



# SERVICE MANUAL

DUAL BAND FM TRANSCEIVER

## IC-2720H

---

---

---

---

---

Icom Inc.

---

---

## INTRODUCTION

---

This service manual describes the latest service information for the **IC-2720H** DUAL BAND FM TRANSCEIVER at the time of publication

| MODEL    | VERSION  | SYMBOL |
|----------|----------|--------|
| IC-2720H | U.S.A.   | USA    |
|          | Korea    | KOR    |
|          | S.E.Asia | SEA    |
|          | Export   | EXP    |

To upgrade quality, any 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 16 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>

1110004310 S.I.C M62352GP IC-2720H MAIN UNIT 5 pieces  
8810009610 Screw FH M2.6x6 ZK IC-2720H bottom cover 10 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 50 dB to 60 dB attenuator between the transceiver and a deviation meter or spectrum analyzer when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

---

## TABLE OF CONTENTS

---

### **SECTION 1     SPECIFICATIONS**

### **SECTION 2     INSIDE VIEWS**

### **SECTION 3     DISASSEMBLY INSTRUCTIONS**

### **SECTION 4     CIRCUIT DESCRIPTION**

|       |                             |        |
|-------|-----------------------------|--------|
| 4 - 1 | RECEIVER CIRCUITS .....     | 4 - 1  |
| 4 - 2 | TRANSMITTER CIRCUITS .....  | 4 - 5  |
| 4 - 3 | PLL CIRCUITS .....          | 4 - 6  |
| 4 - 4 | POWER SUPPLY CIRCUITS ..... | 4 - 8  |
| 4 - 5 | CPU PORT ALLOCATIONS .....  | 4 - 10 |

### **SECTION 5     PARTS LIST**

### **SECTION 6     MECHANICAL PARTS AND DISASSEMBLY**

### **SECTION 7     SEMI-CONDUCTOR INFORMATION**

### **SECTION 8     BOARD LAYOUTS**

|       |                    |       |
|-------|--------------------|-------|
| 8 - 1 | CONTROL UNIT ..... | 8 - 1 |
| 8 - 2 | MAIN UNIT .....    | 8 - 3 |
| 8 - 3 | VCO UNIT .....     | 8 - 5 |

### **SECTION 9     BLOCK DIAGRAM**

### **SECTION 10    VOLTAGE DIAGRAMS**

|        |                          |        |
|--------|--------------------------|--------|
| 10 - 1 | CONTROL UNIT .....       | 10 - 1 |
| 10 - 2 | MAIN AND VCO UNITS ..... | 10 - 2 |

# SECTION 1 SPECIFICATIONS

## GENERAL

- Frequency range :  
LEFT SIDE

| VERSION | RX (MHz)                                        | TX (MHz)                                                      |
|---------|-------------------------------------------------|---------------------------------------------------------------|
| [KOR]   | 144.000–146.000, 430.000–440.000                | 144.000–146.000, 430.000–440.000                              |
| [SEA]   | 136.000–179.995* <sup>2</sup> , 430.000–440.000 | 140.000–150.000* <sup>2</sup> , 430.000–440.000               |
| [EXP]   | 118.000–549.995* <sup>2</sup>                   | 136.000–174.000* <sup>2</sup> , 400.000–479.000* <sup>3</sup> |
| [USA]   | 118.000–549.995* <sup>2, *4</sup>               | 144.000–148.000, 430.000–450.000* <sup>4</sup>                |

### RIGHT SIDE

| VERSION | RX (MHz)                                                                                                                                                            | TX (MHz)                                                      |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| [KOR]   | 144.000–146.000, 430.000–440.000                                                                                                                                    | 144.000–146.000, 430.000–440.000                              |
| [SEA]   | 136.000–173.995* <sup>2</sup> , 430.000–440.000                                                                                                                     | 140.000–150.000* <sup>2</sup> , 430.000–440.000               |
| [EXP]   | 118.000–179.995* <sup>2</sup> , 375.000–549.995* <sup>3</sup><br>810.000–999.990* <sup>5</sup>                                                                      | 136.000–174.000* <sup>2</sup> , 400.000–479.000* <sup>3</sup> |
| [USA]   | 118.000–174.000* <sup>2</sup> , 375.000–549.995* <sup>4</sup> ,<br>810.000–824.000* <sup>5</sup> , 849.000–869.000* <sup>5</sup> ,<br>894.000–999.990* <sup>5</sup> | 144.000–148.000, 430.000–450.000* <sup>4</sup>                |

\*<sup>1</sup>Guaranteed 144.000 – 146.000 MHz only, \*<sup>2</sup>Guaranteed 144.000 – 148.000 MHz only,

\*<sup>3</sup>Guaranteed 430.000 – 440.000 MHz only; \*<sup>4</sup>Guaranteed 440.000 – 450.000 MHz only

\*<sup>5</sup>Not guaranteed range

- Mode : FM, AM (AM range is 118.0 – 135.995 MHz and Rx only for [USA] and [EXP].)
- Number of memory channel : 212 (including 2 call channels and 10 scan edges)
- Usable temperature range : –10°C to +60°C; +14°F to +140°F
- Frequency resolution : 5, 10, 12.5, 15, 20, 25, 30 and 50 kHz
- Frequency stability : ±10 ppm (–10°C to +60°C; +14°F to +140°F)
- Power supply requirement : 13.8 V DC ±15 % (negative ground)
- Current drain (at 13.8 V DC) :
 

|          |                      |               |
|----------|----------------------|---------------|
| Receive  | Standby (squelched)  | 1.2 A         |
|          | Max. audio output    | 1.8 A         |
| Transmit | at VHF 50 W/UHF 35 W | 12.0 A/11.0 A |
- Antenna connector : SO-239 (50 Ω)
- DATA connector : Mini DIN 6 pin
- Dimensions :
 

|            |                                                |
|------------|------------------------------------------------|
| Controller | 140(W)×50(H)×27(D) mm; 5½(W)×1¾(H)×1¼(D) inch  |
| Main unit  | 140(W)×40(H)×187(D) mm; 5½(W)×1¾(H)×7¾(D) inch |

 (projections not included)
- Weight :
 

|            |                |
|------------|----------------|
| Controller | 150 g; 5.29 oz |
| Main unit  | 1.4 kg; 3.0 lb |

## TRANSMITTER

- Output power :
 

|     |                            |
|-----|----------------------------|
| VHF | 50 W/25 W/5 W (selectable) |
| UHF | 35 W/25 W/5 W (selectable) |
- Modulation system : Variable reactance frequency
- Maximum frequency deviation : ±5.0 kHz
- Spurious emissions : Less than –60 dB
- Microphone connector : 8-pin modular jack (600 Ω)

## RECEIVER

- Receive system : Double-conversion superheterodyne
- Intermediate frequency :
 

|        |                     |
|--------|---------------------|
| 1st IF | 38.85 MHz/46.05 MHz |
| 2nd IF | 450 kHz/455 kHz     |

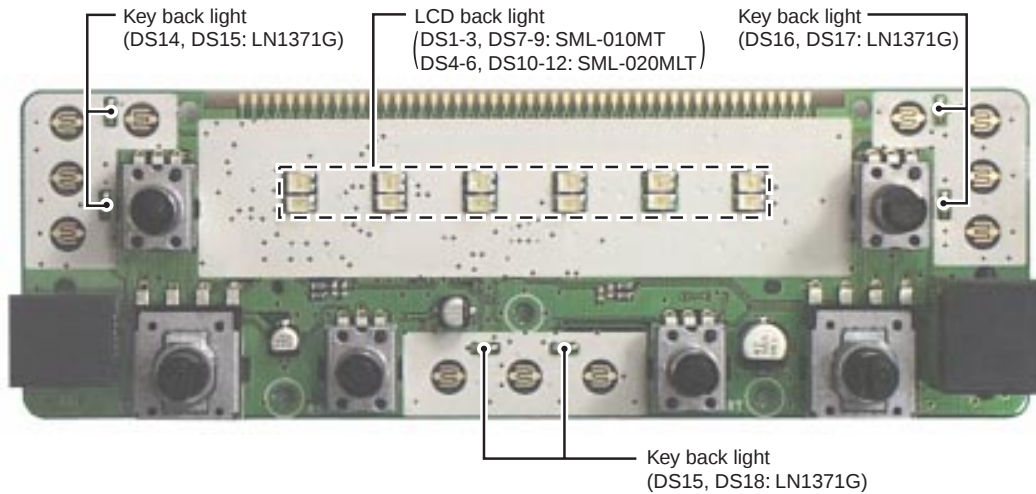
 (Left/right side band)
- Sensitivity : Less than 0.18 µV (at 12 dB SINAD)
- Squelch sensitivity : Less than 0.13 µV (at threshold)
- Selectivity :
 

|                                 |                                  |
|---------------------------------|----------------------------------|
| More than 12 kHz/–6 dB (Wide);  | More than 6 kHz/–6 dB (Narrow)   |
| Less than 30 kHz/–60 dB (Wide); | Less than 20 kHz/–60 dB (Narrow) |
- Spurious and image rejection : More than 60 dB
- Audio output power (at 13.8 v) : More than 2.4 W at 10% distortion with an 8 Ω load
- External speaker connector : 2-conductor 3.5(d) mm (1/8")/8 Ω

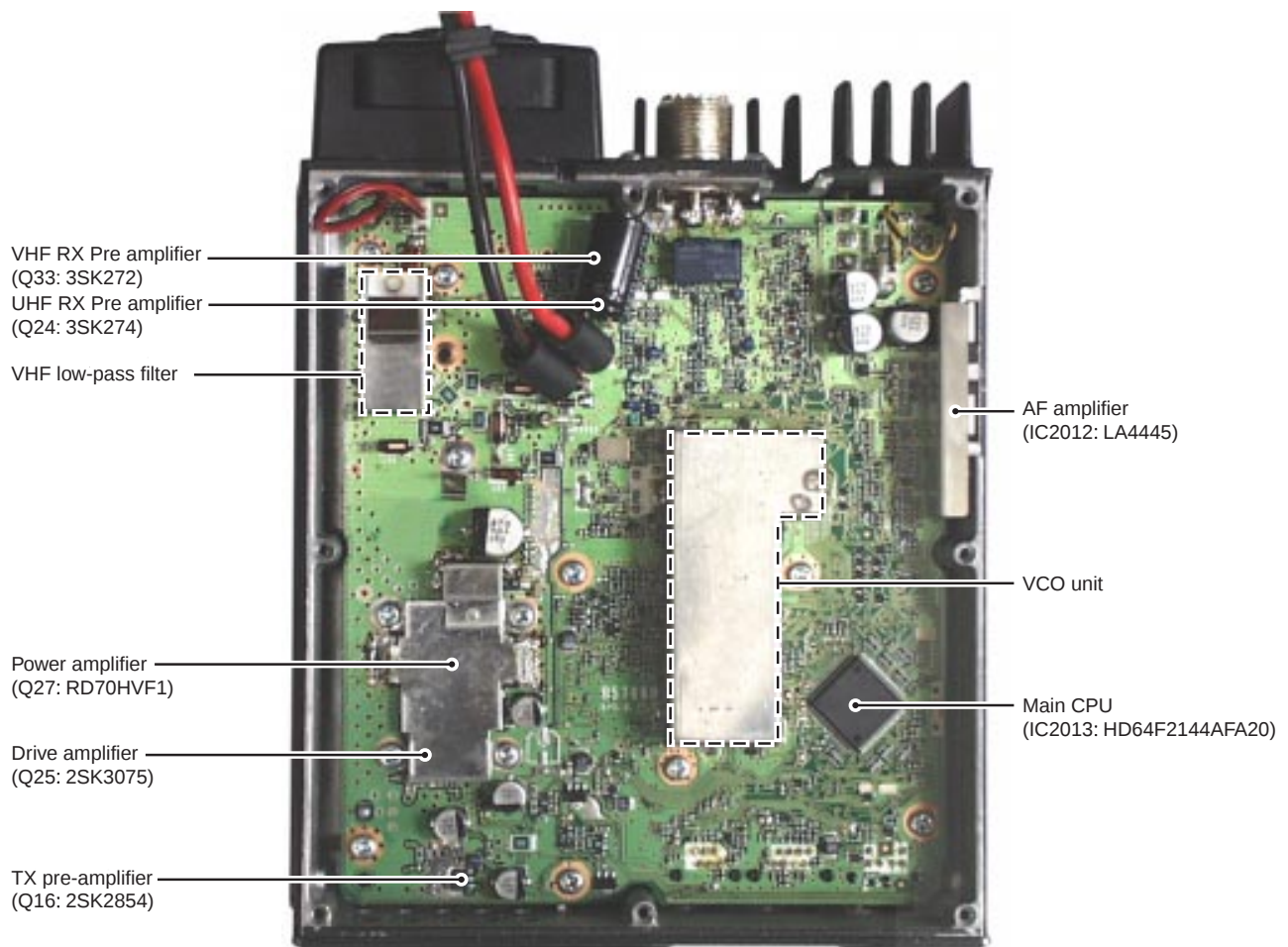
All stated specifications are subject to change without notice or obligation.

## SECTION 2 INSIDE VIEWS

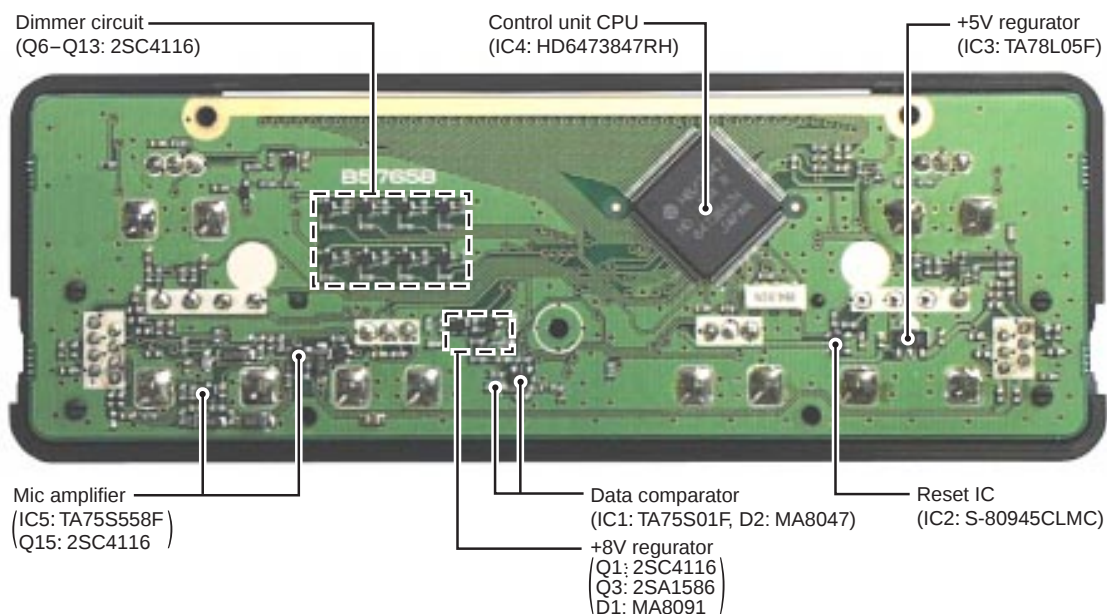
### • CONTROL UNIT (TOP VIEW)



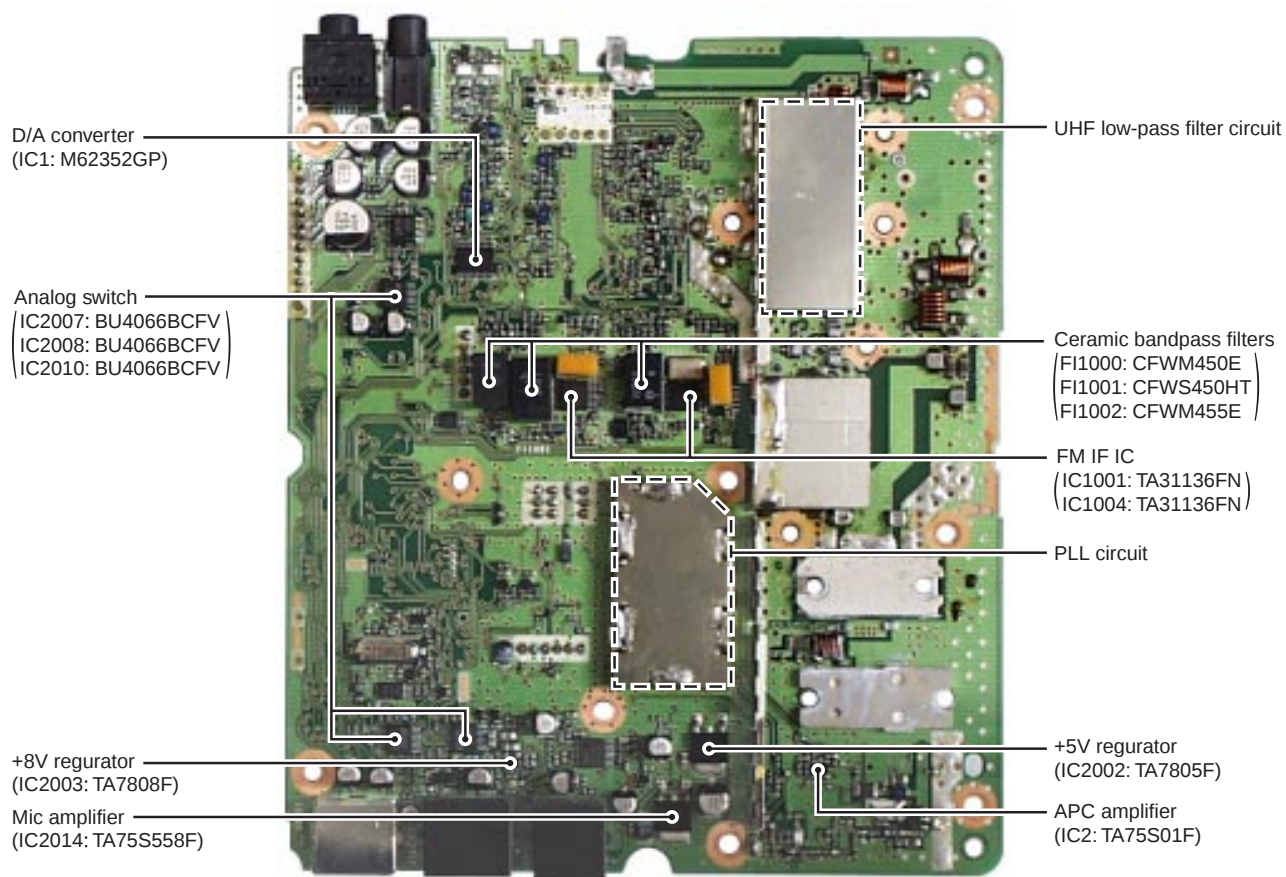
### • MAIN UNIT (TOP VIEW)



## • CONTROL UNIT (BOTTOM VIEW)



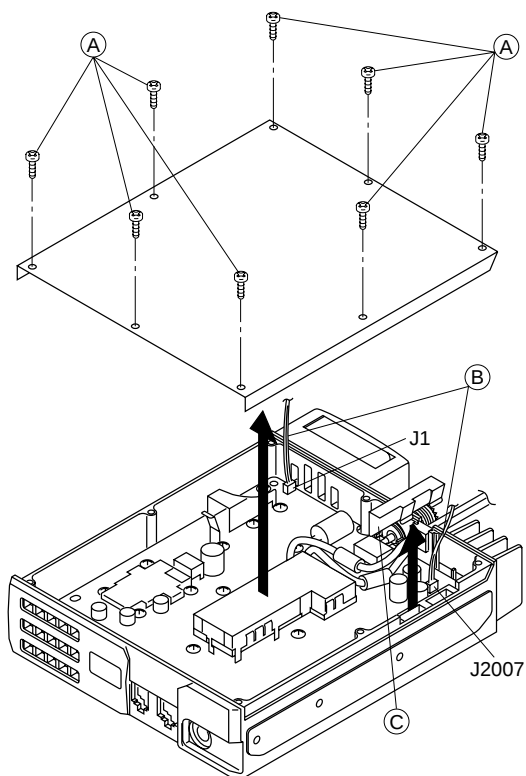
## • MAIN UNIT (BOTTOM VIEW)



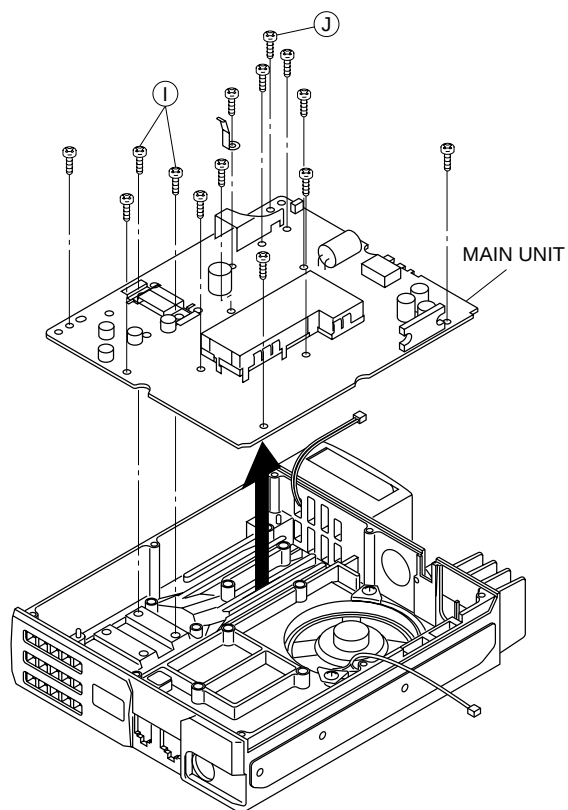
## SECTION 3 DISASSEMBLY INSTRUCTIONS

### • Removing the MAIN unit

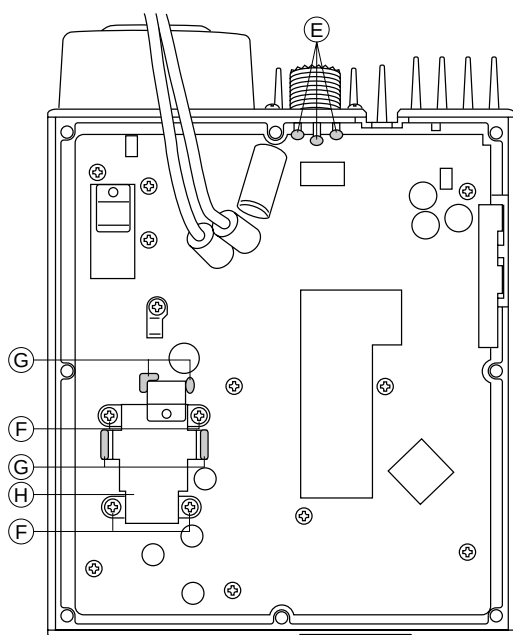
- ① Unscrew 8 screws (A), and remove the cover.
- ② Disconnect two cables (B) from J1 and J2007.
- ③ Remove the clip (C).



- ⑦ Unscrew 2 screws (I).
- ⑧ Unscrew 12 screws (J), and remove MAIN unit.

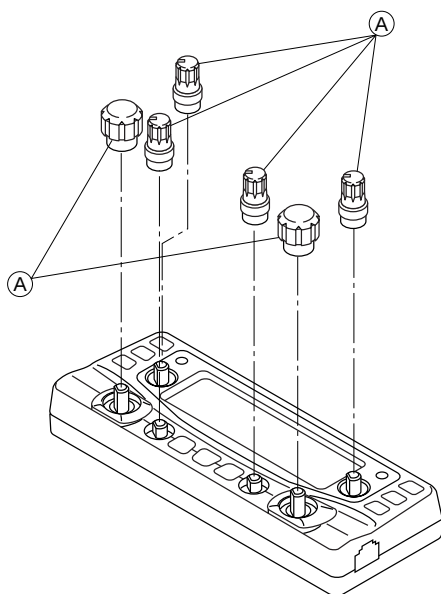


- ④ Unsolder 3 points (E).
- ⑤ Unscrew 4 screws (F).
- ⑥ Unsolder 4 points (G), and remove the cover (H).



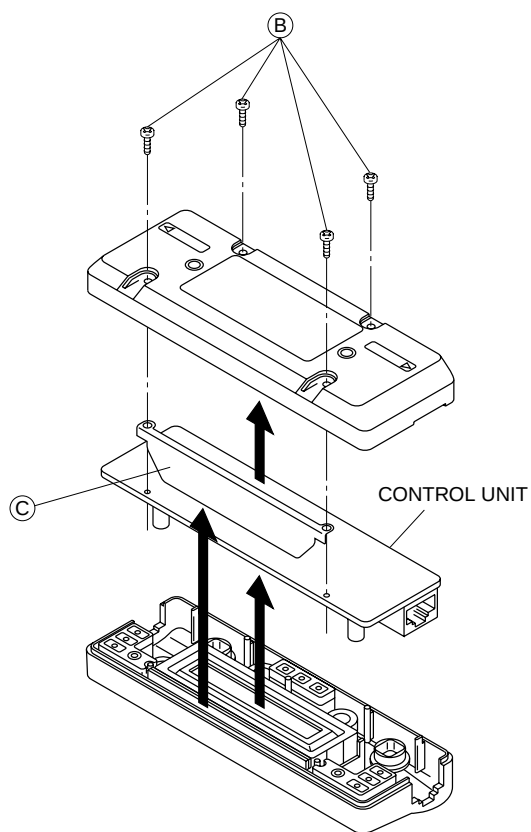
- **Removing the CONTROL unit**

① Remove 6 knobs **A**.



② Unscrew 4 screws **B**, and remove the cover.

③ Remove the plate **C**, and remove CONTROL unit.



## SECTION 4 CIRCUIT DESCRIPTION

### 4-1 RECEIVER CIRCUITS

#### 4-1-1 TRIPLEXER AND RX BAND SWITCHING CIRCUITS (MAIN UNIT)

The transceiver has a triplexer (low-pass and high-pass filters) on the first stage from the antenna connector to separate the signals into VHF and UHF signals. The RF signals from the antenna connector are applied to the triplexer or RX band switch circuits.

##### • RF SIGNALS V-V (118 MHz–180 MHz), U-V (136 MHz–174 MHz)

The V-V and U-V RF signals from the antenna connector pass through the low-pass filter (L76, L77, L80, C205, C209, C242, C243, C264), and then applied to the TX/RX switching circuit (D42, D46, D52, D67, D2049). The filtered signals are amplified at the pre-amplifier (Q33), and are applied to the left side or right side displayed RX circuits.

##### • RF SIGNALS U-U, V-U2 (375 MHz–550 MHz)

The U-U and V-U2 RF signals from the antenna connector pass through the high-pass filter (L78, L81, C206, C210, C213, C265), and then applied to the TX/RX switching circuit (D55, D64, D65, D2050) via the SWR detector (D50, D58). The filtered signals are amplified at the pre-amplifier (Q24), and are applied to the left side or right side displayed RX circuits.

##### • RF SIGNALS U-U3 (810 MHz–1000 MHz)

The U-U3 RF signals from the antenna connector pass through the two low-pass filters (L76, L77, L80, C205, C209, C242, C243, C264, L87, L88, C266–C268), and are then applied to the RX band switching circuit (D2061). The filtered signals are amplified at the RF amplifier (Q18), and are applied to the right side displayed RX circuits.

##### • RF SIGNALS V220 (174 MHz–260 MHz), V-U1 (225 MHz–375 MHz)

The V220 and V-U1 RF signals from the antenna connector are applied to the RX band switching circuit (Q34, D66, RL1), and are applied to the left side displayed RX circuit.

#### 4-1-2 RF CIRCUIT FOR LEFT SIDE DISPLAY (MAIN UNIT)

##### • RF SIGNALS V-V (118 MHz–180 MHz)

The amplified signals are applied to the RF amplifier (Q29) after being passed through the attenuator (D59) and band-pass filter (D47, D53). The signals are applied to the RX band switching circuit (D28) via the another bandpass filter (D32, D39) to suppress the unwanted signals.

##### • RF SIGNALS V220 (174 MHz–260 MHz)

The signals are applied to the RF amplifier (Q31) after being passed through the RX band switching circuit (D62) and bandpass filter (D51). The amplified signals are applied to the RX band switching circuit (D28) via the another bandpass filter (D34) to suppress the unwanted signals and attenuator (R195–R197).

