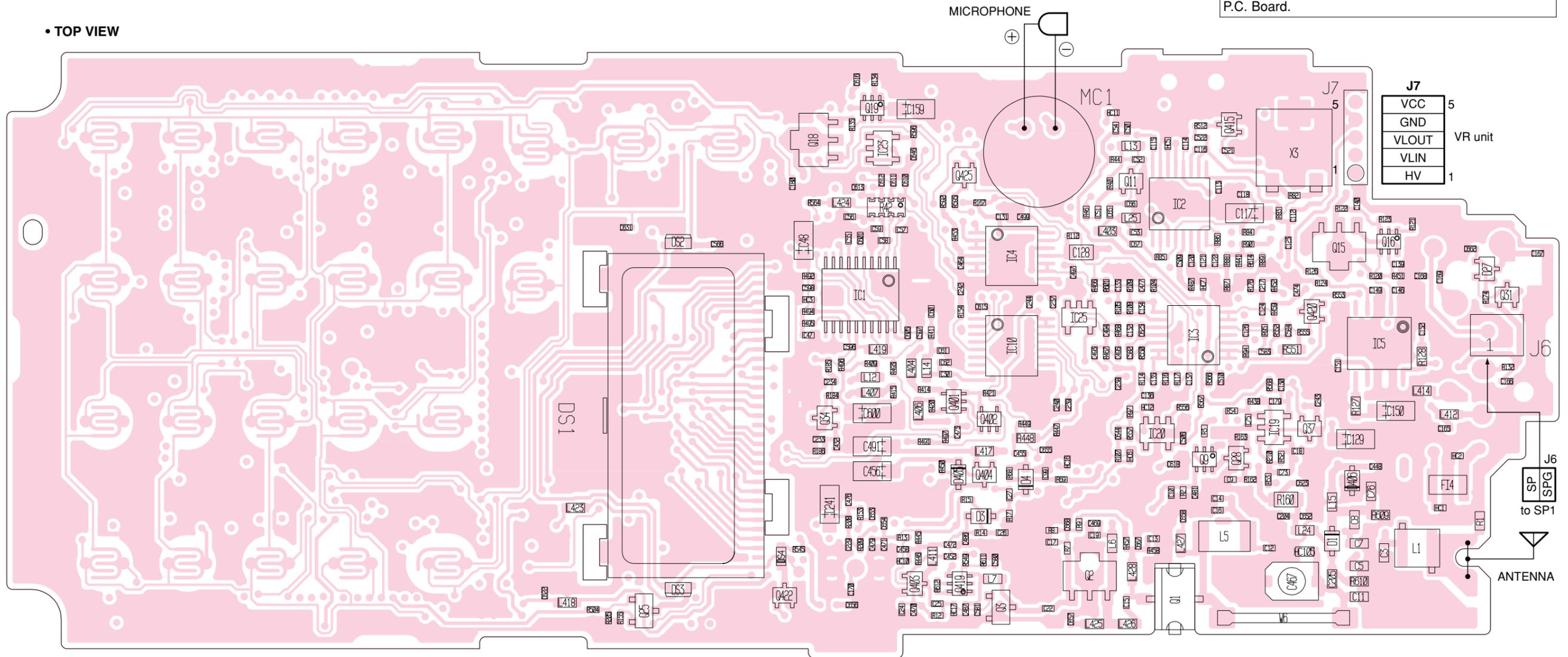
8 - 2 DIODES

| NAME | SYMBOL | INSIDE VIEW |
|-------------------------------|---------------|-------------|
| 1SS353 HSU88TRF MA2S111 | C 9 A | |
| 1SS375 DA204U HSM88AS | FH K C1 | |
| 1T365-01 | pink line | |
| DAN202U | N | |

SECTION 9 BOARD LAYOUTS

9 - 1 MAIN UNIT

• TOP VIEW



The combination of this page and the next page shows the unit layout in the same configuration as the actual P.C. Board.

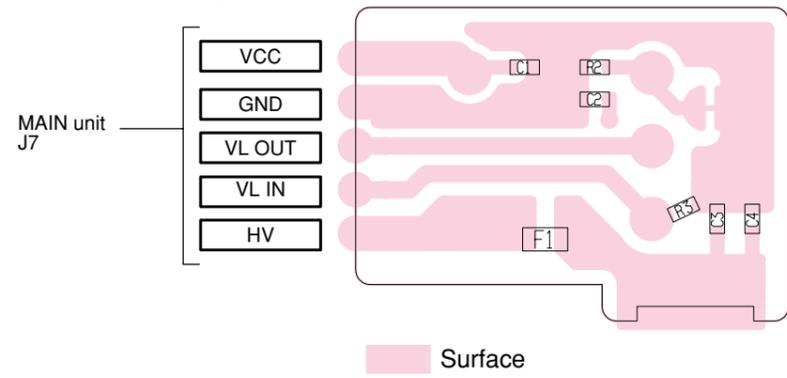
| | | |
|-----------|--------|---|
| J7 | VCC | 5 |
| | GND | |
| | VL OUT | |
| | VL IN | |
| | HV | 1 |