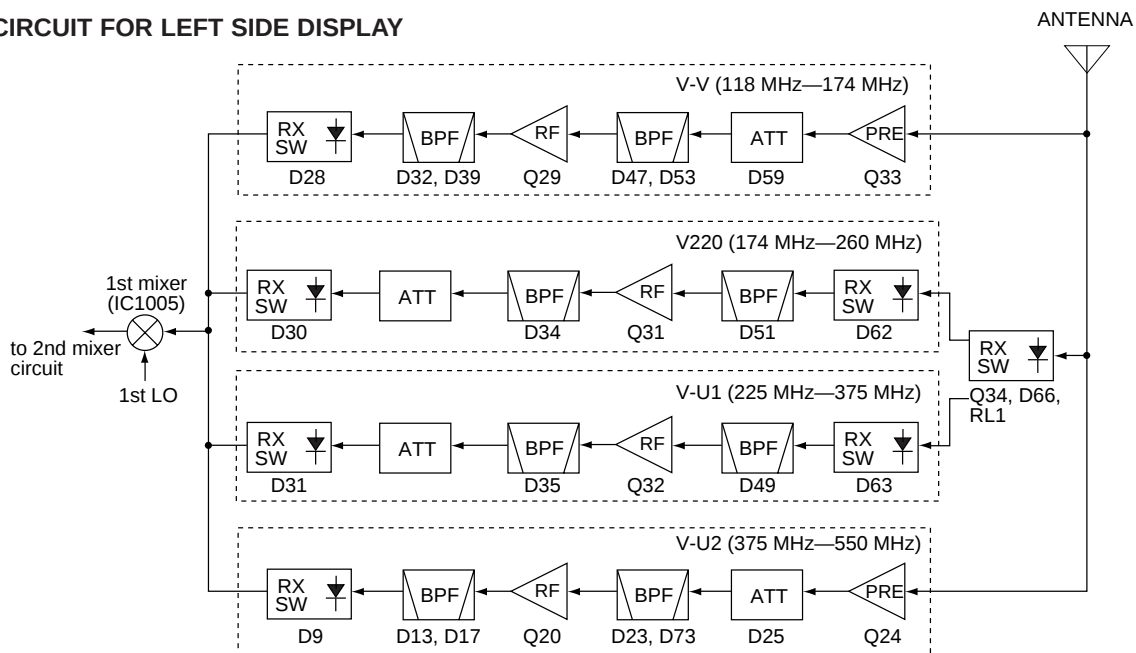
##### • RF SIGNALS V-U1 (225 MHz–375 MHz)

The signals are applied to the RF amplifier (Q32) after being passed through the RX band switching circuit (D63) and bandpass filter (D49). The amplified signals are applied to the RX band switching circuit (D31) via the attenuator (R198–R200) and another bandpass filter (D35) to suppress the unwanted signals.

##### • RF SIGNALS V-U2 (375 MHz–550 MHz)

The amplified signals are applied to the RF amplifier (Q20) after being passed through the attenuator (D25) and band-pass filter (D23, D73). The signals are applied to the RX band switching circuit (D9) via the another bandpass filter (D13, D17) to suppress the unwanted signals.

##### • RF CIRCUIT FOR LEFT SIDE DISPLAY





A portion of the AF signals from the FM IF IC (IC1001, pin 9) are applied to the active filter section (IC1001, pin 8). The active filter section amplifies and filters noise components. The filtered signals are applied to the noise detector section and output from the IC1001 (pin 14) as the "L\_SQL" signal. The "L\_SQL" signal from IC1001 (pin 14) is applied to the CPU (IC2013, pin 40). The CPU analyzes the noise condition and outputs the "L\_DET\_MUTE" signal to the AF mute switch (Q1010).

#### • TONE SQUELCH

The tone squelch circuit detects AF signals and opens the squelch only when receiving a signal containing a matching subaudible tone (CTCSS). When tone squelch is in use, and a signal with a mismatched or no subaudible tone is received, the tone squelch circuit mutes the AF signals even when noise squelch is open.

A portion of the AF signals from the FM IF IC (IC1001, pin 9) passes through the low-pass filter (Q1003) to remove AF (voice) signals. The filtered signal is applied to the CTCSS decoder which is inside the CPU (IC2013, pin 41) via the "L\_DTCS\_IN" line to control the AF mute switch (Q1010).

### 4-1-7 RF CIRCUIT FOR RIGHT SIDE DISPLAY (MAIN UNIT)

#### • RF SIGNALS U-V (136 MHz–174 MHz)

The amplified signals are applied to the RF amplifier (Q30) after being passed through the attenuator (D60) and band-pass filter (D48, D54). The signals are applied to the RX band switching circuit (D29) via the another bandpass filter (D33, D40) to suppress the unwanted signals.

#### • RF SIGNALS U-U3 (810 MHz–1000 MHz)

The signals are applied to the RF amplifier (Q18) after being passed through the RX band switching circuit (D2061). The amplified signals pass through the attenuator (L19, C20, C46, C51, R178–R180) and high-pass filter (L20, C278, C279), and are then applied to the another RF amplifier (Q35) again. The signals pass through the attenuator (L10, C15, C280, R183–R185) and RX band switching circuit (D11).

#### • RF SIGNALS V-U2 (375 MHz–550 MHz)

The amplified signals are applied to the RF amplifier (Q19) after being passed through the attenuator (D24) and band-pass filter (D22, D72). The signals are applied to the RX band switching circuit (D8) via the another bandpass filter (D12, D16) to suppress the unwanted signals.

The signals from the RX band switching circuits are then applied to the right side displayed 1st mixer circuit (IC1006, pin 6).

### 4-1-8 1ST MIXER AND 1ST IF CIRCUIT FOR RIGHT SIDE DISPLAY (MAIN UNIT)

The 1st mixer circuit converts the received RF signals to 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 the bandpass filter at the next stage of 1st mixer circuit.

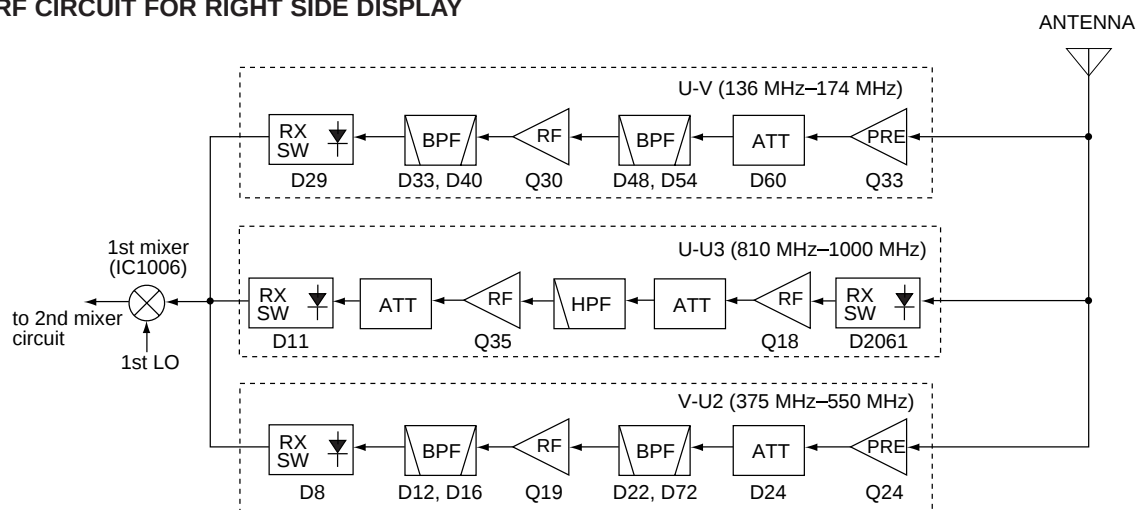
The RF signals are mixed with 1st LO signals at the 1st mixer (IC1006) to produce a 46.05 MHz 1st IF signal. The 1st IF signal is output from pin 1, and passed through the crystal bandpass filter (FI1004) to suppress unwanted harmonic components. The filtered signal is amplified at the IF amplifier (Q1041) after being passed through the limiter circuit (D1022). The amplified signal is applied to the 2nd mixer circuit (IC1004).

### 4-1-9 2ND IF AND DEMODULATOR CIRCUITS FOR RIGHT SIDE DISPLAY (MAIN UNIT)

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

The FM IC IC (IC1004) contains the 2nd mixer, limiter and noise amplifiers, quadrature detector, S-meter detector, active filter circuits, etc. A 2nd LO signal (45.595 MHz) is produced at the PLL circuit by dividing it's reference frequency.

#### • RF CIRCUIT FOR RIGHT SIDE DISPLAY



The 46.05 MHz 1st IF signal from the IF amplifier (Q1041) is applied to the 2nd mixer section of the FM IF IC (IC1004, pin 16), and is mixed with the 2nd LO signal (45.595 MHz) to be converted to a 455 kHz 2nd IF signal.

The 2nd IF signal is applied to the each demodulator circuits by AM or FM mode.

#### • FM MODE

The 2nd IF signal is output from the FM IF IC (IC1004, pin 3) and passes through the ceramic bandpass filter (FI1002). The filtered signal is fed back to the IC, and amplified at the limiter amplifier section (pin 5), then demodulated into AF signals at the quadrature detector section (pins 10, 11). The detected AF signals are output from pin 9 and are applied to the AF circuit via the AM/FM selector circuit (IC2016, pins 7, 1).

#### • AM MODE

The 2nd IF signal is output from the FM IF IC (IC1004, pin 3) and passes through the ceramic bandpass filter (FI1002). The filtered signal is applied to the AM detector circuit (Q1025) to convert into AF signals, and then amplified at the Q1022 (pins 5, 1). The amplified AF signals are applied to the AF circuit via the AM/FM selector circuit (IC2016, pins 6, 1).

### 4-1-10 AF AMPLIFIER CIRCUIT FOR RIGHT SIDE DISPLAY (MAIN UNIT)

The AF amplifier circuit amplifies the demodulated AF signals to drive a speaker.

The AF signals pass through the AF mute switch (Q1011), and are then applied to the electric volume control circuit (IC2011, pin 8) as "UAFO" signal after being passed through the low-pass filter (Q1008). The level controlled AF signals are output from pin 7, and are then applied to the AF power amplifier (IC2012, pin 5) via the "VOUT2" signal. The power amplified AF signals are applied to the internal speaker (SP1) via the [EXT SP] jack (J2004).

When no plug is connected to the jack, the signals are fed back to the UHF audio input (IC2012, pin 2) and combined with the UHF audio. The mixed audio is applied to the other external speaker jack (J2005) and then to the internal speaker.

The electronic volume control circuit controls AF gain, therefore, the AF output level is according to the [VOL] setting and also the squelch conditions.

### 4-1-11 NOISE SQUELCH CIRCUIT FOR RIGHT SIDE DISPLAY (MAIN UNIT)

#### • NOISE SQUELCH

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

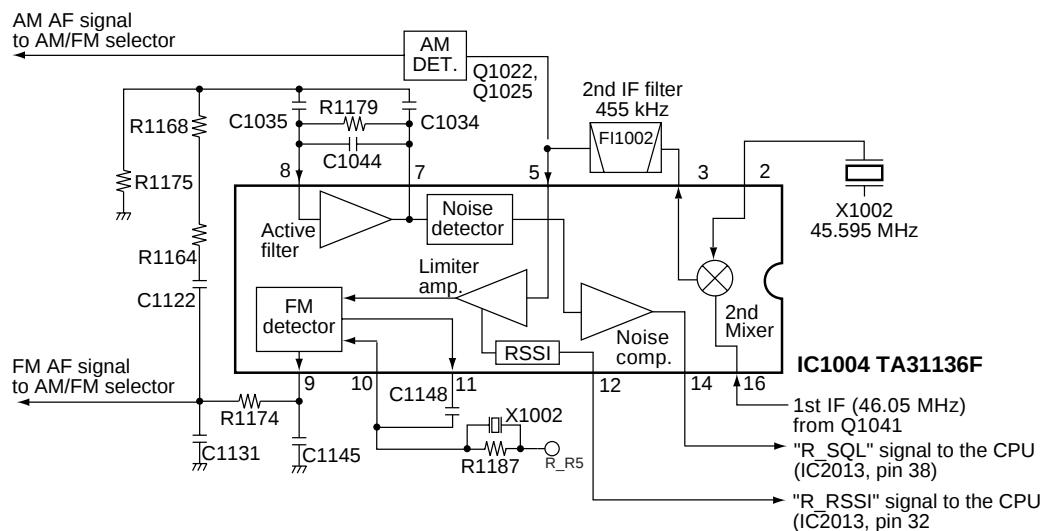
A portion of the AF signals from the FM IF IC (IC1004, pin 9) are applied to the active filter section (IC1004, pin 8). The active filter section amplifies and filters noise components. The filtered signals are applied to the noise detector section and output from the IC1004 (pin 14) as the "R\_SQL" signal. The "R\_SQL" signal from IC1004 (pin 14) is applied to the CPU (IC2013, pin 38). The CPU analyzes the noise condition and outputs the "R\_DET\_MUTE" signal (pin 58) to the AF mute switch (Q1011).

#### • TONE SQUELCH

The tone squelch circuit detects AF signals and opens the squelch only when receiving a signal containing a matching subaudible tone (CTCSS). When tone squelch is in use, and a signal with a mismatched or no subaudible tone is received, the tone squelch circuit mutes the AF signals even when noise squelch is open.

A portion of the AF signals from the FM IF IC (IC1004, pin 9) passes through the low-pass filter (Q1004) to remove AF (voice) signals. The filtered signal is applied to the CTCSS decoder which is inside the CPU (IC2013, pin 39) via the "R\_DTCS\_IN" line to control the AF mute switch (Q1011).

### • 2ND IF AND DEMODULATOR CIRCUIT FOR RIGHT SIDE DISPLAY



## 4-2 TRANSMITTER CIRCUITS

### 4-2-1 MICROPHONE AMPLIFIER CIRCUIT (MAIN AND CONTROL UNITS)

The microphone amplifier circuit amplifies audio signals from the microphone to a level needed for the modulation circuit. The microphone amplifier circuit is commonly used for the both VHF and UHF bands.

#### • THE AF SIGNALS FROM THE MAIN UNIT

The AF signals from the microphone (J2001, pin 6) pass through the high-pass filter (Q2028), and are then applied to the microphone amplifier (IC2014, pin 3). The amplified signals are applied to the analog switch (IC2008, pin 1).

The microphone sensitivity is controlled by the microphone sensitivity controller (Q2023) via the "MIC\_SENS" line from the CPU (IC2023).

#### • THE AF SIGNALS FROM THE CONTROL UNIT

The AF signals from the microphone (CONTROL unit; J1, pin 6) are applied to the microphone amplifier (Q15, IC5 pin 3). The amplified signals pass through the J2, pin 2 via the "MIC" line, and are then applied to the analog switch (IC2008, pin 4).

The microphone sensitivity is controlled by the microphone sensitivity controller (Q2022) via the "MIC\_SENS" line from the CPU (IC2023).

The each AF signals (from IC2008, pins 1, 4) are applied to the IDC limiter amplifier section (IC1000a, pin 3), and then pass through the de-emphasis circuit (C1036, R1050). The signals pass through the splatter filter (IC1000d, pins 13, 14), and are then applied to the buffer amplifier (IC1000c, pin 9). The amplified signals are applied to the D/A convertor IC (IC1009, pin 12) to control the modulation level.

#### • THE DATA SIGNALS

##### (1) 9600 bps mode

The data signals from the J2003, pin 1 are applied to the analog switch (IC2007, pin 4) after being passed through the limiter circuit (D2012). The signals pass through another analog switch (IC2008, pins 9 and 8), and are then applied to the buffer amplifier (IC100c, pin 9) via the "DATAMOD" line. The amplified signals are applied to the D/A convertor IC (IC1009, pin 12) to control the modulation level.

##### (2) 1200 bps mode

The data signals from the J2003, pin 1 are applied to the analog switch (IC2007, pin 4) after being passed through the limiter circuit (D2012). The signals pass through another analog switch (IC2008, pins 10 and 11), and are then applied to the IDC limiter amplifier section (IC1000a, pin 3). The signals pass through the de-emphasis circuit (C1036, R1050) and splatter filter (IC1000d, pins 13, 14). The signals are amplified at the buffer amplifier (IC1000c, pin 9), and are then applied to the D/A convertor IC (IC1009, pin 12) to control the modulation level.

The AF or data signals are applied to the each VCO circuit from the D/A convertor IC (IC1009, pin 11) as "MOD" signal.

### 4-2-2 VHF MODULATION CIRCUIT (MAIN AND VCO UNITS)

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

The "MOD" signal from the D/A convertor IC (IC1009, pin 11) changes the reactance of D5 (VCO unit) to modulate the oscillated signal at the VHF-VCO circuit (VCO unit; Q6). The modulated signal is amplified at the buffer amplifiers (VCO unit; Q7, Q8), and then passes through the VCO switch (VCO unit; D12, D13). The TX LO signal passes through the low-pass filter (L90, L91, C245–C247) and attenuator (C2134, R2216–C2218), and is then applied to the TX switch (D77) via the "VHF\_YGR" line. The signal is applied to the drive/power amplifier circuits.

### 4-2-3 UHF MODULATION CIRCUIT (MAIN UNIT)

The "MOD" signal from the D/A convertor IC (IC1009, pin 11) changes the reactance of D1018 to modulate the oscillated signal at the UHF-VCO circuit (Q1039). The modulated signal is amplified at the buffer amplifiers (Q1044, Q1047), and then passes through the VCO switch (D2059, D2060). The TX LO signal passes through the high-pass filter (L1079, C2183, C2184), and is then applied to the TX switch (D78) via the "UHF\_YGR" line. The signal is applied to the drive/power amplifier circuits.

### 4-2-4 DRIVE/POWER AMPLIFIER CIRCUITS (MAIN UNIT)

The drive amplifier circuit amplifies the VCO oscillated signal to the needed level at the power amplifier. Q27 is a power module which provides stable 50 W (UHF is 35 W) output power with a 13.8 V DC power source.

The RF signal from the TX switch (D77; VHF, D78; UHF) is amplified at the buffer amplifier (Q38), and is then applied to the pre-amplifier (Q16). The amplified signal is amplified at the pre-drive (Q21) and drive amplifier (Q25), and then applied to the power amplifier (Q27) to obtain 50 W (UHF is 35 W) of RF power.

#### • VHF RF SIGNAL

The amplified signal passes through the low-pass filter (D36, D2070), and is then applied to the SWR detector (D57, D61). The signal is applied to the TX/RX switch (D42), and passes through the low-pass filter (L76, L77, L80, C205, C209, C242, C243, C264) to suppress high harmonics components. The signal is applied to the antenna connector after being passed through the reverse power detector circuit (D70, D71).

#### • UHF RF SIGNAL

The amplified signal passes through the TX/RX switch (D37, D38, D41, D43–D45, D68), and is then applied to the SWR detector (D50, D58). The signal passes through the high-pass filter (L78, L81, C206, C210, C213, C265) to suppress high harmonics components. The signal is applied to the antenna connector after being passed through the reverse power detector circuit (D70, D71).

The detected voltage at the reverse detector circuit is applied to the CPU (IC2013, pin 35) to switch from high power to middle power automatically when the SWR become worse.

#### 4-2-5 APC CIRCUIT (MAIN UNIT)

The APC circuit protects the pre-drive (Q21), drive amplifier (Q25) and power amplifier (Q27) from a mismatched output load and stabilizes the output power.

##### • VHF APC CIRCUIT

The SWR detector circuit (D57, D61) detects forward signals and reflection signals at D57 and D61 respectively. The impedance is matched at 50  $\Omega$  and is increased when it is mismatched.

##### • UHF APC CIRCUIT

The SWR detector circuit (D50, D58) detects forward signals and reflection signals at D50 and D58 respectively. The impedance is matched at 50  $\Omega$  and is increased when it is mismatched.

The detected voltage is applied to the differential amplifier (IC2, pin 3) via the "POWER\_DET" line, and the power setting voltage from the D/A convertor (IC1, pin 12) is applied to another input (IC2, pin 1) for the reference as "PWRCON" line.

When antenna impedance is mismatched, the detected voltage exceeds the power setting voltage. The output voltage of the differential amplifier (IC2, pin 4) controls the input current of the pre-drive (Q21), drive amplifier (Q25) and power amplifier (Q27) to reduce the output power.

### 4-3 PLL CIRCUITS

#### 4-3-1 GENERAL

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

#### 4-3-2 PLL CIRCUIT FOR RIGHT SIDE DISPLAY (MAIN UNIT)

The R-VCO (for right side display) composes of VHF-VCO and UHF-VCO circuits.

##### • FROM THE VHF-VCO CIRCUIT

An oscillated signal from the VHF-VCO circuit (Q1038, D1014, D1015) passes through the buffer amplifiers (Q1043, Q1016) and VCO switch (D1023) is applied to the PLL IC for right side display (IC1008, pin 8)

##### • FROM THE UHF-VCO CIRCUIT

An oscillated signal from the UHF-VCO circuit (Q1038, D1016–D1018) passes through the buffer amplifiers (Q1044, Q1016) and VCO switch (D1023) is applied to the right side displayed PLL IC (IC1008, pin 8)

And is then prescaled in the PLL IC based on the divided ratio (N-data). The reference signal is generated at the reference oscillator (VCO unit; X1, 12.8 MHz), and is then amplified at the buffer amplifier (Q1012). The reference signal is also applied to the PLL IC. The PLL IC detects the out-of-step phase using the reference frequency and outputs it from pin 16. The output signal is passed through the loop filter (Q1020, Q1021, D1008) and is then applied to the right side display VCO circuit as lock voltage.

#### 4-3-3 R-VCO CIRCUIT FOR RIGHT SIDE DISPLAY (MAIN UNIT)

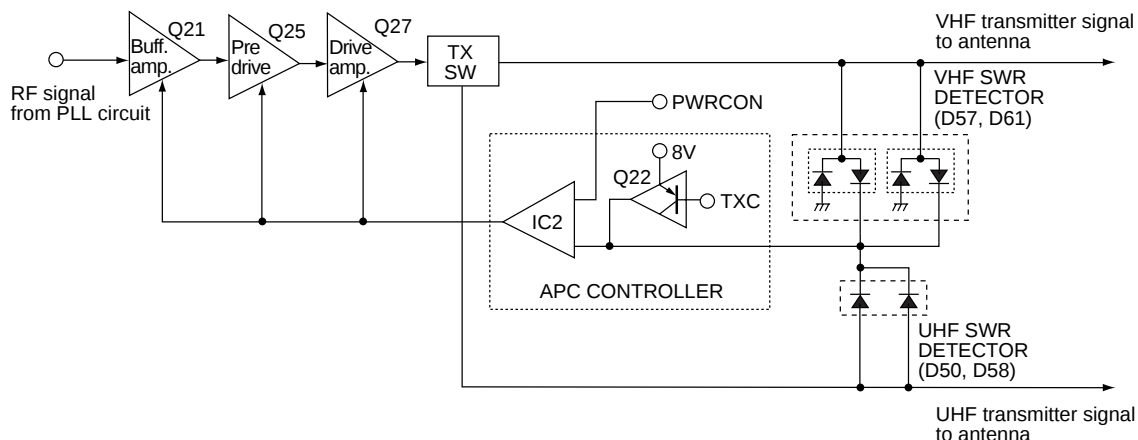
The VCO circuit for right side display contains a separated the VHF-VCO (Q1038, D1014, D1015) and UHF-VCO (Q1039, D1016–D1018) circuits.

##### • VHF-VCO (RX ONLY)

The oscillated signal at the VHF-VCO circuit is amplified at the buffer amplifier (Q1043), and then passes through the attenuator (R2209–R2211, C2123) and low-pass filter (L1045, L1046, C1207, C1249, C1250, C1289, C1304). The signal is applied to the 1st mixer circuit for right side display (IC1006, pin 4) via the VCO switch (D1028) as the 1st LO signal.

A portion of the signal from the buffer amplifier (Q1043) passes through the VCO switch (D1023), and is then amplified at the buffer amplifier (Q1016). The amplified signal is fed back to the PLL IC (IC1008, pin 8) as the comparison signal.

##### • APC CIRCUIT



#### • UHF-VCO

The oscillated signal at the UHF-VCO circuit is amplified at the buffer amplifiers (Q1044, Q1047), and is then applied to the VCO switch (D2059, D2060) to divide UHF TX signal and RX signal.

#### (1) UHF TX SIGNAL

The TX UHF signal passes through the high-pass filter (L1079, C2183, C2184) to suppress harmonics components, and is then applied to the TX switch (D78). The signal is applied to the drive/power amplifier circuit.

#### (2) RX SIGNAL

The 400 MHz band RX signal is applied to the another VCO switches (D1038 and D1049), and then passes through the attenuator (R2206–R2208, C2122) and low-pass filter (L1034, L1035, C1258). The filtered signal passes through the VCO switch (Q1048, D1039), and is then applied to the 1st mixer circuit (IC1006, pin 4) as the 1st LO signal.

The 900 MHz band RX signal passes through the another VCO switches (D1027 and D1028), and is then amplified at the buffer amplifier (Q1042). The signal passes through the attenuator (L1020, C1202, C1206) and low-pass filter (L1021, L1036, C1252, C1259, C1260). The filtered signal passes through the VCO switch (D1026), and is then applied to the 1st mixer circuit (IC1006, pin 4) as the 1st LO signal.

A portion of the signal from the buffer amplifier (Q1044) passes through the VCO switch (D1024), and is then amplified at the buffer amplifier (Q1016). The amplified signal is fed back to the PLL IC (IC1008, pin 8) as the comparison signal.

#### 4-3-4 PLL CIRCUIT FOR LEFT SIDE DISPLAY (VCO UNIT)

An oscillated signal from the L-VCO circuit passes through the buffer amplifiers (Q7, Q1) is applied to the PLL IC for left side display (IC1, pin 8).

And is then prescaled in the PLL IC based on the divided ratio (N-data). The reference signal is generated at the reference oscillator (X1, 12.8 MHz). The reference signal is also applied to the PLL IC. The PLL IC detects the out-of-step phase using the reference frequency and outputs it from pin 16. The output signal is passed through the loop filter (Q2, Q3, D2) and is then applied to the left side display VCO circuit as lock voltage.

#### 4-3-5 L-VCO CIRCUIT FOR LEFT SIDE DISPLAY (VCO AND MAIN UNITS)

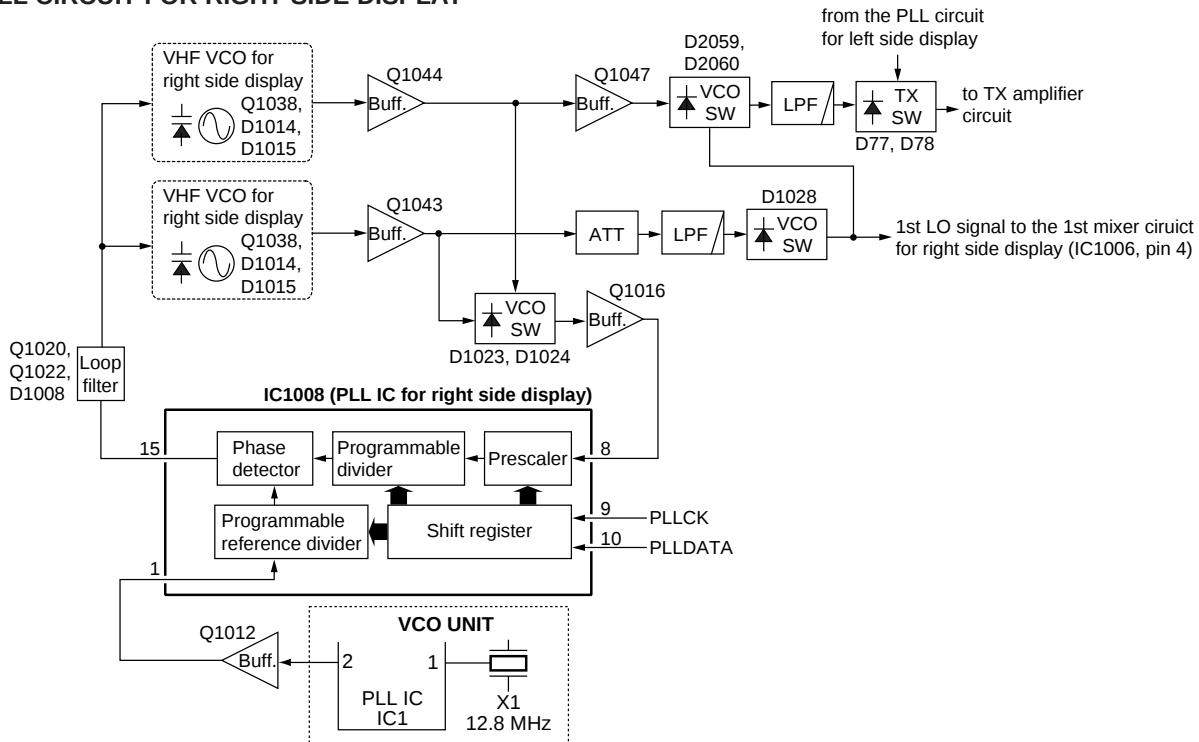
##### • VHF TX SIGNAL

The oscillated signal at the VCO circuit is amplified at the buffer amplifiers (Q7 and Q8), and then passes through the low-pass filter (MAIN unit; L90, L91, C245–C247) and attenuator (R2216–R2218, C2134) via the VCO switch (D12, D13). The signal is applied to the drive/power amplifier circuit (MAIN unit) after being passed through the TX switch (MAIN unit; D77).

##### • RX SIGNAL

The oscillated signal at the VCO circuit is amplified at the buffer amplifiers (Q7, Q8), and is then applied to the VCO switch (D7–D9, D15). The signal is applied to the normal oscillating signal, twice oscillating signal or half oscillating signal circuit.

#### • PLL CIRCUIT FOR RIGHT SIDE DISPLAY



### (1) NORMAL OSCILLATING SIGNAL CIRCUIT

The signal from the VCO switch (D7) passes through the attenuator (R33, R37, R38, C41) and low-pass filter (L5, L9, C45, C47, C53, C63, C64), and then applied to the VCO switch (D10) which is controlled by the "L\_VR5" signal.

### (2) TWICE OSCILLATING SIGNAL CIRCUIT

The signal from the VCO switch (D9) passes through the high-pass (L6, C46, C48, C49), low-pass (L8, C52, C54, C57) and high-pass (L11, C58, C65) filters to obtain twice oscillating signal. The signals is applied to the VCO switch (D11) which is controlled by the "L\_UR5" signal.

### (3) HARF OSCILLATING SIGNAL CIRCUIT

The signal from the VCO switch (D15) is applied to the pre-scaler circuit (IC3, pin 2) to divide harf oscillating signal. The divided signal is applied to the VCO switch (D16). The reglator circuit provides the pre-scaler's power supply. The circuit is controlled by the "L\_LO\_SW" signal.

The signal from the each VCO switch is applied to the 1st mixer circuit for right side display (MAIN unit; IC1005, pin 4) as the 1st LO signal.

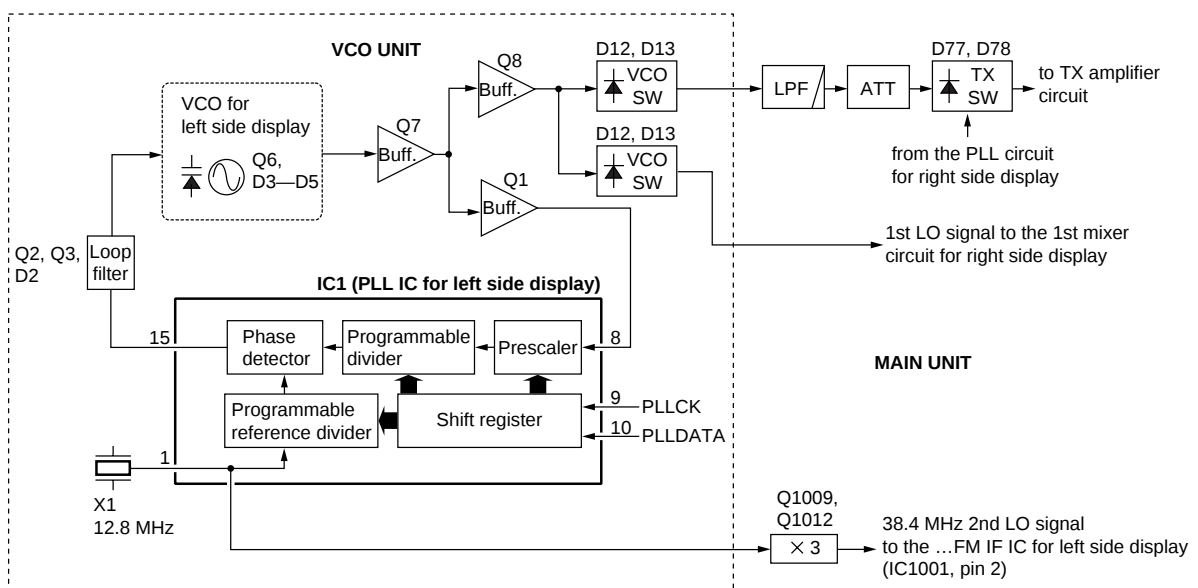
A portion of the signal from the buffer amplifier (Q7) is amplified at the buffer amplifier (Q1), and is then fed back to the PLL IC (IC1, pin 8) as the comparison signal.

## 4-4 POWER SUPPLY CIRCUITS

### 4-4-1 CONTROL UNIT VOLTAGE LINE

| Line | Description                                                                                                                                                                                                                                                  |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HV   | The 13.8V external DC power from the power connector (MAIN unit; J2000). The voltage is supplied to the LCD back light circuit (DS1–DS12), etc.                                                                                                              |
| 8V   | Common 8 V converted from the HV line at the +8 regulator circuit (Q1, Q3, D1). The output voltage is applied to the microphone amplifier regulator circuit (Q16), key back light circuit (DS13–DS18).                                                       |
| CPU5 | Common 5 V converted from the HV line by the +5 regulator circuit (CONTROL unit; IC3). The output voltage is applied to the buffer amplifier (CONTROL unit; Q2) and reset circuit (CONTROL unit; IC2), control unit CPU (IC4) and PTT detector (Q5, D3, D4). |

### • PLL CIRCUIT FOR LEFT SIDE DISPLAY



#### 4-4-2 MAIN UNIT VOLTAGE LINE

| Line    | Description                                                                                                                                                                                                                           |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HV      | The 13.8V external DC power from the power connector.                                                                                                                                                                                 |
| VCC     | The same voltage as the HV line which is controlled by the VCC regulator circuit (MAIN unit; Q2001). When the [POWER] switch is pushed, the CPU outputs control signal to the power switch controller (Q2003) to turn the circuit ON. |
| 5V      | Common 5 V for the CPU converted from the HV line by the 5V regulator circuit (IC2002). The voltage line is also applied to the CPU when IC-2720H is power OFF.                                                                       |
| 8V      | Common 8 V converted from the VCC line at the +8 regulator circuit (IC2003).                                                                                                                                                          |
| 5VS     | Common 5 V produced from the 5 V line by the +5 regulator circuit (Q2002, D2048). The output signal is applied to the PTT detector (Q2005), mic amplifier (IC2014, Q2028), etc.VHF transmit.                                          |
| VT8     | 8 V produced from the 8V line at the VT8 regulator circuit (Q9, Q11).                                                                                                                                                                 |
| UT8     | UHF transmit 8V produced from the 8V line at the UT8 regulator circuit (Q10, Q12).                                                                                                                                                    |
| VUT8    | VHF and UHF transmit 8 V produced from the 8 V line at the VUT8 regulator circuit (Q13, D1). The output voltage is applied to the buffer amplifier (Q38), pre-amplifier (Q16) and pre-driver (Q21).                                   |
| L_AM5   | Receive 5 V produced from the 5VS line at the L_R5 regulator circuit (Q1000). The output voltage is applied to the AM detector for left side display (Q1014, Q1017).                                                                  |
| R_AM5   | Receive 5 V produced from the 5VS line at the R_R5 regulator circuit (Q1002). The output voltage is applied to the AM detector for right side display (Q1022, Q1025).                                                                 |
| L_R5    | Receive 5 V produced from the 5VS line at the L_AM5 regulator circuit (Q1006). The output voltage is applied to the IF amplifier (Q1040) and FM IF IC (IC1001) for left side display.                                                 |
| R_R5    | Receive 5 V produced from the 5VS line at the R_AM5 regulator circuit (Q1005). The output voltage is applied to the IF amplifier (Q1041) and FM IF IC (IC1004) for right side display.                                                |
| L140_R5 | Receive 5 V produced from the 5VS line at the L_R5 regulator circuit (Q1). The output voltage is applied to the RF amplifier (Q29) for left side display's 144 MHz bandpass filter.                                                   |
| R140_R5 | Receive 5 V produced from the 5VS line at the R_R5 regulator circuit (Q2). The output voltage is applied to the RF amplifier (Q30) for right side display's 144 MHz bandpass filter.                                                  |

#### MAIN UNIT VOLTAGE LINE-Continued

| Line    | Description                                                                                                                                                                                            |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| L220_R5 | Receive 5 V produced from the 5VS line at the R_AM5 regulator circuit (Q3). The output voltage is applied to the RF amplifier (Q31) for left side display's 220 MHz bandpass filter.                   |
| L300_R5 | Receive 5 V produced from the 5VS line at the L_AM5 regulator circuit (Q4). The output voltage is applied to the RF amplifier (Q32) for right side display's 300 MHz bandpass filter.                  |
| R400_R5 | Receive 5 V produced from the 5VS line at the R_R5 regulator circuit (Q5). The output voltage is applied to the RF amplifier (Q19) for right side display's 430 MHz bandpass filter.                   |
| L400_R5 | Receive 5 V produced from the 5VS line at the R_AM5 regulator circuit (Q6). The output voltage is applied to the RF amplifier (Q20) for left side display's 430 MHz bandpass filter.                   |
| R800_R5 | Receive 5 V produced from the 5VS line at the L_AM5 regulator circuit (Q8). The output voltage is applied to the RF amplifier (Q18, Q35) for right side display's 910 MHz bandpass filter.             |
| L_VCO8  | Common 8 V produced from the 8 V line by the +8 regulator circuit (Q1023). The output voltage is applied to the VCO circuit (RF unit; Q6, D3-D5) and buffer amplifier (RF unit; Q8).                   |
| CPU5    | Common 5 V converted from the HV line by the +5 regulator circuit (CONTROL unit; IC3). The output voltage is applied to the buffer amplifier (CONTROL unit; Q2) and reset circuit (CONTROL unit; IC2). |

#### 4-4-3 VCO UNIT VOLTAGE LINE

| Line   | Description                                                                                                                                                                                           |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8V     | Common 8 V converted from the VCC line at the +8 regulator circuit (MAIN unit; IC2003). The output voltage is applied to the filter switch (IC2), loop filter (Q2, Q3, D2) and buffer amplifier (Q8). |
| 5VS    | Common 5 V produced from the 5 V line by the +5 regulator circuit (MAIN unit; Q2002, D2048). The output voltage is applied to the PTT IC (IC1) and regulator circuit (Q9).                            |
| L_VCO8 | Common 8 V produced from the 8 V line by the +8 regulator circuit (Q1023). The output voltage is applied to the VCO circuit (RF unit; Q6, D3-D5) and buffer amplifier (RF unit; Q8).                  |

## 4-5 PORT ALLOCATIONS

### 4-5-1 CPU (MAIN UNIT; IC2013)

| Pin number | Port name  | Description                                                                                                                   |
|------------|------------|-------------------------------------------------------------------------------------------------------------------------------|
| 10         | UMMUTE     | Outputs microphone mute signal for right side display.<br>Low: While microphone is muting.                                    |
| 11         | CK_SHIFT1  | Output clock shift signal.                                                                                                    |
| 16         | TX_MUTE    | Outputs transmit mute control signal.<br>High: While transmit is muting.                                                      |
| 17         | MIC_PTT    | Input port for microphone's PTT detecting signal.                                                                             |
| 18         | SUB_SEL    | Outputs sub band select signal.                                                                                               |
| 20         | UTX_CTRL   | Outputs RF transmit power supply circuit control signal for left side display.<br>High: While transmitting 400–479 MHz.       |
| 21         | VTX_CTRL   | Outputs RF transmit power supply circuit control signal for right side display.<br>High: While transmitting 136–174 MHz.      |
| 22         | DTCS_SEL   | Outputs DTCS filter select signal.                                                                                            |
| 24         | ES_DATA    | I/O port the data signal from/to the EEPROM (IC2000, pin 5).                                                                  |
| 25         | ES_CK      | Outputs clock signal to the EEPROM (IC2000, pin 6).                                                                           |
| 26         | P_PTT      | Input port for PTT detect signal in packet mode.                                                                              |
| 27         | P_MOD_MUTE | Outputs modulation mute signal on packet mode<br>Low: While packet mod. is muting.                                            |
| 28         | 98_DATA    | Input port for data signal from HM-98.                                                                                        |
| 29         | MIC_U/D    | Input port for up/down signal from the microphone.                                                                            |
| 30         | CM_MUTE    | Outputs the microphone mute signal to the CONTROL unit.<br>Low: While the microphone is muting.                               |
| 31         | MIC_SEL    | Input port for the connecting microphone detect signal for HM-98.<br>Low: While HM-98 is connecting.                          |
| 32         | R_RSSI     | Input port for the RSSI signal from the FM IF IC (IC1004, pin 12) to detect receiving signal strength for right side display. |
| 33         | L_RSSI     | Input port for the RSSI signal from the FM IF IC (IC1001, pin 12) to detect receiving signal strength for left side display.  |
| 34         | TEMP       | Input port for chassis temperature detecting signal.                                                                          |
| 35         | REV_DET    | Input port for the reverse power detecting signal.                                                                            |
| 38         | R_SQL      | Input port for the squelch level for right side display.                                                                      |
| 39         | R_DTCS_IN  | Input port for the DTCS or CTCSS signal for right side display.                                                               |
| 40         | L_SQL      | Input port for the squelch level for the left side display.                                                                   |
| 41         | L_DTCS_IN  | Input port for the DTCS or CTCSS signal for left side display.                                                                |
| 44         | DTMF       | Outputs DTMF, E-tone, beep signals.                                                                                           |
| 45         | DTCS       | Outputs DTCS and CTCSS signals                                                                                                |
| 47         | P_SQL      | Outputs the packet squelch signal.                                                                                            |

| Pin number | Port name    | Description                                                                                                                                      |
|------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 48         | FAN_CTRL     | Outputs cooling fan control signal.                                                                                                              |
| 49         | CLONE_OUT    | Outputs the cloning data signal.                                                                                                                 |
| 50         | CLONE_IN     | Input port for the cloning data signal.                                                                                                          |
| 51         | D/A_DATA     | Outputs serial data to the D/A converter IC (IC1, pins 15–17).                                                                                   |
| 52         | D/A_CK       |                                                                                                                                                  |
| 53         | D/A_STB      |                                                                                                                                                  |
| 54         | MM_MUTE      | Outputs microphone mute control signal for MAIN unit.<br>Low: While the microphone is muting.                                                    |
| 55         | L_AF_MUTE    | Outputs AF mute control signal for left side display.<br>High: While AF audio is muting.                                                         |
| 56         | R_AF_MUTE    | Outputs AF mute control signal for right side display.<br>High: While AF audio is muting.                                                        |
| 57         | L_DET_MUTE   | Outputs detector mute signal for left side display.                                                                                              |
| 58         | R_DET_MUTE   | Outputs detector mute signal for right side display.                                                                                             |
| 60         | AF_VOL_CK    | Outputs the volume serial signal.                                                                                                                |
| 61         | AF_VOL_DATA  |                                                                                                                                                  |
| 62         | L_R5CTRL     | Outputs the RX RF power supply control signal for left side display.                                                                             |
| 63         | R_UVCO_SEL   | Outputs the VCO select signal for right side display.<br>High: While receiving 320–999.9 MHz on right side display.                              |
| 64         | L_UNLOCK     | Input port for the PLL unlock signal for left side display (VCO unit; IC1, pin 7).<br>Low: The PLL Lock voltage is unlock for left side display. |
| 65         | 1200/9600SEL | Outputs 1200 or 9600 bps packet baud rate select signal.<br>Low: 9600 bps baud rate is selected.                                                 |
| 66         | L_RX400      | Outputs the 400 MHz receiver circuit select signal for left side display.<br>High: While receiving 310–550 MHz on left side display.             |
| 67         | L_RX300      | Outputs the 300 MHz receiver circuit select signal for left side display.<br>High: While receiving 205–309.995 MHz on left side display.         |
| 68         | L_AM         | Outputs receive mode select signal for left side display.<br>Low: AM mode is selected.                                                           |
| 69         | R_AM         | Outputs receive mode select signal for right side display.<br>Low: AM mode is selected.                                                          |
| 72         | R_RX220      | Outputs the 220 MHz receiver circuit select signal for left side display.<br>Low: While receiving 174–254.995 MHz on left side display.          |
| 73         | L_RX140      | Outputs the 144 MHz receiver circuit select signal for left side display.<br>Low: While receiving 118–173.995 MHz on left side display.          |
| 74         | R_RX800      | Outputs the 800 MHz receiver circuit select signal for right side display.<br>Low: While receiving 810–999.990 MHz on right side display.        |

## CPU-Continued

| Pin number           | Port name                                                | Description                                                                                                                                   |
|----------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 75                   | L_400SHIFT                                               | Outputs shift signal to the 430 MHz bandpass filter for left side display.<br>High: While receiving 310–450 MHz on left side display.         |
| 76                   | R_RX400                                                  | Outputs the 430 MHz receiver circuit select signal for right side display.<br>Low: While receiving 360–549.990 MHz on right side display.     |
| 77                   | R_RX140                                                  | Outputs the 144 MHz receiver circuit select signal for right side display.<br>Low: While receiving 118–174 MHz on right side display.         |
| 78                   | LR_R5CTRL                                                | Outputs the RX RF power supply control signal for right side display.<br>High: While receiving on left side display.                          |
| 79                   | L_VCO_SHIFT                                              | Outputs the VCO select signal for left side display.<br>High: While transmitting 400–479 MHz on left side display.                            |
| 80                   | R400_SHIFT                                               | Outputs 430 MHz bandpass filter shift signal for right side display.<br>High: While receiving 360–450 MHz on right side display.              |
| 81                   | R_VVCO_SEL                                               | Output VCO select signal for right side display.<br>High: While receiving 118–174 MHz on right side display.                                  |
| 82                   | L_PLLSW                                                  | Outputs PLL loop select signal for right side display.                                                                                        |
| 83                   | R_PLLSW                                                  | Outputs PLL loop select signal for left side display.                                                                                         |
| 84                   | R_UNLOCK                                                 | Input port for the PLL unlock signal for right side display (IC1008, pin 7).<br>Low: The PLL lock voltage is unlocked for right side display. |
| 85                   | P_L/R_SEL                                                | Outputs packet band select signal.                                                                                                            |
| 86–89                | MATRIX_IN1–<br>MATRIX_IN4                                | Input ports for Initial matrix.                                                                                                               |
| 90<br>91             | PLLDATA<br>PLLCK                                         | Outputs serial signal to the PLL IC (IC1008, pins 9, 10 and VCO unit; IC1, pins 9, 10).                                                       |
| 93<br>94<br>95<br>96 | MATRIX_OUT1<br>MATRIX_OUT2<br>MATRIX_OUT3<br>MATRIX_OUT4 | Outputs Initial matrix signal.                                                                                                                |

## 4-5-2 D/A CONVERTER IC (CONTROL UNIT; IC4)

| Pin number | Port name                               | Description                                                             |
|------------|-----------------------------------------|-------------------------------------------------------------------------|
| 2, 3       | R_BPF3<br>R_BPF4                        | Output tracking signals to the band-pass filter for right side display. |
| 4–7        | L_BPF1,<br>L_BPF2,<br>L_BPF3,<br>L_BPF4 | Output tracking signals to the band-pass filter for left side display.  |
| 8          | L-ATT                                   | Outputs the attenuator circuit control signal for left side display.    |
| 9          | R-ATT                                   | Outputs the attenuator circuit control signal for right side display.   |
| 12         | PWRCON                                  | Outputs control signal for RF output power.                             |
| 18, 19     | R-BPF1,<br>R-BPF2                       | Output tracking signals to the band-pass filter for right side display. |

# SECTION 5 PARTS LIST

## [CONTROL UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION  |                         |
|---------|------------|--------------|-------------------------|
| IC1     | 1110002750 | S.IC         | TA75S01F (TE85R)        |
| IC2     | 1110005780 | S.IC         | S-80945CLMC-G7F-T2      |
| IC3     | 1180000420 | S.IC         | TA78L05F (TE12R)        |
| IC4     | 1140010230 | S.IC         | HD6473847RH (FX-2493D)  |
| IC5     | 1130007370 | S.IC         | TA75S558F (TE85L)       |
| Q1      | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q2      | 1590001650 | S.TRANSISTOR | XP4601 (TX)             |
| Q3      | 1510000770 | S.TRANSISTOR | 2SA1586-GR (TE85R)      |
| Q5      | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q6      | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q7      | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q8      | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q9      | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q10     | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q11     | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q12     | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q13     | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q15     | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q16     | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| D1      | 1730002280 | S.ZENER      | MA8091-M (TX)           |
| D2      | 1730002340 | S.ZENER      | MA8047-M (TX)           |
| D3      | 1750000550 | S.DIODE      | 1SS355 TE-17            |
| D4      | 1790001000 | S.ZENER      | MA8062-L (TX)           |
| X1      | 6060000610 | S.CERAMIC    | EFOS4914E3              |
| R1      | 7210002920 | VARIABLE     | EVU-F2AF20B55 (560K)    |
| R2      | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R3      | 7210002920 | VARIABLE     | EVU-F2AF20B55 (560K)    |
| R4      | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R5      | 7210002920 | VARIABLE     | EVU-F2AF20B55 (560K)    |
| R6      | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R7      | 7210002920 | VARIABLE     | EVU-F2AF20B55 (560K)    |
| R8      | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R9      | 7030003640 | S.RESISTOR   | ERJ3GEYJ 473 V (47 kΩ)  |
| R10     | 7030003640 | S.RESISTOR   | ERJ3GEYJ 473 V (47 kΩ)  |
| R11     | 7030003640 | S.RESISTOR   | ERJ3GEYJ 473 V (47 kΩ)  |
| R12     | 7030003640 | S.RESISTOR   | ERJ3GEYJ 473 V (47 kΩ)  |
| R13     | 7030003520 | S.RESISTOR   | ERJ3GEYJ 472 V (4.7 kΩ) |
| R14     | 7030003640 | S.RESISTOR   | ERJ3GEYJ 473 V (47 kΩ)  |
| R15     | 7030005521 | S.RESISTOR   | ERA3YKD 334V (330 kΩ)   |
| R16     | 7030005501 | S.RESISTOR   | ERA3YKD 124V (120 kΩ)   |
| R17     | 7030005691 | S.RESISTOR   | ERA3YED 123V            |
| R18     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R19     | 7030000020 | S.RESISTOR   | MCR10EZJH 1 Ω (010)     |
| R20     | 7030003520 | S.RESISTOR   | ERJ3GEYJ 472 V (4.7 kΩ) |
| R21     | 7030003520 | S.RESISTOR   | ERJ3GEYJ 472 V (4.7 kΩ) |
| R22     | 7030003760 | S.RESISTOR   | ERJ3GEYJ 474 V (470 kΩ) |
| R23     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R24     | 7030003520 | S.RESISTOR   | ERJ3GEYJ 472 V (4.7 kΩ) |
| R25     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R26     | 7030003520 | S.RESISTOR   | ERJ3GEYJ 472 V (4.7 kΩ) |
| R27     | 7030003760 | S.RESISTOR   | ERJ3GEYJ 474 V (470 kΩ) |
| R28     | 7030003520 | S.RESISTOR   | ERJ3GEYJ 472 V (4.7 kΩ) |
| R29     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R30     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R31     | 7030003480 | S.RESISTOR   | ERJ3GEYJ 222 V (2.2 kΩ) |
| R32     | 7030003600 | S.RESISTOR   | ERJ3GEYJ 223 V (22 kΩ)  |
| R35     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R39     | 7030003680 | S.RESISTOR   | ERJ3GEYJ 104 V (100 kΩ) |
| R41     | 7030003800 | S.RESISTOR   | ERJ3GEYJ 105 V (1 MΩ)   |
| R42     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R43     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R44     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R45     | 7030003390 | S.RESISTOR   | ERJ3GEYJ 391 V (390 Ω)  |
| R46     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R47     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R48     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R49     | 7030003390 | S.RESISTOR   | ERJ3GEYJ 391 V (390 Ω)  |
| R50     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |

## [CONTROL UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION    |                         |
|---------|------------|----------------|-------------------------|
| R51     | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R52     | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R53     | 7030003390 | S.RESISTOR     | ERJ3GEYJ 391 V (390 Ω)  |
| R54     | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R55     | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R56     | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R57     | 7030003390 | S.RESISTOR     | ERJ3GEYJ 391 V (390 Ω)  |
| R58     | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R59     | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R60     | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R61     | 7030003580 | S.RESISTOR     | ERJ3GEYJ 153 V (15 kΩ)  |
| R62     | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R63     | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R64     | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R65     | 7030003390 | S.RESISTOR     | ERJ3GEYJ 391 V (390 Ω)  |
| R66     | 7030003390 | S.RESISTOR     | ERJ3GEYJ 391 V (390 Ω)  |
| R67     | 7030003380 | S.RESISTOR     | ERJ3GEYJ 331 V (330 Ω)  |
| R71     | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R72     | 7030003560 | S.RESISTOR     | ERJ3GEYJ 103 V (10 kΩ)  |
| R73     | 7030003560 | S.RESISTOR     | ERJ3GEYJ 103 V (10 kΩ)  |
| R74     | 7030003560 | S.RESISTOR     | ERJ3GEYJ 103 V (10 kΩ)  |
| R75     | 7030003560 | S.RESISTOR     | ERJ3GEYJ 103 V (10 kΩ)  |
| R76     | 7030003620 | S.RESISTOR     | ERJ3GEYJ 333 V (33 kΩ)  |
| R77     | 7030003660 | S.RESISTOR     | ERJ3GEYJ 683 V (68 kΩ)  |
| R78     | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R79     | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R80     | 7030003530 | S.RESISTOR     | ERJ3GEYJ 562 V (5.6 kΩ) |
| R81     | 7030003600 | S.RESISTOR     | ERJ3GEYJ 223 V (22 kΩ)  |
| R82     | 7030003600 | S.RESISTOR     | ERJ3GEYJ 223 V (22 kΩ)  |
| R83     | 7030003580 | S.RESISTOR     | ERJ3GEYJ 153 V (15 kΩ)  |
| R85     | 7030003760 | S.RESISTOR     | ERJ3GEYJ 474 V (470 kΩ) |
| R88     | 7030003500 | S.RESISTOR     | ERJ3GEYJ 332 V (3.3 kΩ) |
| C1      | 4030006880 | S.CERAMIC      | C1608 JB 1H 472K-T      |
| C2      | 4030006880 | S.CERAMIC      | C1608 JB 1H 472K-T      |
| C3      | 4030006880 | S.CERAMIC      | C1608 JB 1H 472K-T      |
| C4      | 4030006880 | S.CERAMIC      | C1608 JB 1H 472K-T      |
| C5      | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T      |
| C6      | 4030007090 | S.CERAMIC      | C1608 CH 1H 470J-T      |
| C7      | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T      |
| C8      | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T      |
| C10     | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T      |
| C12     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C13     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C14     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C15     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C16     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C18     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C19     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C20     | 4510004640 | S.ELECTROLYTIC | ECEV1CA470SP            |
| C22     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C23     | 4030012600 | S.CERAMIC      | C2012 JB 1A 105M-T      |
| C24     | 4510004630 | S.ELECTROLYTIC | ECEV1CA100SR            |
| C25     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C26     | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T      |
| C27     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C28     | 4510004630 | S.ELECTROLYTIC | ECEV1CA100SR            |
| C29     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C30     | 4030007090 | S.CERAMIC      | C1608 CH 1H 470J-T      |
| C31     | 4030007090 | S.CERAMIC      | C1608 CH 1H 470J-T      |
| C32     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C33     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C34     | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T      |
| C35     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C36     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C37     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C39     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C40     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C41     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C42     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C43     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C44     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C45     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C46     | 4030008910 | S.CERAMIC      | C1608 JB 1H 393K-T      |
| C47     | 4030008910 | S.CERAMIC      | C1608 JB 1H 393K-T      |