VR unit

J6
SP
SPG
to SP1

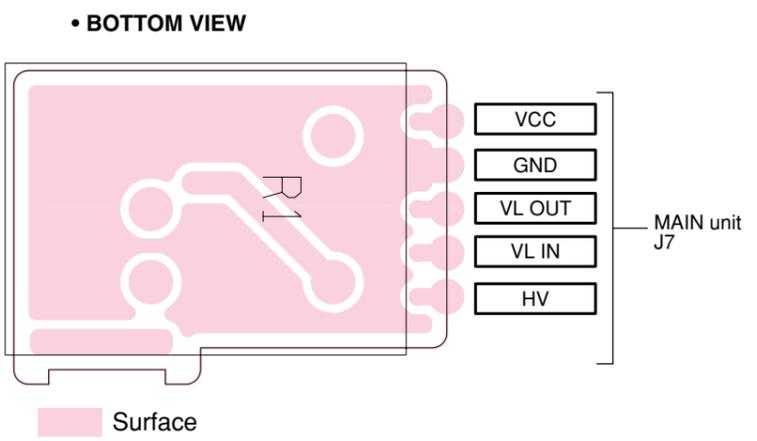
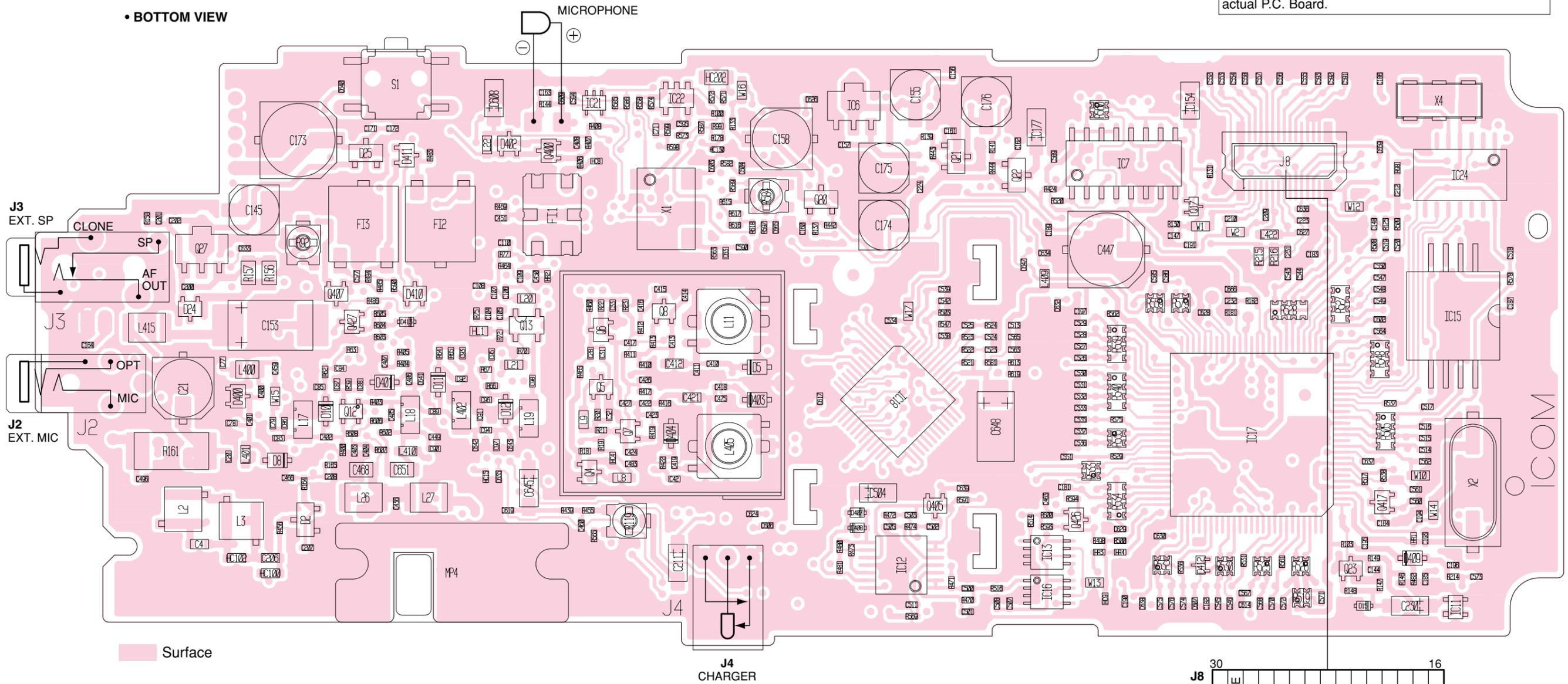
9 - 2 VR BOARD

• TOP VIEW



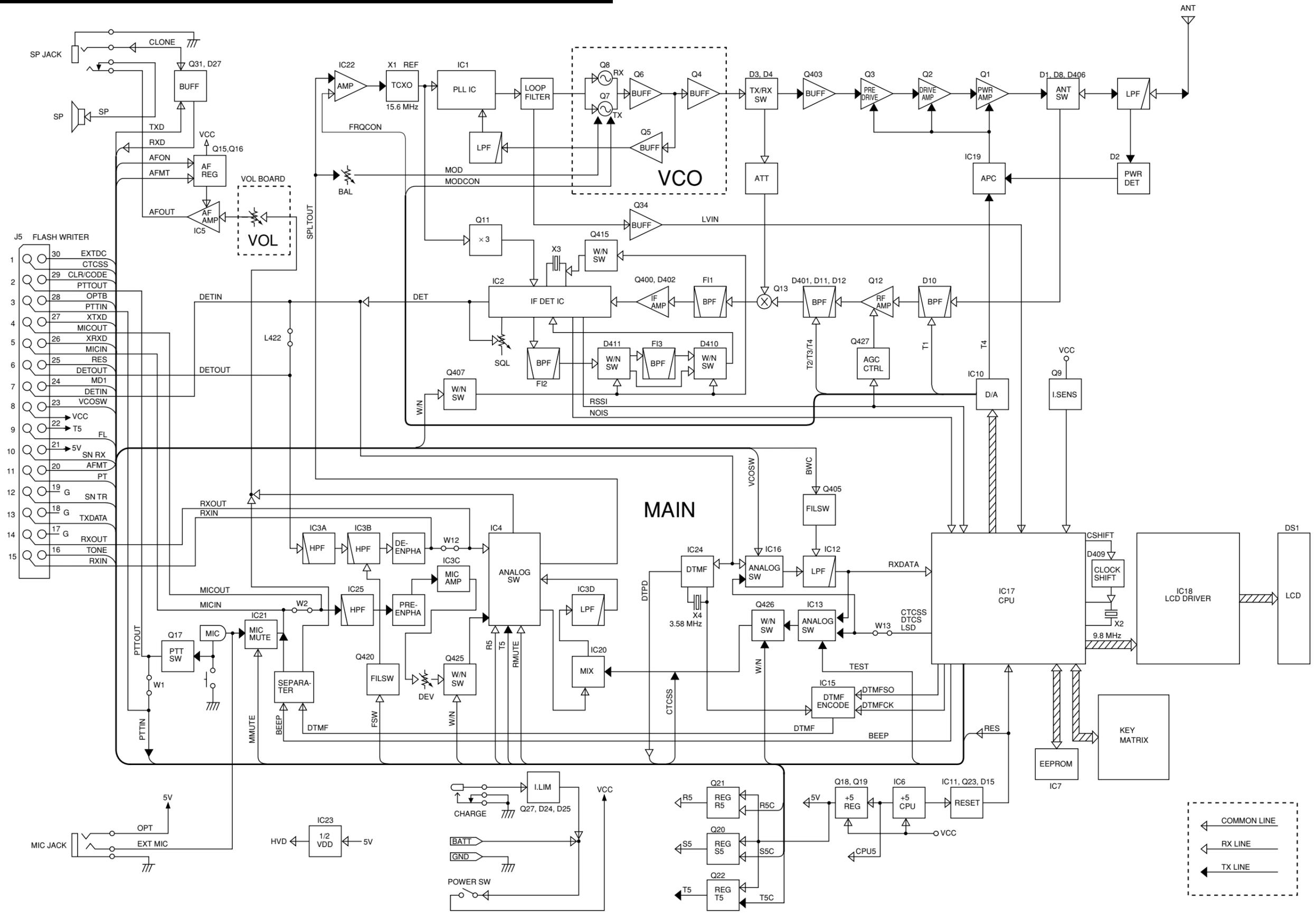
MAIN unit
J7

The combination of this page and the previous page shows the unit layout in the same configuration as the actual P.C. Board.



| | | |
|----|----------|------|
| 30 | EXTDC | 16 |
| 29 | CLR/CODE | |
| 28 | PTTIN | |
| 27 | OPTB | |
| 26 | MICOUT | |
| 25 | MICIN | |
| 24 | DETOUT | |
| 23 | DETIN | |
| 22 | VCC | |
| 21 | FL | |
| 20 | SN RX | |
| 19 | PT | |
| 18 | SN TR | |
| 17 | TXDATA | |
| 16 | RXOUT | |
| 15 | RXIN | DTMF |

SECTION 10 BLOCK DIAGRAM



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