S.=Surface mount

# [CONTROL UNIT]

| REF NO. | ORDER NO.   | DESCRIPTION |                   |
|---------|-------------|-------------|-------------------|
| C48     | 4550000530  | S.TANTALUM  | TESVA 1V 104M1-8L |
| C49     | 45500005980 | S.TANTALUM  | TEMSVA 1A 475M-8L |
| C50     | 45500003220 | S.TANTALUM  | TEMSVA 1E 105M-8L |
| C54     | 45500006250 | S.TANTALUM  | TEMSVA 1A 106M-8L |
| J1      | 6510023110  | CONNECTOR   | 3008L-8P8C        |
| J2      | 6510023170  | CONNECTOR   | 3008L-6P6C        |
| DS1     | 5040002370  | S.LED       | SML-010MT T86     |
| DS2     | 5040002370  | S.LED       | SML-010MT T86     |
| DS3     | 5040002370  | S.LED       | SML-010MT T86     |
| DS4     | 5040002060  | S.LED       | SML-020MLT T86    |
| DS5     | 5040002060  | S.LED       | SML-020MLT T86    |
| DS6     | 5040002060  | S.LED       | SML-020MLT T86    |
| DS7     | 5040002370  | S.LED       | SML-010MT T86     |
| DS8     | 5040002370  | S.LED       | SML-010MT T86     |
| DS9     | 5040002370  | S.LED       | SML-010MT T86     |
| DS10    | 5040002060  | S.LED       | SML-020MLT T86    |
| DS11    | 5040002060  | S.LED       | SML-020MLT T86    |
| DS12    | 5040002060  | S.LED       | SML-020MLT T86    |
| DS13    | 5010000120  | S.LED       | LN1371G-(TR)      |
| DS14    | 5010000120  | S.LED       | LN1371G-(TR)      |
| DS15    | 5010000120  | S.LED       | LN1371G-(TR)      |
| DS16    | 5010000120  | S.LED       | LN1371G-(TR)      |
| DS17    | 5010000120  | S.LED       | LN1371G-(TR)      |
| DS18    | 5010000120  | S.LED       | LN1371G-(TR)      |
| DS19    | 5030002210  | LCD         | L1-0500TAM        |
| S1      | 2250000460  | ENCODER     | EVQ-VENF0224B     |
| S2      | 2250000460  | ENCODER     | EVQ-VENF0224B     |
| EP1     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP2     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP3     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP4     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP5     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP6     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP7     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP8     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP9     | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP10    | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP11    | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP12    | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP13    | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP14    | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |
| EP15    | 8930057510  | LCD CONTACT | SRCN-2493-SP-N-W  |
| EP16    | 0910054973  | PCB         | B 5765C           |
| EP17    | 6910012350  | S.BEAD      | MMZ1608Y 102BT    |

# [MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION  |                              |
|---------|------------|--------------|------------------------------|
| IC1     | 1110004310 | S.IC         | M62352GP 75EC                |
| IC2     | 1110002750 | S.IC         | TA75S01F (TE85R)             |
| IC1000  | 1110005340 | S.IC         | NJM12902V-TE1                |
| IC1001  | 1110003200 | S.IC         | TA31136FN (EL)               |
| IC1003  | 1130004200 | S.IC         | TC4S66F (TE85R)              |
| IC1004  | 1110003200 | S.IC         | TA31136FN (EL)               |
| IC1005  | 1110005620 | S.IC         | GN02039B-0L                  |
| IC1006  | 1110005620 | S.IC         | GN02039B-0L                  |
| IC1008  | 1140005990 | S.IC         | MB15A02PFV1-G-BND-ER         |
| IC1009  | 1190000350 | S.IC         | M62363FP-650C                |
| IC2000  | 1140008650 | S.IC         | HN58X2464TI                  |
| IC2001  | 1110005990 | S.IC         | S-80945CNMC-G9F-T2           |
| IC2002  | 1180001070 | S.IC         | TA7805F (TE16L)              |
| IC2003  | 1180001250 | S.IC         | TA7808F (TE16L)              |
| IC2006  | 1110002750 | S.IC         | TA75S01F (TE85R)             |
| IC2007  | 1130008090 | S.IC         | BU4066BCFV-E1                |
| IC2008  | 1130008090 | S.IC         | BU4066BCFV-E1                |
| IC2009  | 1130003760 | S.IC         | TC4S81F (TE85R)              |
| IC2010  | 1130008090 | S.IC         | BU4066BCFV-E1                |
| IC2011  | 1110004490 | S.IC         | M62449FP 700C                |
| IC2012  | 1110002540 | IC           | LA4445                       |
| IC2013  | 1140010840 | S.IC         | HD64F2144AFA20 (FX-2493 USA) |
|         |            |              | [USA]                        |
|         | 1140010830 | S.IC         | HD64F2144AFA20 (FX-2493 EXP) |
|         |            |              | [OTHER]                      |
| IC2014  | 1130007370 | S.IC         | TA75S558F (TE85L)            |
| IC2015  | 1130006220 | S.IC         | TC4W53FU (TE12L)             |
| IC2016  | 1130006220 | S.IC         | TC4W53FU (TE12L)             |
| Q1      | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q2      | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q3      | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q4      | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q5      | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q6      | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q8      | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q9      | 1590000430 | S.TRANSISTOR | DTC144EUA T106               |
| Q10     | 1590000430 | S.TRANSISTOR | DTC144EUA T106               |
| Q11     | 1510000670 | S.TRANSISTOR | 2SA1588-GR (TE85R)           |
| Q12     | 1510000670 | S.TRANSISTOR | 2SA1588-GR (TE85R)           |
| Q13     | 1520000460 | S.TRANSISTOR | 2SB1132 T100 R               |
| Q14     | 1530002850 | S.TRANSISTOR | 2SC4116-BL (TE85R)           |
| Q15     | 1530002850 | S.TRANSISTOR | 2SC4116-BL (TE85R)           |
| Q16     | 1560001090 | S.FET        | 2SK2854                      |
| Q18     | 1530003780 | S.TRANSISTOR | 2SC5624VH-TL                 |
| Q19     | 1580000740 | S.FET        | 3SK320 (TE85L)               |
| Q20     | 1580000740 | S.FET        | 3SK320 (TE85L)               |
| Q21     | 1560001160 | S.FET        | 2SK3475 (TE12L)              |
| Q22     | 1590000720 | S.TRANSISTOR | DTA144EUA T106               |
| Q23     | 1530002850 | S.TRANSISTOR | 2SC4116-BL (TE85R)           |
| Q24     | 1580000710 | S.FET        | 3SK274 (TE85L)               |
| Q25     | 1560001060 | S.FET        | 2SK3075 (TE12L)              |
| Q26     | 1530002850 | S.TRANSISTOR | 2SC4116-BL (TE85R)           |
| Q27     | 1560001190 | FET          | RD70HVF                      |
| Q28     | 1590000430 | S.TRANSISTOR | DTC144EUA T106               |
| Q29     | 1580000660 | S.FET        | 3SK272-(TX)                  |
| Q30     | 1580000660 | S.FET        | 3SK272-(TX)                  |
| Q31     | 1530003780 | S.TRANSISTOR | 2SC5624VH-TL                 |
| Q32     | 1530003780 | S.TRANSISTOR | 2SC5624VH-TL                 |
| Q33     | 1580000660 | S.FET        | 3SK272-(TX)                  |
| Q34     | 1530002850 | S.TRANSISTOR | 2SC4116-BL (TE85R)           |
| Q35     | 1530003260 | S.TRANSISTOR | 2SC5006-T1                   |
| Q38     | 1530002920 | S.TRANSISTOR | 2SC4226-T1 R25               |
| Q1000   | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q1001   | 1590000430 | S.TRANSISTOR | DTC144EUA T106               |
| Q1002   | 1590000860 | S.TRANSISTOR | DTA114YUA T106               |
| Q1003   | 1590001650 | S.TRANSISTOR | XP4601 (TX)                  |
| Q1004   | 1590001650 | S.TRANSISTOR | XP4601 (TX)                  |
| Q1005   | 1590000440 | S.TRANSISTOR | DTA143ZUA T106               |
| Q1006   | 1590000440 | S.TRANSISTOR | DTA143ZUA T106               |
| Q1007   | 1590001190 | S.TRANSISTOR | XP6501-(TX) .AB              |
| Q1008   | 1590001190 | S.TRANSISTOR | XP6501-(TX) .AB              |
| Q1009   | 1530002380 | S.TRANSISTOR | 2SC4215-Y (TE85R)            |
| Q1010   | 1590001450 | S.FET        | 2SJ144-GR (TE85R)            |
| Q1011   | 1590001450 | S.FET        | 2SJ144-GR (TE85R)            |
| Q1012   | 1530002850 | S.TRANSISTOR | 2SC4116-BL (TE85R)           |
| Q1013   | 1590000720 | S.TRANSISTOR | DTA144EUA T106               |
| Q1014   | 1590001190 | S.TRANSISTOR | XP6501-(TX) .AB              |
| Q1016   | 1530002560 | S.TRANSISTOR | 2SC4403-3-TL                 |
| Q1017   | 1590001190 | S.TRANSISTOR | XP6501-(TX) .AB              |
| Q1020   | 1510000770 | S.TRANSISTOR | 2SA1586-GR (TE85R)           |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                     |
|---------|------------|---------------------------------|
| Q1021   | 1530002690 | S.TRANSISTOR 2SC4116-GR (TE85R) |
| Q1022   | 1590001190 | S.TRANSISTOR XP6501-(TX) .AB    |
| Q1023   | 1530002850 | S.TRANSISTOR 2SC4116-BL (TE85R) |
| Q1025   | 1590001190 | S.TRANSISTOR XP6501-(TX) .AB    |
| Q1026   | 1590001650 | S.TRANSISTOR XP4601 (TX)        |
| Q1027   | 1590001650 | S.TRANSISTOR XP4601 (TX)        |
| Q1029   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q1038   | 1530003580 | S.TRANSISTOR 2SC5231C8-TL       |
| Q1039   | 1530003580 | S.TRANSISTOR 2SC5231C8-TL       |
| Q1040   | 1530003220 | S.TRANSISTOR 2SC4406-4-TL       |
| Q1041   | 1530003220 | S.TRANSISTOR 2SC4406-4-TL       |
| Q1042   | 1530002920 | S.TRANSISTOR 2SC4226-T1 R25     |
| Q1043   | 1530003580 | S.TRANSISTOR 2SC5231C8-TL       |
| Q1044   | 1530003580 | S.TRANSISTOR 2SC5231C8-TL       |
| Q1047   | 1530003580 | S.TRANSISTOR 2SC5231C8-TL       |
| Q1048   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q1049   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2000   | 1520000460 | S.TRANSISTOR 2SB1132 T100 R     |
| Q2002   | 1510000670 | S.TRANSISTOR 2SA1588-GR (TE85R) |
| Q2003   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2005   | 1530002850 | S.TRANSISTOR 2SC4116-BL (TE85R) |
| Q2006   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2007   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2008   | 1530003090 | S.TRANSISTOR 2SC4213-B (TE85R)  |
| Q2009   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2010   | 1530003090 | S.TRANSISTOR 2SC4213-B (TE85R)  |
| Q2011   | 1530003090 | S.TRANSISTOR 2SC4213-B (TE85R)  |
| Q2014   | 1590001650 | S.TRANSISTOR XP4601 (TX)        |
| Q2016   | 1590001780 | S.TRANSISTOR XP4213 (TX)        |
| Q2017   | 1590000660 | S.TRANSISTOR DTC144TU T106      |
| Q2018   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2019   | 1590000720 | S.TRANSISTOR DTA144EUA T106     |
| Q2022   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2023   | 1590000430 | S.TRANSISTOR DTC144EUA T106     |
| Q2024   | 1590001650 | S.TRANSISTOR XP4601 (TX)        |
| Q2025   | 1590001650 | S.TRANSISTOR XP4601 (TX)        |
| Q2028   | 1530002690 | S.TRANSISTOR 2SC4116-GR (TE85R) |
| Q2029   | 1590000660 | S.TRANSISTOR DTC144TU T106      |
| Q2030   | 1590000720 | S.TRANSISTOR DTA144EUA T106     |
| D1      | 1160000140 | S.DIODE DAP222 TL               |
| D2      | 1790001240 | S.DIODE MA2S728-(TX)            |
| D3      | 1790001240 | S.DIODE MA2S728-(TX)            |
| D5      | 1790001240 | S.DIODE MA2S728-(TX)            |
| D8      | 1790001260 | S.DIODE MA2S077-(TX)            |
| D9      | 1790001260 | S.DIODE MA2S077-(TX)            |
| D11     | 1790001260 | S.DIODE MA2S077-(TX)            |
| D12     | 1750000720 | S.VARICAP HVC375BTRF            |
| D13     | 1750000720 | S.VARICAP HVC375BTRF            |
| D16     | 1750000720 | S.VARICAP HVC375BTRF            |
| D17     | 1750000720 | S.VARICAP HVC375BTRF            |
| D22     | 1750000720 | S.VARICAP HVC375BTRF            |
| D23     | 1750000720 | S.VARICAP HVC375BTRF            |
| D24     | 1720000240 | S.DIODE 1SV172 (TE85R)          |
| D25     | 1720000240 | S.DIODE 1SV172 (TE85R)          |
| D28     | 1790001260 | S.DIODE MA2S077-(TX)            |
| D29     | 1790001260 | S.DIODE MA2S077-(TX)            |
| D30     | 1790001260 | S.DIODE MA2S077-(TX)            |
| D31     | 1790001260 | S.DIODE MA2S077-(TX)            |
| D32     | 1750000710 | S.VARICAP HVC350BTRF            |
| D33     | 1750000710 | S.VARICAP HVC350BTRF            |
| D34     | 1750000710 | S.VARICAP HVC350BTRF            |
| D35     | 1750000720 | S.VARICAP HVC375BTRF            |
| D36     | 1750000510 | S.DIODE UM9401F                 |
| D37     | 1750000510 | S.DIODE UM9401F                 |
| D38     | 1750000510 | S.DIODE UM9401F                 |
| D39     | 1750000710 | S.VARICAP HVC350BTRF            |
| D40     | 1750000710 | S.VARICAP HVC350BTRF            |
| D41     | 1750000510 | S.DIODE UM9401F                 |
| D42     | 1750000510 | S.DIODE UM9401F                 |
| D43     | 1750000510 | S.DIODE UM9401F                 |
| D44     | 1750000510 | S.DIODE UM9401F                 |
| D45     | 1750000510 | S.DIODE UM9401F                 |
| D46     | 1750000810 | S.DIODE UM9957F/TR              |
| D47     | 1750000710 | S.VARICAP HVC350BTRF            |
| D48     | 1750000710 | S.VARICAP HVC350BTRF            |
| D49     | 1750000720 | S.VARICAP HVC375BTRF            |
| D50     | 1790001240 | S.DIODE MA2S728-(TX)            |
| D51     | 1750000710 | S.VARICAP HVC350BTRF            |
| D52     | 1790001250 | S.DIODE MA2S111-(TX)            |
| D53     | 1750000710 | S.VARICAP HVC350BTRF            |

[USA] only  
[USA] only

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION            |
|---------|------------|------------------------|
| D54     | 1750000710 | S.VARICAP HVC350BTRF   |
| D55     | 1750000510 | S.DIODE UM9401F        |
| D57     | 1790000980 | S.DIODE MA742 (TX)     |
| D58     | 1790001240 | S.DIODE MA2S728-(TX)   |
| D59     | 1720000240 | S.DIODE 1SV172 (TE85R) |
| D60     | 1720000240 | S.DIODE 1SV172 (TE85R) |
| D61     | 1790000980 | S.DIODE MA742 (TX)     |
| D62     | 1790001260 | S.DIODE MA2S077-(TX)   |
| D63     | 1790001260 | S.DIODE MA2S077-(TX)   |
| D64     | 1790001260 | S.DIODE MA2S077-(TX)   |
| D65     | 1790001250 | S.DIODE MA2S111-(TX)   |
| D66     | 1750000550 | S.DIODE 1SS355 TE-17   |
| D67     | 1790001260 | S.DIODE MA2S077-(TX)   |
| D68     | 1750000510 | S.DIODE UM9401F        |
| D70     | 1730002340 | S.ZENER MA8047-M (TX)  |
| D71     | 1790000980 | S.DIODE MA742 (TX)     |
| D72     | 1750000720 | S.VARICAP HVC375BTRF   |
| D73     | 1750000720 | S.VARICAP HVC375BTRF   |
| D77     | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D78     | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D81     | 1790001240 | S.DIODE MA2S728-(TX)   |
| D82     | 1790001240 | S.DIODE MA2S728-(TX)   |
| D83     | 1790001240 | S.DIODE MA2S728-(TX)   |
| D1008   | 1750000370 | S.DIODE DA221 TL       |
| D1014   | 1750000830 | S.VARICAP HVC362TRF    |
| D1015   | 1750000830 | S.VARICAP HVC362TRF    |
| D1016   | 1750000720 | S.VARICAP HVC375BTRF   |
| D1017   | 1750000720 | S.VARICAP HVC375BTRF   |
| D1018   | 1720000790 | S.VARICAP HVC321B1TRF  |
| D1021   | 1750000370 | S.DIODE DA221 TL       |
| D1022   | 1750000370 | S.DIODE DA221 TL       |
| D1023   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1024   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1026   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1027   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1028   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1038   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1039   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1040   | 1750000520 | S.DIODE DAN222TL       |
| D1041   | 1750000520 | S.DIODE DAN222TL       |
| D1042   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D1044   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D1045   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D1046   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D1047   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D1049   | 1790001260 | S.DIODE MA2S077-(TX)   |
| D1053   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2000   | 1790000700 | DIODE DSA3A1           |
| D2010   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2011   | 1730002340 | S.ZENER MA8047-M (TX)  |
| D2012   | 1750000370 | S.DIODE DA221 TL       |
| D2029   | 1790000980 | S.DIODE MA742 (TX)     |
| D2030   | 1730000520 | ZENER RD20E B2         |
| D2032   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2033   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2035   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2036   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2037   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2038   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2039   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2041   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2042   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2043   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2044   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2045   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2046   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2047   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2048   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2049   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2050   | 1790001250 | S.DIODE MA2S111-(TX)   |
| D2051   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2052   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2053   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2054   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2055   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2056   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2057   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2058   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2059   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2060   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2061   | 1790001620 | S.DIODE 1SV308 (TPL3)  |
| D2062   | 1790001620 | S.DIODE 1SV308 (TPL3)  |

[USA] only

[USA] only

[SEA], [EXP] only

[KOR], [SEA] only

[KOR] only

[KOR], [SEA] only

[KOR], [SEA] only

[KOR], [SEA] only

[KOR] only

[KOR], [SEA] only

[KOR], [EXP] only

[KOR] only

except [EXP]

except [EXP]

S.=Surface mount

# [MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION   |                       |
|---------|------------|---------------|-----------------------|
| D2063   | 1790001620 | S.DIODE       | 1SV308 (TPL3)         |
| D2064   | 1790001620 | S.DIODE       | 1SV308 (TPL3)         |
| D2065   | 1790001620 | S.DIODE       | 1SV308 (TPL3)         |
| D2066   | 1790001620 | S.DIODE       | 1SV308 (TPL3)         |
| D2067   | 1790001620 | S.DIODE       | 1SV308 (TPL3)         |
| D2068   | 1790001620 | S.DIODE       | 1SV308 (TPL3)         |
| D2069   | 1790001250 | S.DIODE       | MA2S111-(TX)          |
| D2070   | 1750000510 | S.DIODE       | UM9401F               |
| D2071   | 1790001250 | S.DIODE       | MA2S111-(TX)          |
| FI1000  | 2020001270 | CERAMIC       | CFWLB450KE2A-B0       |
| FI1001  | 2020001460 | CERAMIC       | CFWLA450KHFA-B0       |
| FI1002  | 2020000920 | CERAMIC       | CFWLB455KEFA-B0       |
| FI1003  | 2010002550 | S.MONOLITHIC  | FL-342 (38.85 MHz)    |
| FI1004  | 2010002560 | S.MONOLITHIC  | FL-344 (46.05 MHz)    |
| X1001   | 6070000200 | DISCRIMINATOR | CDBLA450KCAY24-B0     |
| X1002   | 6070000230 | DISCRIMINATOR | CDBLA455KCAY24-B0     |
| X1003   | 6050011330 | S.XTAL        | CR-723 (45.595 MHz)   |
| X2001   | 6050009520 | S.XTAL        | CR-520 (19.6608 MHz+) |
| L2      | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L4      | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L5      | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L6      | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L10     | 6200005660 | S.COIL        | ELJRE 10NG-F          |
| L11     | 6200004960 | S.COIL        | NL 252018T-R33J       |
| L13     | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L15     | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L16     | 6200005650 | S.COIL        | ELJRE 8N2Z-F          |
| L19     | 6200005680 | S.COIL        | ELJRE 15NG-F          |
| L20     | 6200005670 | S.COIL        | ELJRE 12NG-F          |
| L21     | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L22     | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L23     | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L24     | 6200008270 | S.COIL        | 0.26-1.0-5TL 17N      |
| L25     | 6200002640 | S.COIL        | NL 252018T-R15J       |
| L26     | 6200003950 | S.COIL        | HF50ACC 322513-T      |
| L27     | 6200007740 | S.COIL        | LQW2BHN47NJ01L        |
| L32     | 6200003950 | S.COIL        | HF50ACC 322513-T      |
| L33     | 6200010170 | S.COIL        | AS080447-33N          |
| L34     | 6190001520 | S.COIL        | ZBFS5101-PT           |
| L35     | 6110001690 | COIL          | LA-255                |
| L37     | 6200002420 | S.COIL        | NL 252018T-068J       |
| L38     | 6200002590 | S.COIL        | NL 252018T-039J       |
| L39     | 6200002420 | S.COIL        | NL 252018T-068J       |
| L40     | 6200002590 | S.COIL        | NL 252018T-039J       |
| L44     | 6170000180 | COIL          | LW-19                 |
| L46     | 6200002580 | S.COIL        | NL 252018T-033J       |
| L48     | 6200003560 | S.COIL        | NL 252018T-018J       |
| L50     | 6200002630 | S.COIL        | NL 252018T-R10J       |
| L52     | 6200002630 | S.COIL        | NL 252018T-R10J       |
| L53     | 6170000180 | COIL          | LW-19                 |
| L54     | 6200010060 | S.COIL        | AS080647-56N          |
| L55     | 6200008170 | S.COIL        | 0.35-1.6-8TL 54N      |
| L57     | 6200007650 | S.COIL        | LL1608-FH82NJ         |
| L59     | 6200007650 | S.COIL        | LL1608-FH82NJ         |
| L60     | 6200010040 | S.COIL        | AS100340-10N          |
| L61     | 6200010150 | S.COIL        | AS080340-15N          |
| L63     | 6200003560 | S.COIL        | NL 252018T-018J       |
| L65     | 6200002580 | S.COIL        | NL 252018T-033J       |
| L66     | 6200002390 | S.COIL        | LQW31HN64NJ01L        |
| L67     | 6200002370 | S.COIL        | LQW31HN39NJ01L        |
| L68     | 6200002390 | S.COIL        | LQW31HN64NJ01L        |
| L69     | 6200002370 | S.COIL        | LQW31HN39NJ01L        |
| L70     | 6200010150 | S.COIL        | AS080340-15N          |
| L71     | 6200010060 | S.COIL        | AS080647-56N          |
| L72     | 6200009200 | S.COIL        | 0.45-1.5-4TL          |
| L73     | 6200010150 | S.COIL        | AS080340-15N          |
| L76     | 6200010060 | S.COIL        | AS080647-56N          |
| L77     | 6200010070 | S.COIL        | AS080747-68N          |
| L78     | 6200010150 | S.COIL        | AS080340-15N          |
| L79     | 6200010330 | S.COIL        | C2012C-R18G           |
| L80     | 6200010050 | S.COIL        | AS080547-47N          |
| L81     | 6200010150 | S.COIL        | AS080340-15N          |
| L82     | 6200009890 | S.COIL        | C2012C-82NG           |
| L84     | 6200010320 | S.COIL        | C2012C-R15G           |
| L85     | 6170000180 | COIL          | LW-19                 |
| L86     | 6170000180 | COIL          | LW-19                 |

[USA] only

# [MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION |                         |
|---------|------------|-------------|-------------------------|
| L87     | 6200005670 | S.COIL      | ELJRE 12NG-F            |
| L88     | 6200005670 | S.COIL      | ELJRE 12NG-F            |
| L90     | 6200005740 | S.COIL      | ELJRE 47NG-F            |
| L91     | 6200005740 | S.COIL      | ELJRE 47NG-F            |
| L93     | 6200007770 | S.COIL      | LQW2BHN10J01L           |
| L94     | 6200005670 | S.COIL      | ELJRE 12NG-F            |
| L1000   | 6200004470 | S.COIL      | MLF1608D R12K-T         |
| L1001   | 6200005190 | S.COIL      | MLF1608D R56K-T         |
| L1002   | 6200007620 | S.COIL      | LL1608-FH47NJ           |
| L1004   | 6200005740 | S.COIL      | ELJRE 47NG-F            |
| L1006   | 6200002610 | S.COIL      | NL 252018T-R47J         |
| L1007   | 6200002610 | S.COIL      | NL 252018T-R47J         |
| L1010   | 6200002360 | S.COIL      | LQW31HN33NJ01L          |
| L1012   | 6200002330 | S.COIL      | LQW31HN15NJ01L          |
| L1014   | 6200002640 | S.COIL      | NL 252018T-R15J         |
| L1016   | 6200002640 | S.COIL      | NL 252018T-R15J         |
| L1017   | 6200005730 | S.COIL      | ELJRE 39NG-F            |
| L1018   | 6200005680 | S.COIL      | ELJRE 15NG-F            |
| L1020   | 6200005670 | S.COIL      | ELJRE 12NG-F            |
| L1021   | 6200007550 | S.COIL      | LL1608-FH12NJ           |
| L1023   | 6200005700 | S.COIL      | ELJRE 22NG-F            |
| L1034   | 6200007580 | S.COIL      | LL1608-FH22NJ           |
| L1035   | 6200007580 | S.COIL      | LL1608-FH22NJ           |
| L1036   | 6200007530 | S.COIL      | LL1608-FH8N2J           |
| L1038   | 6200007580 | S.COIL      | LL1608-FH22NJ           |
| L1042   | 6200004730 | S.COIL      | MLF1608A 1R2K-T         |
| L1045   | 6200007610 | S.COIL      | LL1608-FH39NJ           |
| L1046   | 6200007610 | S.COIL      | LL1608-FH39NJ           |
| L1048   | 6200007570 | S.COIL      | LL1608-FH18NJ           |
| L1049   | 6200007570 | S.COIL      | LL1608-FH18NJ           |
| L1050   | 6200005680 | S.COIL      | ELJRE 15NG-F            |
| L1051   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1052   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1053   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1054   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1055   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1056   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1057   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1058   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1059   | 6200010060 | S.COIL      | AS080647-56N            |
| L1060   | 6200007700 | S.COIL      | LQW2BHN22NJ01L          |
| L1061   | 6200008090 | S.COIL      | LQW2BHN68NJ01L          |
| L1062   | 6200006710 | S.COIL      | MLF1608E 5R6K 5.6U      |
| L1063   | 6200006980 | S.COIL      | ELJRE R10G-F            |
| L1064   | 6200006670 | S.COIL      | ELJRE 68NG-F            |
| L1065   | 6200006990 | S.COIL      | ELJRE 56NG-F            |
| L1066   | 6200005740 | S.COIL      | ELJRE 47NG-F            |
| L1067   | 6200003550 | S.COIL      | MLF1608A 4R7K-T         |
| L1068   | 6200006980 | S.COIL      | ELJRE R10G-F            |
| L1069   | 6200005740 | S.COIL      | ELJRE 47NG-F            |
| L1070   | 6200005640 | S.COIL      | ELJRE 6N8Z-F            |
| L1071   | 6200005720 | S.COIL      | ELJRE 33NG-F            |
| L1072   | 6200005700 | S.COIL      | ELJRE 22NG-F            |
| L1073   | 6200005720 | S.COIL      | ELJRE 33NG-F            |
| L1074   | 6200005720 | S.COIL      | ELJRE 33NG-F            |
| L1077   | 6200009990 | S.COIL      | C2012C-R22G             |
| L1078   | 6200009990 | S.COIL      | C2012C-R22G             |
| L1079   | 6200005690 | S.COIL      | ELJRE 18NG-F            |
| L1080   | 6200005730 | S.COIL      | ELJRE 39NG-F            |
| R1      | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R2      | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R3      | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R4      | 7030003640 | S.RESISTOR  | ERJ3GEYJ 473 V (47 kΩ)  |
| R5      | 7030003640 | S.RESISTOR  | ERJ3GEYJ 473 V (47 kΩ)  |
| R6      | 7030003640 | S.RESISTOR  | ERJ3GEYJ 473 V (47 kΩ)  |
| R7      | 7030003480 | S.RESISTOR  | ERJ3GEYJ 222 V (2.2 kΩ) |
| R8      | 7030003480 | S.RESISTOR  | ERJ3GEYJ 222 V (2.2 kΩ) |
| R11     | 7030003380 | S.RESISTOR  | ERJ3GEYJ 331 V (330 Ω)  |
| R12     | 7030003270 | S.RESISTOR  | ERJ3GEYJ 390 V (39 Ω)   |
| R14     | 7030003680 | S.RESISTOR  | ERJ3GEYJ 104 V (100 kΩ) |
| R15     | 7030003680 | S.RESISTOR  | ERJ3GEYJ 104 V (100 kΩ) |
| R18     | 7030003420 | S.RESISTOR  | ERJ3GEYJ 681 V (680 Ω)  |
| R19     | 7030003400 | S.RESISTOR  | ERJ3GEYJ 471 V (470 Ω)  |
| R21     | 7030003320 | S.RESISTOR  | ERJ3GEYJ 101 V (100 Ω)  |
| R22     | 7030003680 | S.RESISTOR  | ERJ3GEYJ 104 V (100 kΩ) |
| R23     | 7030003680 | S.RESISTOR  | ERJ3GEYJ 104 V (100 kΩ) |
| R24     | 7030003480 | S.RESISTOR  | ERJ3GEYJ 222 V (2.2 kΩ) |
| R27     | 7030003520 | S.RESISTOR  | ERJ3GEYJ 472 V (4.7 kΩ) |
| R28     | 7030003400 | S.RESISTOR  | ERJ3GEYJ 471 V (470 Ω)  |
| R31     | 7030003280 | S.RESISTOR  | ERJ3GEYJ 470 V (47 Ω)   |

S.=Surface mount

# [MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                        |
|---------|------------|------------------------------------|
| R32     | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R33     | 7030000220 | S.RESISTOR MCR10EZJH 47 Ω (470)    |
| R38     | 7030003260 | S.RESISTOR ERJ3GEYJ 330 V (33 Ω)   |
| R39     | 7030003260 | S.RESISTOR ERJ3GEYJ 330 V (33 Ω)   |
| R40     | 7030003670 | S.RESISTOR ERJ3GEYJ 823 V (82 kΩ)  |
| R41     | 7030003670 | S.RESISTOR ERJ3GEYJ 823 V (82 kΩ)  |
| R43     | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)  |
| R44     | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R45     | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)  |
| R47     | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R48     | 7030000340 | S.RESISTOR MCR10EZJH 470 Ω (471)   |
| R51     | 7030003490 | S.RESISTOR ERJ3GEYJ 272 V (2.7 kΩ) |
| R52     | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R53     | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R54     | 7030000280 | S.RESISTOR MCR10EZJH 150 Ω (151)   |
| R55     | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R56     | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R58     | 7030003720 | S.RESISTOR ERJ3GEYJ 224 V (220 kΩ) |
| R59     | 7030003740 | S.RESISTOR ERJ3GEYJ 334 V (330 kΩ) |
| R61     | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R62     | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ) |
| R63     | 7030003620 | S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)  |
| R64     | 7030000340 | S.RESISTOR MCR10EZJH 470 Ω (471)   |
| R65     | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R68     | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R69     | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R70     | 7030003530 | S.RESISTOR ERJ3GEYJ 562 V (5.6 kΩ) |
| R71     | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R72     | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R73     | 7030003340 | S.RESISTOR ERJ3GEYJ 151 V (150 Ω)  |
| R74     | 7030003340 | S.RESISTOR ERJ3GEYJ 151 V (150 Ω)  |
| R75     | 7030000270 | S.RESISTOR MCR10EZJH 120 Ω (121)   |
| R76     | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R77     | 7030004050 | S.RESISTOR ERJ3GEYJ 1R0 V (1 Ω)    |
| R78     | 7030000190 | S.RESISTOR MCR10EZJH 27 Ω (270)    |
| R79     | 7030006270 | S.RESISTOR ERJ12YJ221U (220 Ω)     |
| R80     | 7030000230 | S.RESISTOR MCR10EZJH 56 Ω (560)    |
| R81     | 7030000120 | S.RESISTOR MCR10EZJH 6.8 Ω (6R8)   |
| R82     | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R83     | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R84     | 7030000190 | S.RESISTOR MCR10EZJH 27 Ω (270)    |
| R85     | 7030003590 | S.RESISTOR ERJ3GEYJ 183 V (18 kΩ)  |
| R86     | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R87     | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R89     | 7030003490 | S.RESISTOR ERJ3GEYJ 272 V (2.7 kΩ) |
| R90     | 7030003490 | S.RESISTOR ERJ3GEYJ 272 V (2.7 kΩ) |
| R91     | 7030000340 | S.RESISTOR MCR10EZJH 470 Ω (471)   |
| R92     | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R93     | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R94     | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R95     | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R96     | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R97     | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R98     | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R99     | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R100    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R102    | 7030006070 | S.RESISTOR ERJ12YJ101U (100 Ω)     |
| R103    | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R104    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R105    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R106    | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R107    | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R108    | 7030008350 | S.RESISTOR ERJ12YJ390U             |
| R109    | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R110    | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R111    | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R112    | 7030003340 | S.RESISTOR ERJ3GEYJ 151 V (150 Ω)  |
| R113    | 7030003270 | S.RESISTOR ERJ3GEYJ 390 V (39 Ω)   |
| R114    | 7030003670 | S.RESISTOR ERJ3GEYJ 823 V (82 kΩ)  |
| R115    | 7030003610 | S.RESISTOR ERJ3GEYJ 273 V (27 kΩ)  |
| R117    | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ) |
| R118    | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R120    | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R123    | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ) |
| R124    | 7030003630 | S.RESISTOR ERJ3GEYJ 393 V (39 kΩ)  |
| R125    | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R126    | 7030003630 | S.RESISTOR ERJ3GEYJ 393 V (39 kΩ)  |
| R127    | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R129    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R130    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R131    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R132    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |

# [MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                                |
|---------|------------|--------------------------------------------|
| R133    | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ) [USA]    |
|         | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) [OTHER] |
| R134    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R135    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R137    | 7030000320 | S.RESISTOR MCR10EZJH 330 Ω (331)           |
| R138    | 7030000500 | S.RESISTOR MCR10EZJH 10 kΩ                 |
| R139    | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)          |
| R140    | 7030003530 | S.RESISTOR ERJ3GEYJ 562 V (5.6 kΩ) [USA]   |
|         | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ) [OTHER]  |
| R141    | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)         |
| R142    | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R143    | 7030000500 | S.RESISTOR MCR10EZJH 10 kΩ                 |
| R144    | 7030000380 | S.RESISTOR MCR10EZJH 1 kΩ                  |
| R145    | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)          |
| R147    | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)         |
| R148    | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R149    | 7030004050 | S.RESISTOR ERJ3GEYJ 1R0 V (1 Ω)            |
| R150    | 7030003330 | S.RESISTOR ERJ3GEYJ 121 V (120 Ω)          |
| R151    | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |
| R152    | 7030004050 | S.RESISTOR ERJ3GEYJ 1R0 V (1 Ω)            |
| R154    | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)         |
| R155    | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R156    | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R157    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R158    | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R159    | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |
| R160    | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R161    | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R162    | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R163    | 7030003200 | S.RESISTOR ERJ3GEYJ 100 V (10 Ω)           |
| R164    | 7030003200 | S.RESISTOR ERJ3GEYJ 100 V (10 Ω)           |
| R165    | 7030000360 | S.RESISTOR MCR10EZJH 680 Ω (681)           |
| R166    | 7030000360 | S.RESISTOR MCR10EZJH 680 Ω (681)           |
| R172    | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R173    | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |
| R174    | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R175    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R176    | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R177    | 7030003670 | S.RESISTOR ERJ3GEYJ 823 V (82 kΩ)          |
| R178    | 7030003270 | S.RESISTOR ERJ3GEYJ 390 V (39 Ω)           |
| R179    | 7030003340 | S.RESISTOR ERJ3GEYJ 151 V (150 Ω)          |
| R180    | 7030003340 | S.RESISTOR ERJ3GEYJ 151 V (150 Ω)          |
| R181    | 7030003670 | S.RESISTOR ERJ3GEYJ 823 V (82 kΩ)          |
| R182    | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R183    | 7030003220 | S.RESISTOR ERJ3GEYJ 150 V (15 Ω)           |
| R184    | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)          |
| R185    | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)          |
| R189    | 7030003630 | S.RESISTOR ERJ3GEYJ 393 V (39 kΩ)          |
| R190    | 7030003630 | S.RESISTOR ERJ3GEYJ 393 V (39 kΩ)          |
| R191    | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R192    | 7030003200 | S.RESISTOR ERJ3GEYJ 100 V (10 Ω)           |
| R193    | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)         |
| R194    | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R195    | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)          |
| R196    | 7030003220 | S.RESISTOR ERJ3GEYJ 150 V (15 Ω)           |
| R197    | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)          |
| R198    | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)          |
| R199    | 7030003220 | S.RESISTOR ERJ3GEYJ 150 V (15 Ω)           |
| R200    | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)          |
| R1003   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R1004   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R1005   | 7030003510 | S.RESISTOR ERJ3GEYJ 392 V (3.9 kΩ)         |
| R1006   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)          |
| R1009   | 7030003630 | S.RESISTOR ERJ3GEYJ 393 V (39 kΩ)          |
| R1010   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R1012   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)          |
| R1013   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R1015   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)          |
| R1016   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R1017   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R1018   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R1019   | 7030003450 | S.RESISTOR ERJ3GEYJ 122 V (1.2 kΩ)         |
| R1020   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R1021   | 7030003450 | S.RESISTOR ERJ3GEYJ 122 V (1.2 kΩ)         |
| R1022   | 7030003820 | S.RESISTOR ERJ3GEYJ 155 V (1.5 MΩ)         |
| R1023   | 7030003820 | S.RESISTOR ERJ3GEYJ 155 V (1.5 MΩ)         |
| R1024   | 7030003700 | S.RESISTOR ERJ3GEYJ 154 V (150 kΩ)         |
| R1025   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |
| R1026   | 7030003720 | S.RESISTOR ERJ3GEYJ 224 V (220 kΩ)         |
| R1027   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |
| R1028   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |
| R1029   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                                 |
|---------|------------|---------------------------------------------|
| R1030   | 7030003530 | S.RESISTOR ERJ3GEYJ 562 V (5.6 kΩ)          |
| R1031   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)           |
| R1032   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)           |
| R1033   | 7030003500 | S.RESISTOR ERJ3GEYJ 332 V (3.3 kΩ)          |
| R1034   | 7030003500 | S.RESISTOR ERJ3GEYJ 332 V (3.3 kΩ)          |
| R1035   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)           |
| R1036   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1037   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1038   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)           |
| R1039   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)           |
| R1040   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)           |
| R1041   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1042   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)          |
| R1043   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1044   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1045   | 7030003720 | S.RESISTOR ERJ3GEYJ 224 V (220 kΩ)          |
| R1046   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)          |
| R1047   | 7030003720 | S.RESISTOR ERJ3GEYJ 224 V (220 kΩ)          |
| R1048   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)          |
| R1049   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)          |
| R1050   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1051   | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)           |
| R1052   | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)           |
| R1053   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1054   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1055   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1056   | 7030003460 | S.RESISTOR ERJ3GEYJ 152 V (1.5 kΩ)          |
| R1057   | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ)          |
| R1058   | 7030003690 | S.RESISTOR ERJ3GEYJ 124 V (120 kΩ)          |
| R1059   | 7030003780 | S.RESISTOR ERJ3GEYJ 684 V (680 kΩ)          |
| R1060   | 7030003780 | S.RESISTOR ERJ3GEYJ 684 V (680 kΩ)          |
| R1061   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1062   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1063   | 7030003630 | S.RESISTOR ERJ3GEYJ 393 V (39 kΩ)           |
| R1064   | 7030003630 | S.RESISTOR ERJ3GEYJ 393 V (39 kΩ)           |
| R1065   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1066   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1067   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)           |
| R1068   | 7030003570 | S.RESISTOR ERJ3GEYJ 123 V (12 kΩ)           |
| R1069   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ)          |
| R1070   | 7030003570 | S.RESISTOR ERJ3GEYJ 123 V (12 kΩ)           |
| R1071   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ)          |
| R1072   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ)          |
| R1074   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ)          |
| R1075   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ)          |
| R1076   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ)          |
| R1077   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ)          |
| R1080   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)           |
| R1081   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)           |
| R1082   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)           |
| R1083   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)           |
| R1084   | 7030003460 | S.RESISTOR ERJ3GEYJ 152 V (1.5 kΩ)          |
| R1085   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)           |
| R1086   | 7030003570 | S.RESISTOR ERJ3GEYJ 123 V (12 kΩ)           |
| R1087   | 7030003760 | S.RESISTOR ERJ3GEYJ 474 V (470 kΩ)          |
| R1088   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1090   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)           |
| R1091   | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ)          |
| R1092   | 7030003620 | S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)           |
| R1093   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)          |
| R1097   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)           |
| R1098   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1102   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)           |
| R1103   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)           |
| R1104   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)            |
| R1106   | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ)          |
| R1107   | 7030003570 | S.RESISTOR ERJ3GEYJ 123 V (12 kΩ)[USA] only |
| R1108   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)           |
| R1109   | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)          |
| R1111   | 7030003570 | S.RESISTOR ERJ3GEYJ 123 V (12 kΩ)           |
| R1113   | 7030003740 | S.RESISTOR ERJ3GEYJ 334 V (330 kΩ)          |
| R1114   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)           |
| R1116   | 7030003240 | S.RESISTOR ERJ3GEYJ 220 V (22 Ω)            |
| R1117   | 7030003570 | S.RESISTOR ERJ3GEYJ 123 V (12 kΩ)[USA] only |
| R1118   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1120   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)           |
| R1121   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)           |
| R1122   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)           |
| R1123   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)           |
| R1124   | 7030003500 | S.RESISTOR ERJ3GEYJ 332 V (3.3 kΩ)          |
| R1126   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)           |
| R1127   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)            |

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                        |
|---------|------------|------------------------------------|
| R1129   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1131   | 7030003590 | S.RESISTOR ERJ3GEYJ 183 V (18 kΩ)  |
| R1132   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1135   | 7030003610 | S.RESISTOR ERJ3GEYJ 273 V (27 kΩ)  |
| R1136   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1137   | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)  |
| R1139   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1142   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R1145   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R1146   | 7030003450 | S.RESISTOR ERJ3GEYJ 122 V (1.2 kΩ) |
| R1149   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R1151   | 7030003420 | S.RESISTOR ERJ3GEYJ 681 V (680 Ω)  |
| R1152   | 7030003460 | S.RESISTOR ERJ3GEYJ 152 V (1.5 kΩ) |
| R1153   | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)  |
| R1156   | 7030003510 | S.RESISTOR ERJ3GEYJ 392 V (3.9 kΩ) |
| R1158   | 7030003550 | S.RESISTOR ERJ3GEYJ 822 V (8.2 kΩ) |
| R1159   | 7030003550 | S.RESISTOR ERJ3GEYJ 822 V (8.2 kΩ) |
| R1160   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)  |
| R1161   | 7030003760 | S.RESISTOR ERJ3GEYJ 474 V (470 kΩ) |
| R1162   | 7030003500 | S.RESISTOR ERJ3GEYJ 332 V (3.3 kΩ) |
| R1163   | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ) |
| R1164   | 7030003620 | S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)  |
| R1165   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1168   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1169   | 7030003450 | S.RESISTOR ERJ3GEYJ 122 V (1.2 kΩ) |
| R1170   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R1172   | 7030003710 | S.RESISTOR ERJ3GEYJ 184 V (180 kΩ) |
| R1173   | 7030003450 | S.RESISTOR ERJ3GEYJ 122 V (1.2 kΩ) |
| R1174   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)  |
| R1175   | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R1178   | 7030003740 | S.RESISTOR ERJ3GEYJ 334 V (330 kΩ) |
| R1179   | 7030003660 | S.RESISTOR ERJ3GEYJ 683 V (68 kΩ)  |
| R1180   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)  |
| R1181   | 7030003610 | S.RESISTOR ERJ3GEYJ 273 V (27 kΩ)  |
| R1184   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R1185   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R1187   | 7030003460 | S.RESISTOR ERJ3GEYJ 152 V (1.5 kΩ) |
| R1196   | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)  |
| R1200   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1201   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1203   | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R1204   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1205   | 7030003430 | S.RESISTOR ERJ3GEYJ 821 V (820 Ω)  |
| R1206   | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R1207   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1208   | 7030003370 | S.RESISTOR ERJ3GEYJ 271 V (270 Ω)  |
| R1209   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1210   | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R1211   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)  |
| R1212   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)  |
| R1213   | 7030003280 | S.RESISTOR ERJ3GEYJ 470 V (47 Ω)   |
| R1214   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)  |
| R1215   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)  |
| R1218   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R1219   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R1223   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1224   | 7030003470 | S.RESISTOR ERJ3GEYJ 182 V (1.8 kΩ) |
| R1225   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1226   | 7030003470 | S.RESISTOR ERJ3GEYJ 182 V (1.8 kΩ) |
| R1227   | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R1228   | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R1229   | 7030003650 | S.RESISTOR ERJ3GEYJ 563 V (56 kΩ)  |
| R1232   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R1233   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R1234   | 7030003430 | S.RESISTOR ERJ3GEYJ 821 V (820 Ω)  |
| R1235   | 7030003370 | S.RESISTOR ERJ3GEYJ 271 V (270 Ω)  |
| R1236   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1237   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1239   | 7030003360 | S.RESISTOR ERJ3GEYJ 221 V (220 Ω)  |
| R1248   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1249   | 7030003470 | S.RESISTOR ERJ3GEYJ 182 V (1.8 kΩ) |
| R1250   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1253   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)  |
| R1254   | 7030003370 | S.RESISTOR ERJ3GEYJ 271 V (270 Ω)  |
| R1255   | 7030003370 | S.RESISTOR ERJ3GEYJ 271 V (270 Ω)  |
| R1256   | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R1259   | 7030004050 | S.RESISTOR ERJ3GEYJ 1R0 V (1 Ω)    |
| R1260   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1269   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1275   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1276   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1284   | 7030003470 | S.RESISTOR ERJ3GEYJ 182 V (1.8 kΩ) |

S.=Surface mount

# [MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                        |
|---------|------------|------------------------------------|
| R1285   | 7030003470 | S.RESISTOR ERJ3GEYJ 182 V (1.8 kΩ) |
| R1286   | 7030003510 | S.RESISTOR ERJ3GEYJ 392 V (3.9 kΩ) |
| R1288   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)  |
| R1289   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)  |
| R1290   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R1291   | 7030003500 | S.RESISTOR ERJ3GEYJ 332 V (3.3 kΩ) |
| R1296   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R1297   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1298   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1299   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1300   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R1301   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R1302   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R2000   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)  |
| R2001   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2002   | 7030000400 | S.RESISTOR MCR10EZJH 1.5 kΩ        |
| R2003   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R2004   | 7030000020 | S.RESISTOR MCR10EZJH 1 Ω (010)     |
| R2005   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2006   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R2007   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R2008   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R2010   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2013   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)  |
| R2014   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2016   | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ) |
| R2017   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R2019   | 7410001090 | S.ARRAY EXB-V8V 101JV              |
| R2020   | 7030005521 | S.RESISTOR ERA3YKD 334V (330 kΩ)   |
| R2021   | 7030005501 | S.RESISTOR ERA3YKD 124V (120 kΩ)   |
| R2022   | 7030005691 | S.RESISTOR ERA3YED 123V            |
| R2023   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2026   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2027   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2028   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2033   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2034   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2035   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2036   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2038   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2039   | 7030003760 | S.RESISTOR ERJ3GEYJ 474 V (470 kΩ) |
| R2040   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)  |
| R2048   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R2050   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)  |
| R2051   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R2052   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)  |
| R2053   | 7030003620 | S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)  |
| R2054   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)   |
| R2055   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2056   | 7030003620 | S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)  |
| R2057   | 7030003550 | S.RESISTOR ERJ3GEYJ 822 V (8.2 kΩ) |
| R2058   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2060   | 7030003620 | S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)  |
| R2061   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2062   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2063   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2064   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2065   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2066   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2067   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2068   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2073   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)  |
| R2074   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R2075   | 7030003360 | S.RESISTOR ERJ3GEYJ 221 V (220 Ω)  |
| R2076   | 7030000100 | S.RESISTOR MCR10EZJH 4.7 Ω (4R7)   |
| R2077   | 7030000100 | S.RESISTOR MCR10EZJH 4.7 Ω (4R7)   |
| R2078   | 7030003780 | S.RESISTOR ERJ3GEYJ 684 V (680 kΩ) |
| R2083   | 7030003570 | S.RESISTOR ERJ3GEYJ 123 V (12 kΩ)  |
| R2084   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ) |
| R2086   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ) |
| R2087   | 7030003700 | S.RESISTOR ERJ3GEYJ 154 V (150 kΩ) |
| R2088   | 7030003800 | S.RESISTOR ERJ3GEYJ 105 V (1 MΩ)   |
| R2090   | 7030003600 | S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)  |
| R2091   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2092   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2093   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2094   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2095   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2096   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |
| R2098   | 7030003840 | S.RESISTOR ERJ3GEYJ 225 V (2.2 MΩ) |
| R2099   | 7030003580 | S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)  |
| R2100   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)  |

# [MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                                |
|---------|------------|--------------------------------------------|
| R2101   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R2102   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)         |
| R2103   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)         |
| R2104   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R2105   | 7510001470 | S.THERMISTOR NTCG20 4AG 473JT              |
| R2106   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R2107   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R2108   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R2109   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)         |
| R2116   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R2117   | 7030003550 | S.RESISTOR ERJ3GEYJ 822 V (8.2 kΩ) [USA]   |
|         | 7030003530 | S.RESISTOR ERJ3GEYJ 562 V (5.6 kΩ) [OTHER] |
| R2118   | 7030003550 | S.RESISTOR ERJ3GEYJ 822 V (8.2 kΩ) [USA]   |
|         | 7030003530 | S.RESISTOR ERJ3GEYJ 562 V (5.6 kΩ) [OTHER] |
| R2119   | 7030003610 | S.RESISTOR ERJ3GEYJ 273 V (27 kΩ) [USA]    |
|         | 7030003550 | S.RESISTOR ERJ3GEYJ 822 V (8.2 kΩ) [OTHER] |
| R2120   | 7030003610 | S.RESISTOR ERJ3GEYJ 273 V (27 kΩ) [USA]    |
|         | 7030003550 | S.RESISTOR ERJ3GEYJ 822 V (8.2 kΩ) [OTHER] |
| R2121   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R2122   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R2124   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2128   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2136   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2137   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2161   | 7030003700 | S.RESISTOR ERJ3GEYJ 154 V (150 kΩ)         |
| R2162   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2163   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2164   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2166   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2167   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2169   | 7030003740 | S.RESISTOR ERJ3GEYJ 334 V (330 kΩ)         |
| R2170   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2171   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2172   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2173   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2174   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2176   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2177   | 7410001090 | S.ARRAY EXB-V8V 101JV                      |
| R2182   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2183   | 7030003640 | S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)          |
| R2185   | 7030003560 | S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)          |
| R2186   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)         |
| R2187   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R2191   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R2192   | 7030003330 | S.RESISTOR ERJ3GEYJ 121 V (120 Ω)          |
| R2197   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2198   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2199   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2200   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2201   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2202   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2203   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2204   | 7030003400 | S.RESISTOR ERJ3GEYJ 471 V (470 Ω)          |
| R2205   | 7030003380 | S.RESISTOR ERJ3GEYJ 331 V (330 Ω)          |
| R2206   | 7030003250 | S.RESISTOR ERJ3GEYJ 270 V (27 Ω)           |
| R2207   | 7030003260 | S.RESISTOR ERJ3GEYJ 330 V (33 Ω)           |
| R2208   | 7030003250 | S.RESISTOR ERJ3GEYJ 270 V (27 Ω)           |
| R2209   | 7030003220 | S.RESISTOR ERJ3GEYJ 150 V (15 Ω)           |
| R2210   | 7030003320 | S.RESISTOR ERJ3GEYJ 101 V (100 Ω)          |
| R2211   | 7030003310 | S.RESISTOR ERJ3GEYJ 820 V (82 Ω)           |
| R2212   | 7030003330 | S.RESISTOR ERJ3GEYJ 121 V (120 Ω)          |
| R2213   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R2214   | 7030003440 | S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)           |
| R2215   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R2216   | 7030003250 | S.RESISTOR ERJ3GEYJ 270 V (27 Ω)           |
| R2217   | 7030003270 | S.RESISTOR ERJ3GEYJ 390 V (39 Ω)           |
| R2218   | 7030003250 | S.RESISTOR ERJ3GEYJ 270 V (27 Ω)           |
| R2219   | 7030003520 | S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)         |
| R2220   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |
| R2221   | 7030003360 | S.RESISTOR ERJ3GEYJ 221 V (220 Ω)          |
| R2222   | 7030003420 | S.RESISTOR ERJ3GEYJ 681 V (680 Ω)          |
| R2223   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)          |
| R2224   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)          |
| R2225   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)          |
| R2226   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)          |
| R2227   | 7030003360 | S.RESISTOR ERJ3GEYJ 221 V (220 Ω)          |
| R2228   | 7030003420 | S.RESISTOR ERJ3GEYJ 681 V (680 Ω)          |
| R2229   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)          |
| R2230   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)          |
| R2231   | 7030003350 | S.RESISTOR ERJ3GEYJ 181 V (180 Ω)          |
| R2234   | 7030003480 | S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)         |
| R2235   | 7030003680 | S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)         |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION    |                         |
|---------|------------|----------------|-------------------------|
| R2236   | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R2237   | 7030003760 | S.RESISTOR     | ERJ3GEYJ 474 V (470 kΩ) |
| R2238   | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R2239   | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R2240   | 7030003760 | S.RESISTOR     | ERJ3GEYJ 474 V (470 kΩ) |
| R2241   | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R2248   | 7030003420 | S.RESISTOR     | ERJ3GEYJ 681 V (680 Ω)  |
| R2249   | 7030003590 | S.RESISTOR     | ERJ3GEYJ 183 V (18 kΩ)  |
| R2250   | 7030003500 | S.RESISTOR     | ERJ3GEYJ 332 V (3.3 kΩ) |
| R2251   | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R2252   | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R2253   | 7030003620 | S.RESISTOR     | ERJ3GEYJ 333 V (33 kΩ)  |
| R2254   | 7030003660 | S.RESISTOR     | ERJ3GEYJ 683 V (68 kΩ)  |
| R2255   | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R2256   | 7030003530 | S.RESISTOR     | ERJ3GEYJ 562 V (5.6 kΩ) |
| R2257   | 7030003580 | S.RESISTOR     | ERJ3GEYJ 153 V (15 kΩ)  |
| R2258   | 7030004050 | S.RESISTOR     | ERJ3GEYJ 1R0 V (1 Ω)    |
| R2259   | 7030003760 | S.RESISTOR     | ERJ3GEYJ 474 V (470 kΩ) |
| R2260   | 7030003590 | S.RESISTOR     | ERJ3GEYJ 183 V (18 kΩ)  |
| R2261   | 7030003600 | S.RESISTOR     | ERJ3GEYJ 223 V (22 kΩ)  |
| R2262   | 7030003560 | S.RESISTOR     | ERJ3GEYJ 103 V (10 kΩ)  |
| R2263   | 7030003630 | S.RESISTOR     | ERJ3GEYJ 393 V (39 kΩ)  |
| R2264   | 7030003520 | S.RESISTOR     | ERJ3GEYJ 472 V (4.7 kΩ) |
| R2265   | 7030003560 | S.RESISTOR     | ERJ3GEYJ 103 V (10 kΩ)  |
| R2266   | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R2267   | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R2268   | 7030003320 | S.RESISTOR     | ERJ3GEYJ 101 V (100 Ω)  |
| R2269   | 7030000500 | S.RESISTOR     | MCR10EZJH 10 kΩ         |
| R2270   | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R2271   | 7030000500 | S.RESISTOR     | MCR10EZJH 10 kΩ         |
| R2272   | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| R2273   | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R2274   | 7030003680 | S.RESISTOR     | ERJ3GEYJ 104 V (100 kΩ) |
| R2275   | 7030003690 | S.RESISTOR     | ERJ3GEYJ 124 V (120 kΩ) |
| R2276   | 7030003600 | S.RESISTOR     | ERJ3GEYJ 223 V (22 kΩ)  |
| R2277   | 7030003840 | S.RESISTOR     | ERJ3GEYJ 225 V (2.2 MΩ) |
| R2278   | 7030003440 | S.RESISTOR     | ERJ3GEYJ 102 V (1 kΩ)   |
| C1      | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C2      | 4510007510 | S.ELECTOR      | ECEV1AA470WR            |
| C3      | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T      |
| C4      | 4030010780 | S.CERAMIC      | C1608 CH 1H 1R5C-T      |
| C5      | 4030009350 | S.CERAMIC      | C1608 CH 1H 3R5B-T      |
| C7      | 4030009530 | S.CERAMIC      | C1608 CH 1H 030B-T      |
| C8      | 4030006980 | S.CERAMIC      | C1608 CH 1H 070D-T      |
| C9      | 4030006980 | S.CERAMIC      | C1608 CH 1H 070D-T      |
| C10     | 4030009570 | S.CERAMIC      | C1608 CH 1H 0R3B-T      |
| C11     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C12     | 4030009570 | S.CERAMIC      | C1608 CH 1H 0R3B-T      |
| C13     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C15     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C16     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C20     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C21     | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T      |
| C22     | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T      |
| C23     | 4030007030 | S.CERAMIC      | C1608 CH 1H 150J-T      |
| C24     | 4030007030 | S.CERAMIC      | C1608 CH 1H 150J-T      |
| C25     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C26     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C27     | 4030006990 | S.CERAMIC      | C1608 CH 1H 080D-T      |
| C28     | 4030006990 | S.CERAMIC      | C1608 CH 1H 080D-T      |
| C29     | 4030006850 | S.CERAMIC      | C1608 JB 1H 471K-T      |
| C32     | 4030006950 | S.CERAMIC      | C1608 CH 1H 040C-T      |
| C33     | 4030006950 | S.CERAMIC      | C1608 CH 1H 040C-T      |
| C36     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C37     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C38     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C39     | 4510004640 | S.ELECTROLYTIC | ECEV1CA470SP            |
| C40     | 4030006960 | S.CERAMIC      | C1608 CH 1H 050C-T      |
| C41     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C42     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C43     | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T      |
| C44     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C46     | 4030009350 | S.CERAMIC      | C1608 CH 1H 3R5B-T      |
| C47     | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T      |
| C51     | 4030006940 | S.CERAMIC      | C1608 CH 1H 030C-T      |
| C52     | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T      |
| C53     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C54     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T      |
| C56     | 4030006980 | S.CERAMIC      | C1608 CH 1H 070D-T      |
| C57     | 4030006980 | S.CERAMIC      | C1608 CH 1H 070D-T      |

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION    |                       |
|---------|------------|----------------|-----------------------|
| C58     | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C59     | 4030006990 | S.CERAMIC      | C1608 CH 1H 080D-T    |
| C60     | 4030006990 | S.CERAMIC      | C1608 CH 1H 080D-T    |
| C63     | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T    |
| C65     | 4030008920 | S.CERAMIC      | C1608 JB 1H 473K-T    |
| C66     | 4030009570 | S.CERAMIC      | C1608 CH 1H 0R3B-T    |
| C67     | 4030009350 | S.CERAMIC      | C1608 CH 1H 3R5B-T    |
| C68     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C69     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C70     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C73     | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C74     | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T    |
| C76     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C77     | 4030007060 | S.CERAMIC      | C1608 CH 1H 270J-T    |
| C78     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C79     | 4030007060 | S.CERAMIC      | C1608 CH 1H 270J-T    |
| C80     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C81     | 4030010780 | S.CERAMIC      | C1608 CH 1H 1R5C-T    |
| C83     | 4030004710 | S.CERAMIC      | C2012 JB 1H 471K-T    |
| C84     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C85     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C86     | 4030009350 | S.CERAMIC      | C1608 CH 1H 3R5B-T    |
| C87     | 4510006220 | S.ELECTROLYTIC | ECEV1CA101UP          |
| C88     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C89     | 4510006220 | S.ELECTROLYTIC | ECEV1CA101UP          |
| C90     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C91     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C92     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C93     | 4510006220 | S.ELECTROLYTIC | ECEV1CA101UP          |
| C94     | 4510006220 | S.ELECTROLYTIC | ECEV1CA101UP          |
| C97     | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C98     | 4030006850 | S.CERAMIC      | C1608 JB 1H 471K-T    |
| C101    | 4510006670 | S.ELECTROLYTIC | ECEV1CA471P           |
| C104    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C106    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C108    | 4030006880 | S.CERAMIC      | C1608 JB 1H 472K-T    |
| C110    | 4030017960 | S.CERAMIC      | ERF22X 6C2H 330J D01L |
| C111    | 4030017950 | S.CERAMIC      | ERF22X 6C2H 360J D01L |
| C112    | 4030007000 | S.CERAMIC      | C1608 CH 1H 090D-T    |
| C113    | 4030007000 | S.CERAMIC      | C1608 CH 1H 090D-T    |
| C114    | 4030006930 | S.CERAMIC      | C1608 CH 1H 020C-T    |
| C115    | 4030006940 | S.CERAMIC      | C1608 CH 1H 030C-T    |
| C118    | 4030017970 | S.CERAMIC      | ERF22X 6C2H 120J D01L |
| C119    | 4030017880 | S.CERAMIC      | ERF22X 6C2H 560J D01L |
| C120    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C121    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C122    | 4030017940 | S.CERAMIC      | ERF22X 6C2H 680J D01L |
| C123    | 4030011180 | S.CERAMIC      | GRM31M2C2H220JV01L    |
| C124    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C125    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C126    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C127    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C128    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C129    | 4030006910 | S.CERAMIC      | C1608 CH 1H 0R5C-T    |
| C130    | 4030006910 | S.CERAMIC      | C1608 CH 1H 0R5C-T    |
| C131    | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T    |
| C132    | 4030017190 | S.CERAMIC      | GRM31BR32J471KY01L    |
| C134    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C135    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C136    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C137    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C138    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C139    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C140    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C141    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C142    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C143    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C144    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C145    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C146    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C147    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C148    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C149    | 4030011600 | S.CERAMIC      | C1608 JB 1E 104K-T    |
| C150    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C153    | 4030007000 | S.CERAMIC      | C1608 CH 1H 090D-T    |
| C154    | 4030007000 | S.CERAMIC      | C1608 CH 1H 090D-T    |
| C155    | 4030008560 | S.CERAMIC      | C1608 CH 1H 300J-T    |
| C156    | 4030011120 | S.CERAMIC      | GRM31M2C2H100JV01L    |
| C157    | 4030006940 | S.CERAMIC      | C1608 CH 1H 030C-T    |
| C158    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C159    | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C160    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION |                            |
|---------|------------|-------------|----------------------------|
| C162    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C163    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C164    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C165    | 4030006910 | S.CERAMIC   | C1608 CH 1H 0R5C-T         |
| C166    | 4030009470 | S.CERAMIC   | C1608 CH 1H R75C-T         |
| C167    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C168    | 4030007130 | S.CERAMIC   | C1608 CH 1H 101J-T         |
| C169    | 4030006940 | S.CERAMIC   | C1608 CH 1H 030C-T         |
| C170    | 4030007130 | S.CERAMIC   | C1608 CH 1H 101J-T         |
| C171    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C172    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C173    | 4030007010 | S.CERAMIC   | C1608 CH 1H 100D-T         |
| C176    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C177    | 4030007130 | S.CERAMIC   | C1608 CH 1H 101J-T         |
| C178    | 4030007130 | S.CERAMIC   | C1608 CH 1H 101J-T         |
| C179    | 4030011120 | S.CERAMIC   | GRM31M2C2H100JV01L         |
| C180    | 4030006940 | S.CERAMIC   | C1608 CH 1H 030C-T         |
| C181    | 4030006940 | S.CERAMIC   | C1608 CH 1H 030C-T         |
| C182    | 4030007000 | S.CERAMIC   | C1608 CH 1H 090D-T         |
| C183    | 4030007000 | S.CERAMIC   | C1608 CH 1H 090D-T         |
| C186    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C187    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C188    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C189    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C194    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C195    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C196    | 4030011120 | S.CERAMIC   | GRM31M2C2H100JV01L [USA]   |
|         | 4030011130 | S.CERAMIC   | GRM31M2C2H110JV01L [OTHER] |
| C197    | 4030006970 | S.CERAMIC   | C1608 CH 1H 060D-T         |
| C198    | 4030011180 | S.CERAMIC   | GRM31M2C2H220JV01L         |
| C199    | 4030006950 | S.CERAMIC   | C1608 CH 1H 040C-T         |
| C202    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C203    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C205    | 4030011200 | S.CERAMIC   | GRM31M2C2H300JV01L         |
| C206    | 4030011080 | S.CERAMIC   | GRM31M2C2H6R0DV01L         |
| C207    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C208    | 4030006990 | S.CERAMIC   | C1608 CH 1H 080D-T         |
| C209    | 4030011290 | S.CERAMIC   | GRM31M2C2H240JV01L         |
| C210    | 4030011060 | S.CERAMIC   | GRM31M2C2H4R0CY21L         |
| C211    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C212    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C213    | 4030011080 | S.CERAMIC   | GRM31M2C2H6R0DV01L         |
| C214    | 4030006940 | S.CERAMIC   | C1608 CH 1H 030C-T         |
| C215    | 4030007170 | S.CERAMIC   | C1608 CH 1H 221J-T         |
| C216    | 4030007070 | S.CERAMIC   | C1608 CH 1H 330J-T         |
| C218    | 4030011600 | S.CERAMIC   | C1608 JB 1E 104K-T         |
| C219    | 4030011600 | S.CERAMIC   | C1608 JB 1E 104K-T         |
| C220    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C222    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C223    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C224    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C225    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C226    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C227    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C228    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C229    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C230    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C231    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C232    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C233    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C234    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C235    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C236    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C237    | 4030017190 | S.CERAMIC   | GRM31BR32J471KY01L         |
| C238    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C239    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C240    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C241    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C242    | 4030017190 | S.CERAMIC   | GRM31BR32J471KY01L         |
| C243    | 4030017190 | S.CERAMIC   | GRM31BR32J471KY01L         |
| C244    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C245    | 4030007070 | S.CERAMIC   | C1608 CH 1H 330J-T         |
| C246    | 4030007080 | S.CERAMIC   | C1608 CH 1H 390J-T         |
| C247    | 4030007070 | S.CERAMIC   | C1608 CH 1H 330J-T         |
| C249    | 4030011600 | S.CERAMIC   | C1608 JB 1E 104K-T         |
| C250    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C251    | 4030006920 | S.CERAMIC   | C1608 CH 1H 010C-T         |
| C252    | 4030011600 | S.CERAMIC   | C1608 JB 1E 104K-T         |
| C253    | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T         |
| C262    | 4030011180 | S.CERAMIC   | GRM31M2C2H220JV01L         |
| C263    | 4030011160 | S.CERAMIC   | GRM31M2C2H150JV01L         |
| C264    | 4030011160 | S.CERAMIC   | GRM31M2C2H150JV01L         |

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION    |                       |
|---------|------------|----------------|-----------------------|
| C265    | 4030011730 | S.CERAMIC      | GRM31M2C2H101JV01L    |
| C266    | 4030006920 | S.CERAMIC      | C1608 CH 1H 010C-T    |
| C267    | 4030006920 | S.CERAMIC      | C1608 CH 1H 010C-T    |
| C268    | 4030006920 | S.CERAMIC      | C1608 CH 1H 010C-T    |
| C269    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C270    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C271    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C272    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C273    | 4030006980 | S.CERAMIC      | C1608 CH 1H 070D-T    |
| C274    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C275    | 4030006980 | S.CERAMIC      | C1608 CH 1H 070D-T    |
| C276    | 4030009570 | S.CERAMIC      | C1608 CH 1H 0R3B-T    |
| C277    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C278    | 4030006920 | S.CERAMIC      | C1608 CH 1H 010C-T    |
| C279    | 4030009540 | S.CERAMIC      | C1608 CH 1H 1R5B-T    |
| C280    | 4030009350 | S.CERAMIC      | C1608 CH 1H 3R5B-T    |
| C286    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C287    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C288    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C289    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C290    | 4030017930 | S.CERAMIC      | ERA21B 6C2D 390J D01L |
| C291    | 4030017930 | S.CERAMIC      | ERA21B 6C2D 390J D01L |
| C292    | 4030007170 | S.CERAMIC      | C1608 CH 1H 221J-T    |
| C293    | 4030007170 | S.CERAMIC      | C1608 CH 1H 221J-T    |
| C297    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C298    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C299    | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C301    | 4030007090 | S.CERAMIC      | C1608 CH 1H 470J-T    |
| C302    | 4030007090 | S.CERAMIC      | C1608 CH 1H 470J-T    |
| C1004   | 4030006870 | S.CERAMIC      | C1608 JB 1H 222K-T    |
| C1005   | 4030006870 | S.CERAMIC      | C1608 JB 1H 222K-T    |
| C1006   | 4030008900 | S.CERAMIC      | C1608 JB 1H 333K-T    |
| C1007   | 4030008770 | S.CERAMIC      | C1608 JB 1H 562K-T    |
| C1008   | 4030008920 | S.CERAMIC      | C1608 JB 1H 473K-T    |
| C1009   | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C1010   | 4030008880 | S.CERAMIC      | C1608 JB 1H 223K-T    |
| C1011   | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C1012   | 4030008880 | S.CERAMIC      | C1608 JB 1H 223K-T    |
| C1015   | 4030012660 | S.CERAMIC      | C1608 JB 1E 683K-T    |
| C1016   | 4030007160 | S.CERAMIC      | C1608 CH 1H 181J-T    |
| C1017   | 4030012660 | S.CERAMIC      | C1608 JB 1E 683K-T    |
| C1018   | 4510004440 | S.ELECTROLYTIC | ECEV1HA010SR          |
| C1019   | 4030010770 | S.CERAMIC      | C1608 JB 1H 392K-T    |
| C1020   | 4030010770 | S.CERAMIC      | C1608 JB 1H 392K-T    |
| C1021   | 4030009970 | S.CERAMIC      | C1608 JB 1H 182K-T    |
| C1022   | 4030009970 | S.CERAMIC      | C1608 JB 1H 182K-T    |
| C1023   | 4550006250 | S.TANTALUM     | TEMSVA 1A 106M-8L     |
| C1024   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1025   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1026   | 4030009970 | S.CERAMIC      | C1608 JB 1H 182K-T    |
| C1027   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1028   | 4030009970 | S.CERAMIC      | C1608 JB 1H 182K-T    |
| C1029   | 4030008860 | S.CERAMIC      | C1608 JB 1H 153K-T    |
| C1030   | 4030008860 | S.CERAMIC      | C1608 JB 1H 153K-T    |
| C1032   | 4030008630 | S.CERAMIC      | C1608 JF 1H 104Z-T    |
| C1033   | 4030008900 | S.CERAMIC      | C1608 JB 1H 333K-T    |
| C1034   | 4510004630 | S.ELECTROLYTIC | ECEV1CA100SR          |
| C1035   | 4030008900 | S.CERAMIC      | C1608 JB 1H 333K-T    |
| C1036   | 4030010770 | S.CERAMIC      | C1608 JB 1H 392K-T    |
| C1037   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1038   | 4030009880 | S.CERAMIC      | C1608 JB 1H 682K-T    |
| C1039   | 4030011330 | S.CERAMIC      | C1608 CH 1H 391J-T    |
| C1040   | 4030007120 | S.CERAMIC      | C1608 CH 1H 820J-T    |
| C1041   | 4030009880 | S.CERAMIC      | C1608 JB 1H 682K-T    |
| C1042   | 4030007110 | S.CERAMIC      | C1608 CH 1H 680J-T    |
| C1043   | 4030008900 | S.CERAMIC      | C1608 JB 1H 333K-T    |
| C1044   | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C1045   | 4030008900 | S.CERAMIC      | C1608 JB 1H 333K-T    |
| C1046   | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C1047   | 4030008900 | S.CERAMIC      | C1608 JB 1H 333K-T    |
| C1048   | 4030007120 | S.CERAMIC      | C1608 CH 1H 820J-T    |
| C1049   | 4030008860 | S.CERAMIC      | C1608 JB 1H 153K-T    |
| C1050   | 4030008860 | S.CERAMIC      | C1608 JB 1H 153K-T    |
| C1051   | 4030007080 | S.CERAMIC      | C1608 CH 1H 390J-T    |
| C1052   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1053   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1054   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1055   | 4030007130 | S.CERAMIC      | C1608 CH 1H 101J-T    |
| C1057   | 4030006900 | S.CERAMIC      | C1608 JB 1H 103K-T    |
| C1058   | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C1059   | 4030006860 | S.CERAMIC      | C1608 JB 1H 102K-T    |
| C1061   | 4030008880 | S.CERAMIC      | C1608 JB 1H 223K-T    |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                  |
|---------|------------|------------------------------|
| C1062   | 4550003220 | S.TANTALUM TEMSVA 1E 105M-8L |
| C1063   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1065   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1066   | 4030006960 | S.CERAMIC C1608 CH 1H 050C-T |
| C1067   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1068   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1069   | 4030006850 | S.CERAMIC C1608 JB 1H 471K-T |
| C1072   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1073   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1075   | 4030007130 | S.CERAMIC C1608 CH 1H 101J-T |
| C1076   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1078   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1080   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1081   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1083   | 4550006480 | S.TANTALUM TEMSVA 1C 475M-8L |
| C1084   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1085   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1087   | 4030017480 | S.CERAMIC C1608 JB 1A 474K-T |
| C1089   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C1090   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1095   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1096   | 4030007050 | S.CERAMIC C1608 CH 1H 220J-T |
| C1097   | 4030007010 | S.CERAMIC C1608 CH 1H 100D-T |
| C1099   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1100   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1101   | 4030006850 | S.CERAMIC C1608 JB 1H 471K-T |
| C1102   | 4030006850 | S.CERAMIC C1608 JB 1H 471K-T |
| C1103   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1108   | 4030007120 | S.CERAMIC C1608 CH 1H 820J-T |
| C1110   | 4030008920 | S.CERAMIC C1608 JB 1H 473K-T |
| C1111   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1112   | 4550006050 | S.TANTALUM TEMSVA 0J 106M8L  |
| C1113   | 4030008920 | S.CERAMIC C1608 JB 1H 473K-T |
| C1118   | 4550000550 | S.TANTALUM TESVA 1V 224M1-8L |
| C1119   | 4550006250 | S.TANTALUM TEMSVA 1A 106M-8L |
| C1120   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1122   | 4030006850 | S.CERAMIC C1608 JB 1H 471K-T |
| C1124   | 4550000540 | S.TANTALUM TESVA 1V 154M1-8L |
| C1125   | 4550006210 | S.TANTALUM ECST1CX106R       |
| C1127   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1130   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1131   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1133   | 4550006480 | S.TANTALUM TEMSVA 1C 475M-8L |
| C1134   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1135   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1136   | 4030017480 | S.CERAMIC C1608 JB 1A 474K-T |
| C1138   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1143   | 4030007050 | S.CERAMIC C1608 CH 1H 220J-T |
| C1144   | 4030007010 | S.CERAMIC C1608 CH 1H 100D-T |
| C1145   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1146   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1148   | 4030007120 | S.CERAMIC C1608 CH 1H 820J-T |
| C1149   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C1151   | 4030008920 | S.CERAMIC C1608 JB 1H 473K-T |
| C1153   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1157   | 4030009570 | S.CERAMIC C1608 CH 1H 0R3B-T |
| C1162   | 4030008630 | S.CERAMIC C1608 JF 1H 104Z-T |
| C1163   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C1166   | 4550006050 | S.TANTALUM TEMSVA 0J 106M8L  |
| C1168   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1169   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1170   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1173   | 4030007080 | S.CERAMIC C1608 CH 1H 390J-T |
| C1174   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T |
| C1175   | 4030007010 | S.CERAMIC C1608 CH 1H 100D-T |
| C1176   | 4030007060 | S.CERAMIC C1608 CH 1H 270J-T |
| C1177   | 4030007020 | S.CERAMIC C1608 CH 1H 120J-T |
| C1178   | 4030007020 | S.CERAMIC C1608 CH 1H 120J-T |
| C1180   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1181   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1182   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1183   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1184   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1185   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1186   | 4030006920 | S.CERAMIC C1608 CH 1H 010C-T |
| C1187   | 4030006910 | S.CERAMIC C1608 CH 1H 0R5C-T |
| C1188   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1189   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1190   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1192   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C1193   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1194   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                  |
|---------|------------|------------------------------|
| C1195   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1197   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1198   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1200   | 4030007050 | S.CERAMIC C1608 CH 1H 220J-T |
| C1201   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T |
| C1202   | 4030009550 | S.CERAMIC C1608 CH 1H 2R5B-T |
| C1203   | 4030009500 | S.CERAMIC C1608 CH 1H 0R5B-T |
| C1204   | 4030009500 | S.CERAMIC C1608 CH 1H 0R5B-T |
| C1206   | 4030009510 | S.CERAMIC C1608 CH 1H 010B-T |
| C1207   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1208   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T |
| C1210   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1212   | 4030006910 | S.CERAMIC C1608 CH 1H 0R5C-T |
| C1213   | 4030006910 | S.CERAMIC C1608 CH 1H 0R5C-T |
| C1218   | 4030006990 | S.CERAMIC C1608 CH 1H 080D-T |
| C1239   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1240   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1244   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1248   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1249   | 4030007030 | S.CERAMIC C1608 CH 1H 150J-T |
| C1250   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1251   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1252   | 4030009540 | S.CERAMIC C1608 CH 1H 1R5B-T |
| C1253   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1254   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1255   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1258   | 4030006990 | S.CERAMIC C1608 CH 1H 080D-T |
| C1259   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T |
| C1260   | 4030006970 | S.CERAMIC C1608 CH 1H 060D-T |
| C1263   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T |
| C1265   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T |
| C1266   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T |
| C1271   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C1272   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C1274   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C1278   | 4510004630 | S.ELECTROLYTIC ECEV1CA100SR  |
| C1279   | 4030008900 | S.CERAMIC C1608 JB 1H 333K-T |
| C1280   | 4030008900 | S.CERAMIC C1608 JB 1H 333K-T |
| C1281   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1285   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C1286   | 4030006920 | S.CERAMIC C1608 CH 1H 010C-T |
| C1289   | 4030007030 | S.CERAMIC C1608 CH 1H 150J-T |
| C1290   | 4030006980 | S.CERAMIC C1608 CH 1H 070D-T |
| C1291   | 4030006980 | S.CERAMIC C1608 CH 1H 070D-T |
| C1292   | 4030007030 | S.CERAMIC C1608 CH 1H 150J-T |
| C1294   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1295   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1296   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C1297   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C1304   | 4030007060 | S.CERAMIC C1608 CH 1H 270J-T |
| C2000   | 4510006020 | ELECTROLYTIC 16 MV 2200 HC   |
| C2001   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2002   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2003   | 4030012610 | S.CERAMIC C2012 JB 1C 474K-T |
| C2004   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2005   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2006   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2007   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2008   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2009   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2010   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2011   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2013   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2014   | 4030012610 | S.CERAMIC C2012 JB 1C 474K-T |
| C2015   | 4550006210 | S.TANTALUM ECST1CX106R       |
| C2016   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2017   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2018   | 4550006210 | S.TANTALUM ECST1CX106R       |
| C2019   | 4550006210 | S.TANTALUM ECST1CX106R       |
| C2020   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C2021   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2022   | 4030008650 | S.CERAMIC C1608 JB 1H 332K-T |
| C2024   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2025   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2026   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2027   | 4030012610 | S.CERAMIC C2012 JB 1C 474K-T |
| C2028   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2029   | 4510005600 | S.ELECTROLYTIC ECEV1CS100SR  |
| C2031   | 4030012610 | S.CERAMIC C2012 JB 1C 474K-T |
| C2032   | 4030012610 | S.CERAMIC C2012 JB 1C 474K-T |
| C2034   | 4030006850 | S.CERAMIC C1608 JB 1H 471K-T |
| C2036   | 4510004640 | S.ELECTROLYTIC ECEV1CA470SP  |

S.=Surface mount

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                   |
|---------|------------|-------------------------------|
| C2037   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2038   | 4510006240 | S.ELECTROLYTIC ECEV1CA221P    |
| C2039   | 4510006260 | S.ELECTROLYTIC ECEV1AA471UP   |
| C2040   | 4510006220 | S.ELECTROLYTIC ECEV1CA101UP   |
| C2041   | 4510004640 | S.ELECTROLYTIC ECEV1CA470SP   |
| C2042   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2043   | 4510006260 | S.ELECTROLYTIC ECEV1AA471UP   |
| C2044   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2046   | 4510006220 | S.ELECTROLYTIC ECEV1CA101UP   |
| C2047   | 4510006240 | S.ELECTROLYTIC ECEV1CA221P    |
| C2049   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2051   | 4510004630 | S.ELECTROLYTIC ECEV1CA100SR   |
| C2052   | 4030007050 | S.CERAMIC C1608 CH 1H 220J-T  |
| C2053   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T  |
| C2055   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2057   | 4030007110 | S.CERAMIC C1608 CH 1H 680J-T  |
| C2058   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2059   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2060   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2061   | 4510004630 | S.ELECTROLYTIC ECEV1CA100SR   |
| C2062   | 4510004630 | S.ELECTROLYTIC ECEV1CA100SR   |
| C2063   | 4510004630 | S.ELECTROLYTIC ECEV1CA100SR   |
| C2064   | 4030008680 | S.CERAMIC C2012 JF 1C 105Z-T  |
| C2065   | 4030008680 | S.CERAMIC C2012 JF 1C 105Z-T  |
| C2066   | 4510004630 | S.ELECTROLYTIC ECEV1CA100SR   |
| C2067   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T  |
| C2068   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T  |
| C2069   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T  |
| C2070   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T  |
| C2072   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2073   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2074   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2075   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T  |
| C2076   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2077   | 4030008900 | S.CERAMIC C1608 JB 1H 333K-T  |
| C2078   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2079   | 4030009590 | S.CERAMIC C2012 JF 1C 225Z-T  |
| C2081   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T  |
| C2082   | 4030008680 | S.CERAMIC C2012 JF 1C 105Z-T  |
| C2083   | 4030008680 | S.CERAMIC C2012 JF 1C 105Z-T  |
| C2084   | 4030008680 | S.CERAMIC C2012 JF 1C 105Z-T  |
| C2085   | 4030008680 | S.CERAMIC C2012 JF 1C 105Z-T  |
| C2086   | 4550006760 | S.TANTALUM TEMSVB2 1A 336M-8R |
| C2088   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2094   | 4030012600 | S.CERAMIC C2012 JB 1A 105M-T  |
| C2095   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2096   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2097   | 4030009350 | S.CERAMIC C1608 CH 1H 3R5B-T  |
| C2098   | 4030006960 | S.CERAMIC C1608 CH 1H 050C-T  |
| C2099   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T  |
| C2100   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2101   | 4030006910 | S.CERAMIC C1608 CH 1H 0R5C-T  |
| C2102   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T  |
| C2103   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2104   | 4030007000 | S.CERAMIC C1608 CH 1H 090D-T  |
| C2105   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2106   | 4030006910 | S.CERAMIC C1608 CH 1H 0R5C-T  |
| C2107   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T  |
| C2108   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2109   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2110   | 4030009550 | S.CERAMIC C1608 CH 1H 2R5B-T  |
| C2111   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2112   | 4030006910 | S.CERAMIC C1608 CH 1H 0R5C-T  |
| C2113   | 4030009350 | S.CERAMIC C1608 CH 1H 3R5B-T  |
| C2114   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2115   | 4030006990 | S.CERAMIC C1608 CH 1H 080D-T  |
| C2116   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2117   | 4030006910 | S.CERAMIC C1608 CH 1H 0R5C-T  |
| C2118   | 4030009550 | S.CERAMIC C1608 CH 1H 2R5B-T  |
| C2119   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2120   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T  |
| C2121   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T  |
| C2122   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2123   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2124   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2125   | 4030011180 | S.CERAMIC GRM31M2C2H220JV01L  |
| C2126   | 4030011210 | S.CERAMIC GRM31M2C2H330JV01L  |
| C2127   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2128   | 4030007170 | S.CERAMIC C1608 CH 1H 221J-T  |
| C2129   | 4030007170 | S.CERAMIC C1608 CH 1H 221J-T  |
| C2130   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |
| C2131   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T  |

[MAIN UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION                  |
|---------|------------|------------------------------|
| C2132   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2133   | 4030017200 | S.CERAMIC GRM31BR32J102KY01L |
| C2134   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2135   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2136   | 4030007070 | S.CERAMIC C1608 CH 1H 330J-T |
| C2137   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2138   | 4030007070 | S.CERAMIC C1608 CH 1H 330J-T |
| C2139   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2140   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T |
| C2141   | 4030006930 | S.CERAMIC C1608 CH 1H 020C-T |
| C2142   | 4030006960 | S.CERAMIC C1608 CH 1H 050C-T |
| C2143   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2144   | 4030006950 | S.CERAMIC C1608 CH 1H 040C-T |
| C2145   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2146   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T |
| C2147   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2148   | 4030006920 | S.CERAMIC C1608 CH 1H 010C-T |
| C2149   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2150   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2151   | 4030006970 | S.CERAMIC C1608 CH 1H 060D-T |
| C2152   | 4030006920 | S.CERAMIC C1608 CH 1H 010C-T |
| C2153   | 4030006960 | S.CERAMIC C1608 CH 1H 050C-T |
| C2154   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2155   | 4030010780 | S.CERAMIC C1608 CH 1H 1R5C-T |
| C2156   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2157   | 4030009510 | S.CERAMIC C1608 CH 1H 010B-T |
| C2158   | 4030006850 | S.CERAMIC C1608 JB 1H 471K-T |
| C2159   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2160   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2161   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2162   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2164   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2165   | 4030007130 | S.CERAMIC C1608 CH 1H 101J-T |
| C2166   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2167   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2168   | 4030007070 | S.CERAMIC C1608 CH 1H 330J-T |
| C2169   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2170   | 4030007070 | S.CERAMIC C1608 CH 1H 330J-T |
| C2171   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2172   | 4030006850 | S.CERAMIC C1608 JB 1H 471K-T |
| C2176   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C2180   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T |
| C2181   | 4030006940 | S.CERAMIC C1608 CH 1H 030C-T |
| C2182   | 4550006250 | S.TANTALUM TEMSVA 1A 106M-8L |
| C2183   | 4030006980 | S.CERAMIC C1608 CH 1H 070D-T |
| C2184   | 4030006980 | S.CERAMIC C1608 CH 1H 070D-T |
| C2185   | 4030008910 | S.CERAMIC C1608 JB 1H 393K-T |
| C2186   | 4030008910 | S.CERAMIC C1608 JB 1H 393K-T |
| C2187   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2188   | 4030012600 | S.CERAMIC C2012 JB 1A 105M-T |
| C2190   | 4510005860 | S.ELECTROLYTIC ECEV1HA2R25SR |
| C2191   | 4030008650 | S.CERAMIC C1608 JB 1H 332K-T |
| C2192   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C2193   | 4030008880 | S.CERAMIC C1608 JB 1H 223K-T |
| C2194   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2195   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2196   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2197   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2198   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2199   | 4550006210 | S.TANTALUM ECST1CX106R       |
| C2200   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C2203   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2204   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2205   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2206   | 4030007040 | S.CERAMIC C1608 CH 1H 180J-T |
| C2207   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2208   | 4030011810 | S.CERAMIC C1608 JB 1A 224K-T |
| C2209   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2210   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2211   | 4030006920 | S.CERAMIC C1608 CH 1H 010C-T |
| C2212   | 4030006920 | S.CERAMIC C1608 CH 1H 010C-T |
| C2213   | 4030007090 | S.CERAMIC C1608 CH 1H 470J-T |
| C2214   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2215   | 4030006860 | S.CERAMIC C1608 JB 1H 102K-T |
| C2216   | 4030011600 | S.CERAMIC C1608 JB 1E 104K-T |
| C2217   | 4030006900 | S.CERAMIC C1608 JB 1H 103K-T |
| C2218   | 4030006880 | S.CERAMIC C1608 JB 1H 472K-T |
| C2219   | 4030006880 | S.CERAMIC C1608 JB 1H 472K-T |
| RL1     | 6330001700 | RELAY ATQ209                 |

S.=Surface mount

# [MAIN UNIT]

| REF NO. | ORDER NO.   | DESCRIPTION |                     |
|---------|-------------|-------------|---------------------|
| J1      | 6510014960  | S.CONNECTOR | B2B-ZR-SM3-TF       |
| J2001   | 6510023110  | CONNECTOR   | 3008L-8P8C          |
| J2003   | 6510023160  | CONNECTOR   | DN-508B-6           |
| J2004   | 6450002220  | CONNECTOR   | PJ-0008P-5          |
| J2005   | 6450001440  | CONNECTOR   | HSJ1403-01-010      |
| J2006   | 6510023170  | CONNECTOR   | 3008L-6P6C          |
| J2007   | 6510014960  | S.CONNECTOR | B2B-ZR-SM3-TF       |
| W2      | 8900010980  | CABLE       | OPC-1131            |
| W2001   | 7030000010  | S.JUMPER    | MCR10EZHZ JPW (000) |
| W2002   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2003   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2005   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2008   | 70300008240 | S.JUMPER    | ERJ12YJ0R00U        |
| W2010   | 70300008240 | S.JUMPER    | ERJ12YJ0R00U        |
| W2011   | 7030000010  | S.JUMPER    | MCR10EZHZ JPW (000) |
| W2012   | 70300008240 | S.JUMPER    | ERJ12YJ0R00U        |
| W2013   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2014   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2015   | 7120000470  | JUMPER      | ERDS2T0             |
| W2016   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2017   | 7030000010  | S.JUMPER    | MCR10EZHZ JPW (000) |
| W2018   | 7030000010  | S.JUMPER    | MCR10EZHZ JPW (000) |
| W2019   | 7030000010  | S.JUMPER    | MCR10EZHZ JPW (000) |
| W2020   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2021   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2022   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2023   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2024   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2025   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2026   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2027   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2028   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2029   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2030   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2031   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2032   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2033   | 7030000010  | S.JUMPER    | MCR10EZHZ JPW (000) |
| W2034   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2035   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2036   | 7030000360  | S.JUMPER    | ERJ3GE JPW V        |
| W2037   | 70300008240 | S.JUMPER    | ERJ12YJ0R00U        |
| EP1     | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2     | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2000  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2001  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2002  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2003  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2004  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2005  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2006  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2007  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2008  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2010  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2011  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2012  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2013  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2014  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2015  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2018  | 0910054984  | PCB         | B 5766D             |
| EP2019  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2020  | 6910000640  | BEAD        | FSRH090160RN000B    |
| EP2021  | 6910000640  | BEAD        | FSRH090160RN000B    |
| EP2022  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2023  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |
| EP2024  | 6910012350  | S.BEAD      | MMZ1608Y 102BT      |

# [VCO UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION  |                         |
|---------|------------|--------------|-------------------------|
| IC1     | 1140005990 | S.IC         | MB15A02PFV1-G-BND-ER    |
| IC2     | 1130004200 | S.IC         | TC4566F (TE85R)         |
| IC3     | 1110004460 | S.IC         | μPB1509GV-E1            |
| Q1      | 1530002560 | S.TRANSISTOR | 2SC4403-3-TL            |
| Q2      | 1510000770 | S.TRANSISTOR | 2SA1586-GR (TE85R)      |
| Q3      | 1530002690 | S.TRANSISTOR | 2SC4116-GR (TE85R)      |
| Q4      | 1590000430 | S.TRANSISTOR | DTC144EUA T106          |
| Q5      | 1590001320 | S.TRANSISTOR | DTC143ZUA T106          |
| Q6      | 1530003580 | S.TRANSISTOR | 2SC5231C8-TL            |
| Q7      | 1530003580 | S.TRANSISTOR | 2SC5231C8-TL            |
| Q8      | 1530003580 | S.TRANSISTOR | 2SC5231C8-TL            |
| Q9      | 1590000440 | S.TRANSISTOR | DTA143ZUA T106          |
| Q10     | 1590000430 | S.TRANSISTOR | DTC144EUA T106          |
| D1      | 1750000770 | S.VARICAP    | HVC376BTRF              |
| D2      | 1750000370 | S.DIODE      | DA221 TL                |
| D3      | 1720000790 | S.VARICAP    | HVC321B1TRF             |
| D4      | 1720000790 | S.VARICAP    | HVC321B1TRF             |
| D5      | 1720000790 | S.VARICAP    | HVC321B1TRF             |
| D6      | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| D7      | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| D8      | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| D9      | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| D10     | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| D11     | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| D12     | 1790001620 | S.DIODE      | 1SV308 (TPL3)           |
| D13     | 1790001620 | S.DIODE      | 1SV308 (TPL3)           |
| D14     | 1790001250 | S.DIODE      | MA2S111-(TX)            |
| D15     | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| D16     | 1790001260 | S.DIODE      | MA2S077-(TX)            |
| X1      | 6050011320 | S.XTAL       | CR-718 (12.8 MHz)       |
| L1      | 6200006670 | S.COIL       | ELJRE 68NG-F            |
| L2      | 6200002610 | S.COIL       | NL 252018T-R47J         |
| L3      | 6200010310 | S.COIL       | C2012C-27NG             |
| L4      | 6200010310 | S.COIL       | C2012C-27NG             |
| L5      | 6200007610 | S.COIL       | LL1608-FH39NJ           |
| L6      | 6200007600 | S.COIL       | LL1608-FH33NJ           |
| L7      | 6200006980 | S.COIL       | ELJRE R10G-F            |
| L8      | 6200007540 | S.COIL       | LL1608-FH10NJ           |
| L9      | 6200007610 | S.COIL       | LL1608-FH39NJ           |
| L10     | 6200006990 | S.COIL       | ELJRE 56NG-F            |
| L11     | 6200007590 | S.COIL       | LL1608-FH27NJ           |
| L12     | 6200003540 | S.COIL       | MLF1608D R22K-T         |
| L13     | 6200006670 | S.COIL       | ELJRE 68NG-F            |
| L14     | 6200006670 | S.COIL       | ELJRE 68NG-F            |
| R1      | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R2      | 7030003380 | S.RESISTOR   | ERJ3GEYJ 331 V (330 Ω)  |
| R3      | 7030003680 | S.RESISTOR   | ERJ3GEYJ 104 V (100 kΩ) |
| R4      | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R5      | 7030003600 | S.RESISTOR   | ERJ3GEYJ 223 V (22 kΩ)  |
| R6      | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R7      | 7030003360 | S.RESISTOR   | ERJ3GEYJ 221 V (220 Ω)  |
| R8      | 7030003600 | S.RESISTOR   | ERJ3GEYJ 223 V (22 kΩ)  |
| R9      | 7030003340 | S.RESISTOR   | ERJ3GEYJ 151 V (150 Ω)  |
| R10     | 7030003600 | S.RESISTOR   | ERJ3GEYJ 223 V (22 kΩ)  |
| R11     | 7030003240 | S.RESISTOR   | ERJ3GEYJ 220 V (22 Ω)   |
| R12     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R13     | 7030003590 | S.RESISTOR   | ERJ3GEYJ 183 V (18 kΩ)  |
| R14     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R15     | 7030003610 | S.RESISTOR   | ERJ3GEYJ 273 V (27 kΩ)  |
| R16     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R17     | 7030003560 | S.RESISTOR   | ERJ3GEYJ 103 V (10 kΩ)  |
| R18     | 7030003320 | S.RESISTOR   | ERJ3GEYJ 101 V (100 Ω)  |
| R19     | 7030003500 | S.RESISTOR   | ERJ3GEYJ 332 V (3.3 kΩ) |
| R20     | 7030003460 | S.RESISTOR   | ERJ3GEYJ 152 V (1.5 kΩ) |
| R21     | 7030003320 | S.RESISTOR   | ERJ3GEYJ 101 V (100 Ω)  |
| R22     | 7030003450 | S.RESISTOR   | ERJ3GEYJ 122 V (1.2 kΩ) |
| R23     | 7030003450 | S.RESISTOR   | ERJ3GEYJ 122 V (1.2 kΩ) |
| R24     | 7030003450 | S.RESISTOR   | ERJ3GEYJ 122 V (1.2 kΩ) |
| R25     | 7030003440 | S.RESISTOR   | ERJ3GEYJ 102 V (1 kΩ)   |
| R26     | 7030003600 | S.RESISTOR   | ERJ3GEYJ 223 V (22 kΩ)  |
| R27     | 7030003840 | S.RESISTOR   | ERJ3GEYJ 225 V (2.2 MΩ) |
| R28     | 7030003680 | S.RESISTOR   | ERJ3GEYJ 104 V (100 kΩ) |

S.=Surface mount

## [VCO UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION |                         |
|---------|------------|-------------|-------------------------|
| R29     | 7030003640 | S.RESISTOR  | ERJ3GEYJ 473 V (47 kΩ)  |
| R30     | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R31     | 7030003520 | S.RESISTOR  | ERJ3GEYJ 472 V (4.7 kΩ) |
| R32     | 7030003560 | S.RESISTOR  | ERJ3GEYJ 103 V (10 kΩ)  |
| R33     | 7030003210 | S.RESISTOR  | ERJ3GEYJ 120 V (12 Ω)   |
| R34     | 7030003280 | S.RESISTOR  | ERJ3GEYJ 470 V (47 Ω)   |
| R35     | 7030003560 | S.RESISTOR  | ERJ3GEYJ 103 V (10 kΩ)  |
| R36     | 7030003430 | S.RESISTOR  | ERJ3GEYJ 821 V (820 Ω)  |
| R37     | 7030003320 | S.RESISTOR  | ERJ3GEYJ 101 V (100 Ω)  |
| R38     | 7030003210 | S.RESISTOR  | ERJ3GEYJ 120 V (12 Ω)   |
| R39     | 7030003330 | S.RESISTOR  | ERJ3GEYJ 121 V (120 Ω)  |
| R40     | 7030003520 | S.RESISTOR  | ERJ3GEYJ 472 V (4.7 kΩ) |
| R41     | 7030003480 | S.RESISTOR  | ERJ3GEYJ 222 V (2.2 kΩ) |
| R42     | 7030003560 | S.RESISTOR  | ERJ3GEYJ 103 V (10 kΩ)  |
| R43     | 7030003470 | S.RESISTOR  | ERJ3GEYJ 182 V (1.8 kΩ) |
| R44     | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R45     | 7030003320 | S.RESISTOR  | ERJ3GEYJ 101 V (100 Ω)  |
| R46     | 7030003560 | S.RESISTOR  | ERJ3GEYJ 103 V (10 kΩ)  |
| R47     | 7030003470 | S.RESISTOR  | ERJ3GEYJ 182 V (1.8 kΩ) |
| R48     | 7030003520 | S.RESISTOR  | ERJ3GEYJ 472 V (4.7 kΩ) |
| R49     | 7030003480 | S.RESISTOR  | ERJ3GEYJ 222 V (2.2 kΩ) |
| R50     | 7030003460 | S.RESISTOR  | ERJ3GEYJ 152 V (1.5 kΩ) |
| R51     | 7030004050 | S.RESISTOR  | ERJ3GEYJ 1R0 V (1 Ω)    |
| R52     | 7030003520 | S.RESISTOR  | ERJ3GEYJ 472 V (4.7 kΩ) |
| R53     | 7030003330 | S.RESISTOR  | ERJ3GEYJ 121 V (120 Ω)  |
| R54     | 7030003480 | S.RESISTOR  | ERJ3GEYJ 222 V (2.2 kΩ) |
| R55     | 7030003560 | S.RESISTOR  | ERJ3GEYJ 103 V (10 kΩ)  |
| R56     | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R57     | 7030003260 | S.RESISTOR  | ERJ3GEYJ 330 V (33 Ω)   |
| R58     | 7030003250 | S.RESISTOR  | ERJ3GEYJ 270 V (27 Ω)   |
| R59     | 7030003250 | S.RESISTOR  | ERJ3GEYJ 270 V (27 Ω)   |
| R60     | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R61     | 7030003440 | S.RESISTOR  | ERJ3GEYJ 102 V (1 kΩ)   |
| R62     | 7030003340 | S.RESISTOR  | ERJ3GEYJ 151 V (150 Ω)  |
| R63     | 7030003840 | S.RESISTOR  | ERJ3GEYJ 225 V (2.2 MΩ) |
| C1      | 4030007090 | S.CERAMIC   | C1608 CH 1H 470J-T      |
| C2      | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C3      | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C4      | 4030007090 | S.CERAMIC   | C1608 CH 1H 470J-T      |
| C5      | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C6      | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C7      | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C8      | 4030007090 | S.CERAMIC   | C1608 CH 1H 470J-T      |
| C9      | 4030007090 | S.CERAMIC   | C1608 CH 1H 470J-T      |
| C10     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C11     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C12     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C13     | 4030006900 | S.CERAMIC   | C1608 JB 1H 103K-T      |
| C14     | 4030006920 | S.CERAMIC   | C1608 CH 1H 010C-T      |
| C15     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C16     | 4030007100 | S.CERAMIC   | C1608 CH 1H 560J-T      |
| C17     | 4030006950 | S.CERAMIC   | C1608 CH 1H 040C-T      |
| C18     | 4030017810 | S.CERAMIC   | C1608 CH 1H 102J-T      |
| C19     | 4030007060 | S.CERAMIC   | C1608 CH 1H 270J-T      |
| C20     | 4030008630 | S.CERAMIC   | C1608 JF 1H 104Z-T      |
| C21     | 4030007010 | S.CERAMIC   | C1608 CH 1H 100D-T      |
| C22     | 4030007010 | S.CERAMIC   | C1608 CH 1H 100D-T      |
| C23     | 4030006850 | S.CERAMIC   | C1608 JB 1H 471K-T      |
| C24     | 4030008630 | S.CERAMIC   | C1608 JF 1H 104Z-T      |
| C25     | 4030008920 | S.CERAMIC   | C1608 JB 1H 473K-T      |
| C26     | 4550000550 | S.TANTALUM  | TESVA 1V 224M1-8L       |
| C27     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C28     | 4550002980 | S.TANTALUM  | TEMSVA 1C 225M-8L       |
| C29     | 4550000530 | S.TANTALUM  | TESVA 1V 104M1-8L       |
| C30     | 4030011600 | S.CERAMIC   | C1608 JB 1E 104K-T      |
| C31     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C32     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C33     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C34     | 4030009570 | S.CERAMIC   | C1608 CH 1H 0R3B-T      |
| C35     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C36     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C37     | 4030007020 | S.CERAMIC   | C1608 CH 1H 120J-T      |
| C38     | 4030007050 | S.CERAMIC   | C1608 CH 1H 220J-T      |
| C39     | 4030007040 | S.CERAMIC   | C1608 CH 1H 180J-T      |
| C40     | 4030006920 | S.CERAMIC   | C1608 CH 1H 010C-T      |
| C41     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C42     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C43     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C44     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T      |
| C45     | 4030006970 | S.CERAMIC   | C1608 CH 1H 060D-T      |

## [VCO UNIT]

| REF NO. | ORDER NO.  | DESCRIPTION |                       |
|---------|------------|-------------|-----------------------|
| C46     | 4030007020 | S.CERAMIC   | C1608 CH 1H 120J-T    |
| C47     | 4030007030 | S.CERAMIC   | C1608 CH 1H 150J-T    |
| C48     | 4030007040 | S.CERAMIC   | C1608 CH 1H 180J-T    |
| C49     | 4030006990 | S.CERAMIC   | C1608 CH 1H 080D-T    |
| C50     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C51     | 4030006920 | S.CERAMIC   | C1608 CH 1H 010C-T    |
| C52     | 4030006970 | S.CERAMIC   | C1608 CH 1H 060D-T    |
| C53     | 4030007060 | S.CERAMIC   | C1608 CH 1H 270J-T    |
| C54     | 4030006970 | S.CERAMIC   | C1608 CH 1H 060D-T    |
| C55     | 4030007050 | S.CERAMIC   | C1608 CH 1H 220J-T    |
| C56     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C57     | 4030006970 | S.CERAMIC   | C1608 CH 1H 060D-T    |
| C58     | 4030006980 | S.CERAMIC   | C1608 CH 1H 070D-T    |
| C59     | 4030007040 | S.CERAMIC   | C1608 CH 1H 180J-T    |
| C60     | 4030006910 | S.CERAMIC   | C1608 CH 1H 0R5C-T    |
| C61     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C62     | 4030006950 | S.CERAMIC   | C1608 CH 1H 040C-T    |
| C63     | 4030007030 | S.CERAMIC   | C1608 CH 1H 150J-T    |
| C64     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C65     | 4030006980 | S.CERAMIC   | C1608 CH 1H 070D-T    |
| C66     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C67     | 4030007040 | S.CERAMIC   | C1608 CH 1H 180J-T    |
| C68     | 4030007090 | S.CERAMIC   | C1608 CH 1H 470J-T    |
| C69     | 4030006990 | S.CERAMIC   | C1608 CH 1H 080D-T    |
| C70     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C71     | 4030006920 | S.CERAMIC   | C1608 CH 1H 010C-T    |
| C72     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C73     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C74     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C75     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C76     | 4030007090 | S.CERAMIC   | C1608 CH 1H 470J-T    |
| C77     | 4030006850 | S.CERAMIC   | C1608 JB 1H 471K-T    |
| C78     | 4030011600 | S.CERAMIC   | C1608 JB 1E 104K-T    |
| C79     | 4030007050 | S.CERAMIC   | C1608 CH 1H 220J-T    |
| C80     | 4030006940 | S.CERAMIC   | C1608 CH 1H 030C-T    |
| C81     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C82     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C83     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C84     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C85     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C86     | 4030006860 | S.CERAMIC   | C1608 JB 1H 102K-T    |
| C87     | 4030007060 | S.CERAMIC   | C1608 CH 1H 270J-T    |
| C88     | 4030007100 | S.CERAMIC   | C1608 CH 1H 560J-T    |
| C89     | 4030007060 | S.CERAMIC   | C1608 CH 1H 270J-T    |
| J1      | 6510023410 | CONNECTOR   | IMSA-9210B-1-06Z172-T |
| J2      | 6510023400 | CONNECTOR   | IMSA-9210B-1-03Z172-T |
| J3      | 6510023400 | CONNECTOR   | IMSA-9210B-1-03Z172-T |
| J4      | 6510023400 | CONNECTOR   | IMSA-9210B-1-03Z172-T |
| J5      | 6510023410 | CONNECTOR   | IMSA-9210B-1-06Z172-T |
| W1      | 7030003860 | S.JUMPER    | ERJ3GE JPW V          |
| W2      | 7030003860 | S.JUMPER    | ERJ3GE JPW V          |
| W3      | 7030003860 | S.JUMPER    | ERJ3GE JPW V          |
| W4      | 7030003860 | S.JUMPER    | ERJ3GE JPW V          |
| EP1     | 0910055402 | PCB         | B 5844B               |

S.=Surface mount

## SECTION 6 MECHANICAL PARTS AND DISASSEMBLY

### [CHASSIS PARTS]

| REF. NO. | ORDER NO.  | DESCRIPTION              | QTY. |
|----------|------------|--------------------------|------|
| J1       | 6510004880 | Connector MR-DS-E 01     | 1    |
| SP1      | 2510001160 | Speaker 057P0802         | 1    |
| MF1      | 2710000730 | Fan AD0412HB-G70 (TS)    | 1    |
| MP1      | 8010018850 | 2493 chassis             | 1    |
| MP2      | 8110007720 | 2493 cover               | 1    |
| MP3      | 8930057750 | 2493 SP holder           | 1    |
| MP4      | 8110005750 | 1729 fan cover           | 1    |
| MP5      | 8930044761 | 2055 SP net-1            | 1    |
| MP7      | 8810009610 | Screw FH M2.6 × 6 ZK     | 8    |
| MP8      | 8810008660 | Screw PH BT M3 × 8 NI-ZU | 12   |
| MP9      | 8810008660 | Screw PH BT M3 × 8 NI-ZU | 2    |
| MP10     | 8810008490 | Setscrew H M2.6 × 8 NI   | 2    |
| MP11     | 8810009110 | Screw PH M2.6 × 16 ZK    | 4    |
| MP12     | 8930054560 | Thermally sheet (T)      | 1    |
| MP13     | 8930054560 | Thermally sheet (T)      | 1    |
| MP15     | 8930057800 | 2493 clip                | 1    |
| MP16     | 8810008660 | Screw BT M3 × 8 NI-ZU    | 2    |
| MP17     | 8810009130 | Screw BT M3 × 12 NI-ZU   | 4    |
| MP18     | 8930058940 | 2493 spring              | 1    |
| MP19     | 8930049780 | Sponge (GG)              | 1    |
| WS1      | 8600036880 | SP cable                 | 1    |

### [CONTROL UNIT]

| REF. NO. | ORDER NO.  | DESCRIPTION                     | QTY. |
|----------|------------|---------------------------------|------|
| J1       | 6510023110 | Connector 3008L-8P8C            | 1    |
| J2       | 6510023170 | Connector 3008L-6P6C            | 1    |
| R1       | 7210002920 | Variable resistor EVU-F2AF20B55 | 1    |
| R3       | 7210002920 | Variable resistor EVU-F2AF20B55 | 1    |
| R5       | 7210002920 | Variable resistor EVU-F2AF20B55 | 1    |
| R7       | 7210002920 | Variable resistor EVU-F2AF20B55 | 1    |
| DS19     | 5030002210 | LCD L1-0500TAM                  | 1    |
| S1       | 2250000460 | Encoder EVQ-VENF0224B           | 1    |
| S2       | 2250000460 | Encoder EVQ-VENF0224B           | 1    |
| EP15     | 8930057510 | LCD contact SRCN-2493-SP-N-W    | 1    |
| MP1      | 8210018540 | 2493 front panel                | 1    |
| MP2      | 8210018550 | 2493 rear panel                 | 1    |
| MP3      | 8210018560 | 2493 reflector                  | 1    |
| MP4      | 8610011160 | Knob N289                       | 2    |
| MP5      | 8610011170 | Knob N290                       | 4    |
| MP6      | 8930056990 | 2493 3-key                      | 1    |
| MP7      | 8930057010 | 2493 L-key                      | 1    |
| MP8      | 8930057000 | 2493 R-key                      | 1    |
| MP9      | 8930057740 | 2493 LCD filter                 | 1    |
| MP10     | 8930057080 | 2493 LCD plate                  | 1    |
| MP11     | 8810009220 | Screw B0 M2 × 8 ZK              | 4    |
| MP13     | 8930059030 | Copper sheet (O)                | 1    |

### [VCO UNIT]

| REF. NO. | ORDER NO.  | DESCRIPTION    | QTY. |
|----------|------------|----------------|------|
| MP1      | 8510013740 | 2372 VCO case  | 1    |
| MP2      | 8510013750 | 2372 VCO cover | 1    |
| MP3      | 8510014800 | 2493 VCO case  | 1    |
| MP4      | 8510014810 | 2493 VCO cover | 1    |

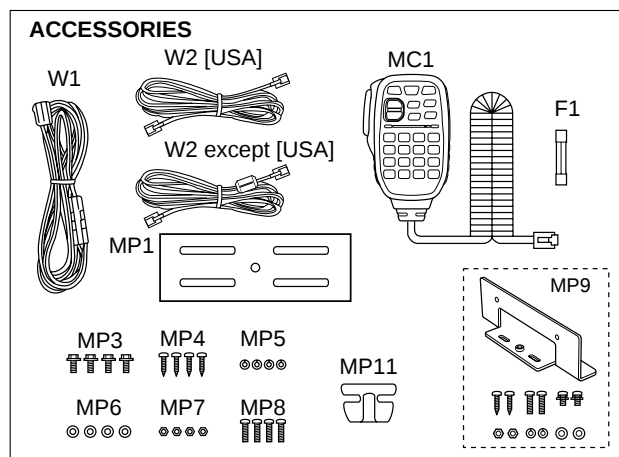
### [MAIN UNIT]

| REF. NO. | ORDER NO.  | DESCRIPTION              | QTY. |
|----------|------------|--------------------------|------|
| J2001    | 6510023110 | Connector 3008L-8P8C     | 1    |
| J2003    | 6510023160 | Connector DN-508B-6      | 1    |
| J2004    | 6450002220 | Connector PJ-0008P-5     | 1    |
| J2005    | 6450001440 | Connector HSJ1403-01-010 | 1    |
| J2006    | 6510023170 | Connector 3008L-6P6C     | 1    |
| W2       | 8900010980 | Cable OPC-1131           | 1    |
| MP1      | 8410002380 | 2399 heatsink            | 1    |
| MP2      | 8510014760 | 2493 PLL case            | 1    |
| MP3      | 8510014750 | 2493 PLL cover           | 1    |
| MP4      | 8510014490 | 2493 shield plate        | 1    |
| MP5      | 8930058180 | 2493 ANT plate           | 1    |
| MP6      | 8510015040 | 2493 V-LPF case assembly | 1    |
| MP8      | 8510014990 | 2493 U-LPF case          | 1    |
| MP9      | 8510015030 | 2469 PA shield plate     | 1    |
| MP10     | 8930059040 | Insulate sheet HK        | 1    |
| MP11     | 8510015000 | 2493 A-shield plate      | 1    |
| MP12     | 8510015050 | 2493 TR cover assembly   | 1    |
| MP14     | 8930058500 | Insulate sheet HB        | 4    |

### [ACCESSORIES]

| REF. NO. | ORDER NO.  | DESCRIPTION                 | QTY. |
|----------|------------|-----------------------------|------|
| F1       | 5210000080 | Fuse FGB 20A (FGB0 125V)    | 1    |
| MC1      | 0880000980 | Microphone HM-133           | 1    |
| W1       | 8900010990 | Cable OPC-1132              | 1    |
| W2       | 8900011290 | Cable OPC-1155 [USA]        | 1    |
|          | 8900011280 | Cable OPC-1154 except [USA] | 1    |
| MP1      | 8010016381 | 1542 mobil bracket (B)-1    | 1    |
| MP3      | 8820000530 | Flange bolt M4 × 8 NI       | 4    |
| MP4      | 8810000950 | Screw PH A M5 × 16          | 4    |
| MP5      | 8850000390 | Spring washer M5            | 4    |
| MP6      | 8850000150 | Flat washer M5 NI BS        | 4    |
| MP7      | 8830000120 | Nut M5                      | 4    |
| MP8      | 8810000470 | Screw PH M5 × 12 (+/-)      | 4    |
| MP9      | 0880001210 | Bracket MB-84               | 1    |
| MP11     | 8930007300 | Mic hanger                  | 1    |

**Screw abbreviations** BT: Self-tapping PH: Pan head  
 ZK: Black FT: Flat head  
 NI: Nickel NI-ZU: Nickel-Zinc





SECTION 7 SEMI-CONDUCTOR INFORMATION

• TRANSISTORS AND FET'S

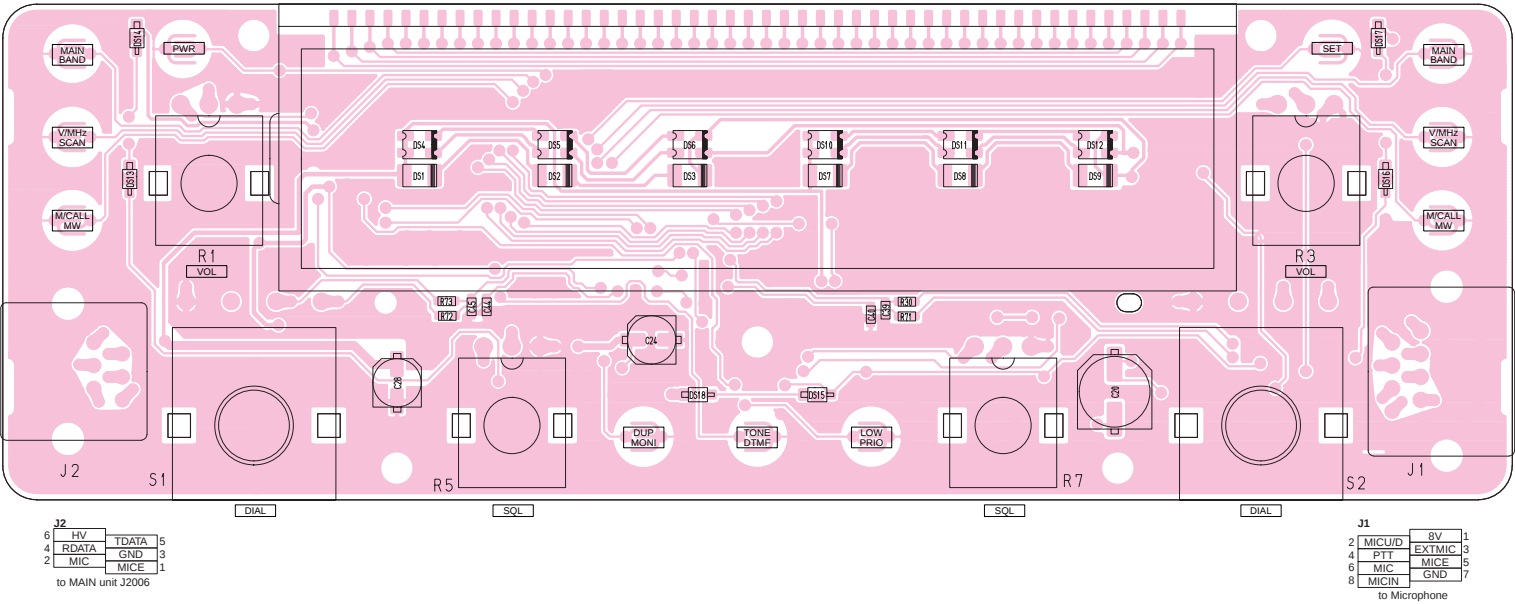
|                                      |                                        |                                        |                                      |                                        |
|--------------------------------------|----------------------------------------|----------------------------------------|--------------------------------------|----------------------------------------|
| <b>2SA1586 GR</b><br>(Symbol: SG)    | <b>2SA1588 GR</b><br>(Symbol: ZG)      | <b>2SB1132 T100 R</b><br>(Symbol: BAR) | <b>2SC4116 BL</b><br>(Symbol: LL)    | <b>2SC4116 GR</b><br>(Symbol: LG)      |
|                                      |                                        |                                        |                                      |                                        |
| <b>2SC4213 B</b><br>(Symbol: AB)     | <b>2SC4215 Y</b><br>(Symbol: QY)       | <b>2SC4226 T1 R25</b><br>(Symbol: R25) | <b>2SC4403 3 TL</b><br>(Symbol: LY3) | <b>2SC4406</b><br>(Symbol: JT)         |
|                                      |                                        |                                        |                                      |                                        |
| <b>2SC5006 T1</b><br>(Symbol: 24)    | <b>2SC5231 C8</b><br>(Symbol: C8)      | <b>2SC5624</b><br>(Symbol: VH-)        | <b>2S3144 GR</b><br>(Symbol: VG)     | <b>2SK2854</b><br>(Symbol: UP)         |
|                                      |                                        |                                        |                                      |                                        |
| <b>2SK3075</b><br>(Symbol: UB F)     | <b>2SK3475</b><br>(Symbol: WB)         | <b>3SK272</b><br>(Symbol: K)           | <b>3SK274</b><br>(Symbol: UN)        | <b>3SK320</b><br>(Symbol: U7)          |
|                                      |                                        |                                        |                                      |                                        |
| <b>DTA114YUA</b><br>(Symbol: 54)     | <b>DTA143ZUA T106</b><br>(Symbol: 113) | <b>DTA144EUA T106</b><br>(Symbol: 16)  | <b>DTC143ZUA</b><br>(Symbol: E23)    | <b>DTC144EUA T106</b><br>(Symbol: 26_) |
|                                      |                                        |                                        |                                      |                                        |
| <b>DTC144TU T106</b><br>(Symbol: 06) | <b>RD70HVF</b><br>(Symbol: RD70HVF1)   | <b>XP4213</b><br>(Symbol: 8S)          | <b>XP4601</b><br>(Symbol: 5C)        | <b>XP6501 AB</b><br>(Symbol: 5N)       |
|                                      |                                        |                                        |                                      |                                        |

• DIODES

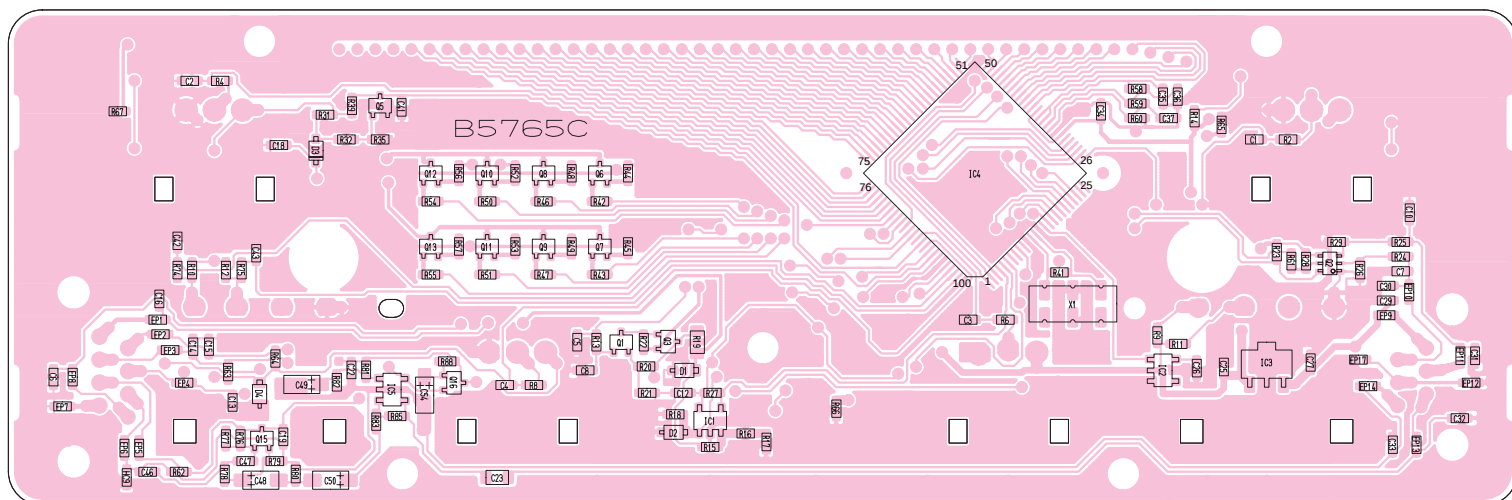
|                                  |                                  |                                  |                                  |                                    |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------------|
| <b>1SS355</b><br>(Symbol: A)     | <b>1SV172</b><br>(Symbol: BE)    | <b>1SV308</b><br>(Symbol: TX)    | <b>DA221 TL</b><br>(Symbol: K)   | <b>DAN222TL</b><br>(Symbol: N)     |
|                                  |                                  |                                  |                                  |                                    |
| <b>DAP222 TL</b><br>(Symbol: P)  | <b>DSA3A1</b><br>(Color: Green)  | <b>HVC321B</b><br>(Symbol: V8)   | <b>HVC350B</b><br>(Symbol: B0)   | <b>HVC362</b><br>(Symbol: V2)      |
|                                  |                                  |                                  |                                  |                                    |
| <b>HVC375B</b><br>(Symbol: B8)   | <b>HVC376B</b><br>(Symbol: B9)   | <b>MA25077</b><br>(Symbol: S)    | <b>MA25111</b><br>(Symbol: A)    | <b>MA25728</b><br>(Symbol: B)      |
|                                  |                                  |                                  |                                  |                                    |
| <b>MA742</b><br>(Symbol: M1U)    | <b>MA8047 M</b><br>(Symbol: 4-7) | <b>MA8062 L</b><br>(Symbol: 6_2) | <b>MA8091 M</b><br>(Symbol: 9-1) | <b>RD20E B2</b><br>(Symbol: 20 B2) |
|                                  |                                  |                                  |                                  |                                    |
| <b>UM9401F</b><br>(Symbol: none) | <b>UM9957FTR</b>                 |                                  |                                  |                                    |
|                                  |                                  |                                  |                                  |                                    |

SECTION 8 BOARD LAYOUTS

8-1 CONTROL UNIT  
• TOP VIEW



• BOTTOM VIEW (CONTROL UNIT)



- TOP VIEW



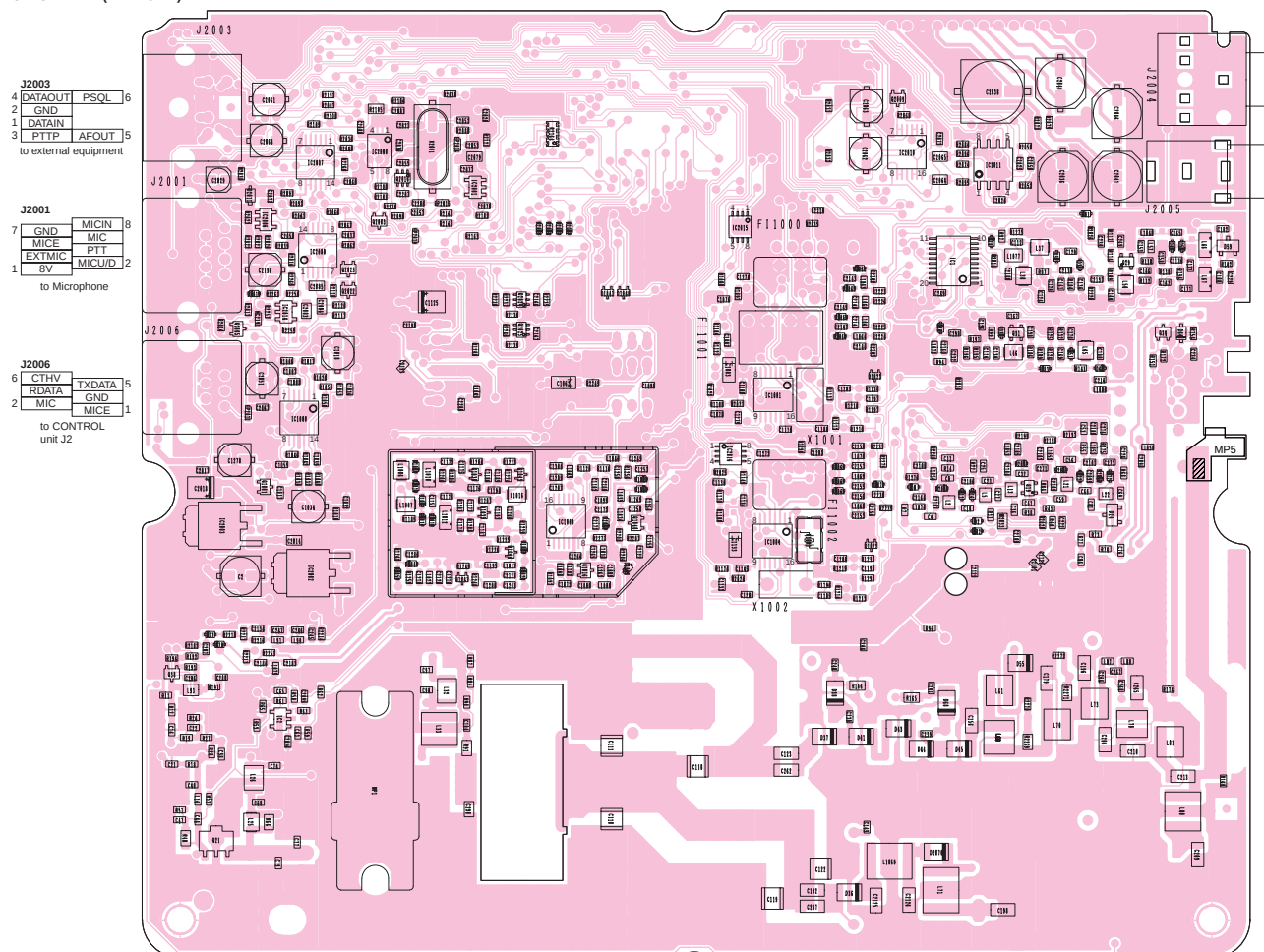
CHASSIS

CHASSIS

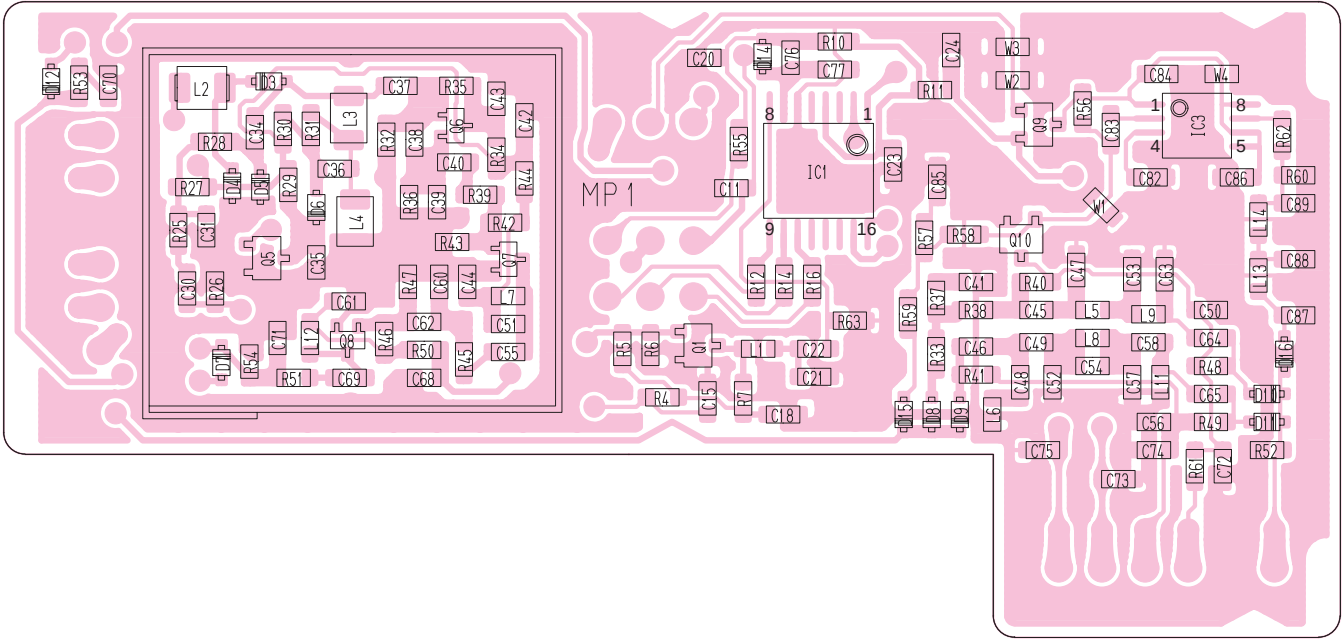
|    |     |     |
|----|-----|-----|
|    | 1   | 2   |
| J1 | +   | -   |
|    | FAN | FAN |

to FAN

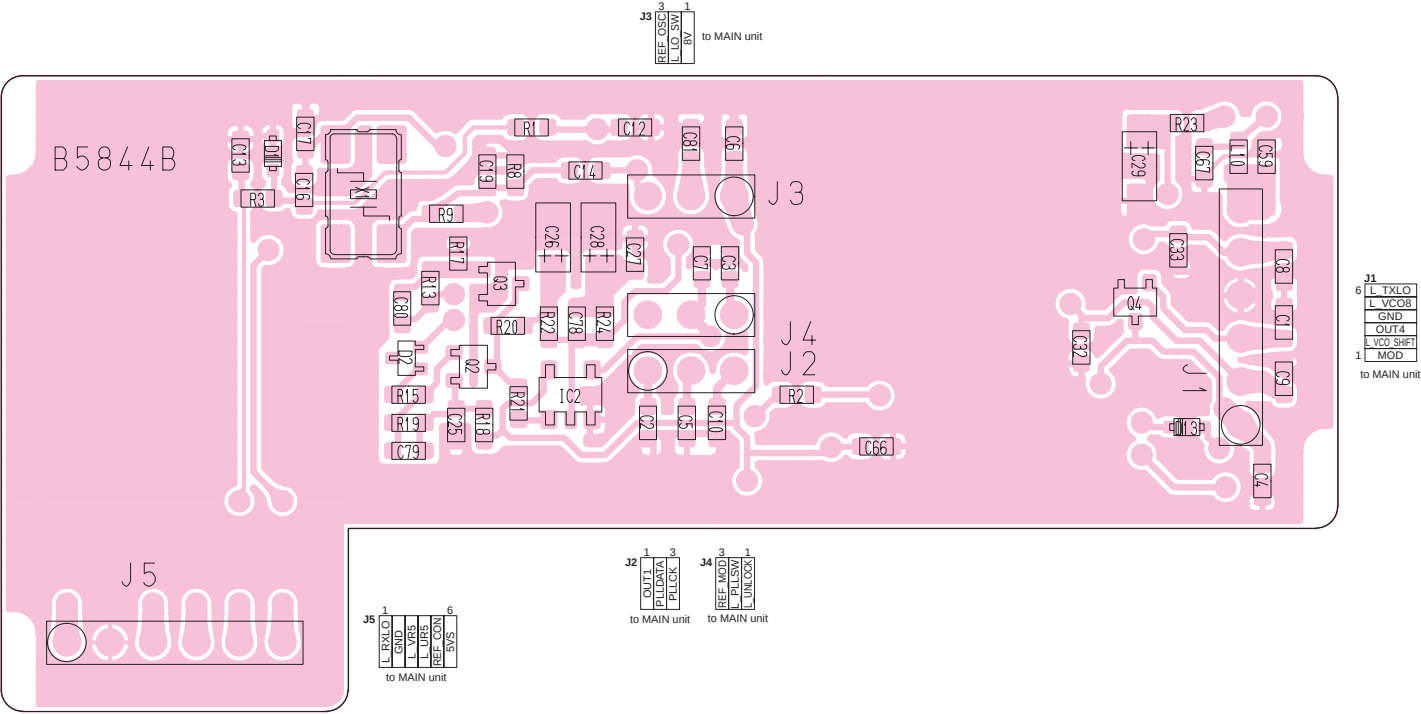
- BOTTOM VIEW (MAIN UNIT)



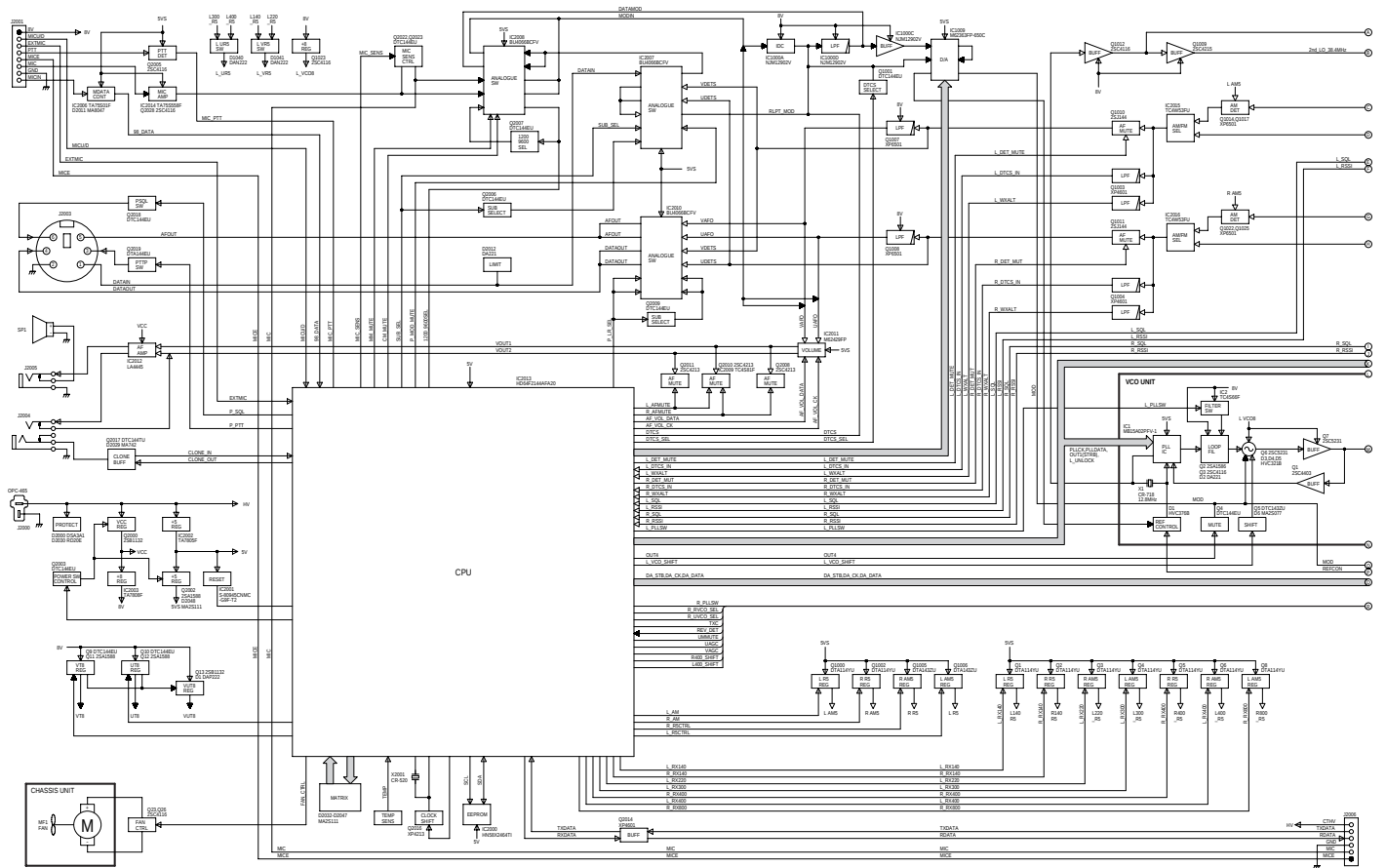
8-3 VCO UNIT  
• TOP VIEW

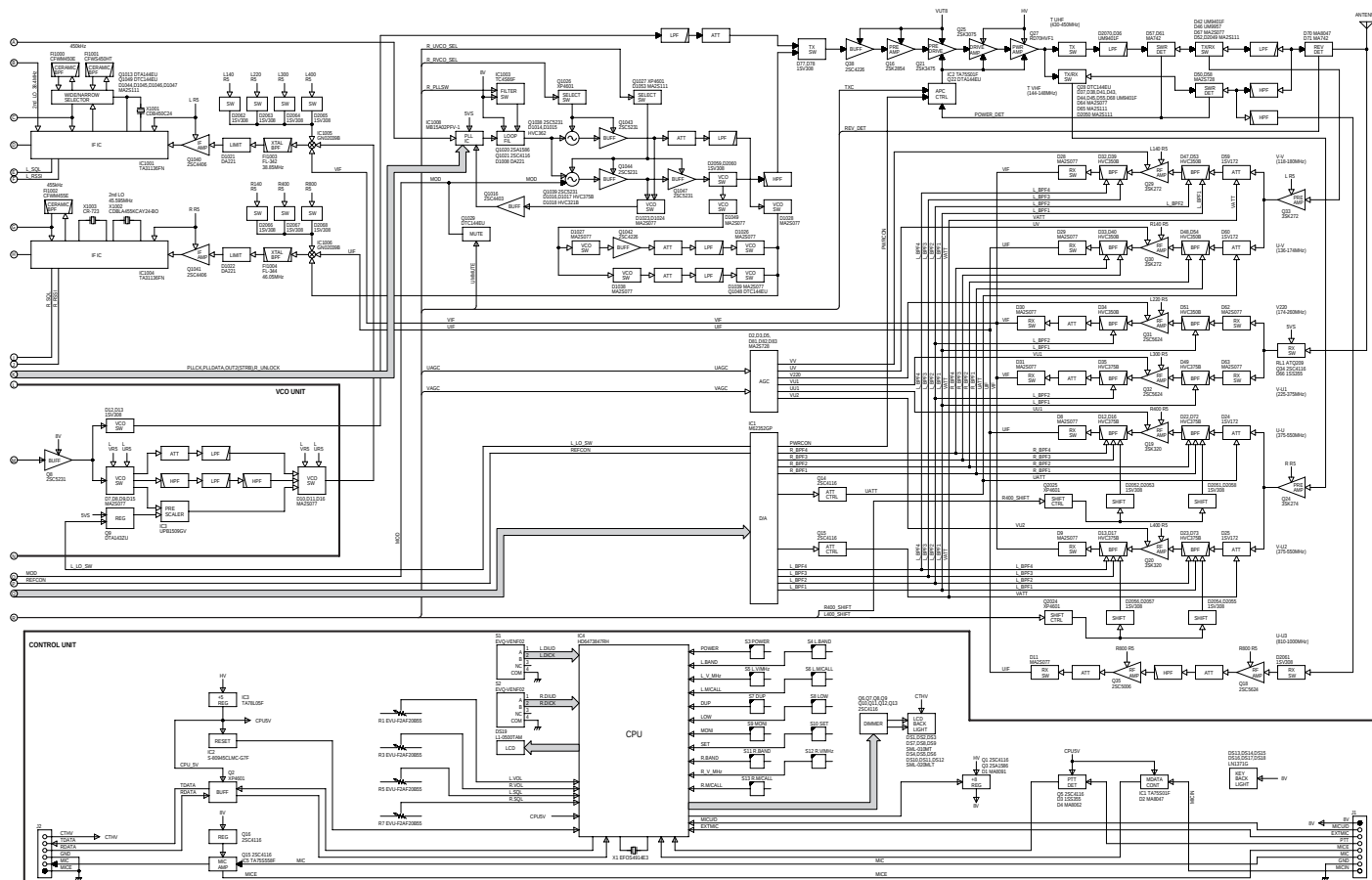


• BOTTOM VIEW (VCO UNIT)



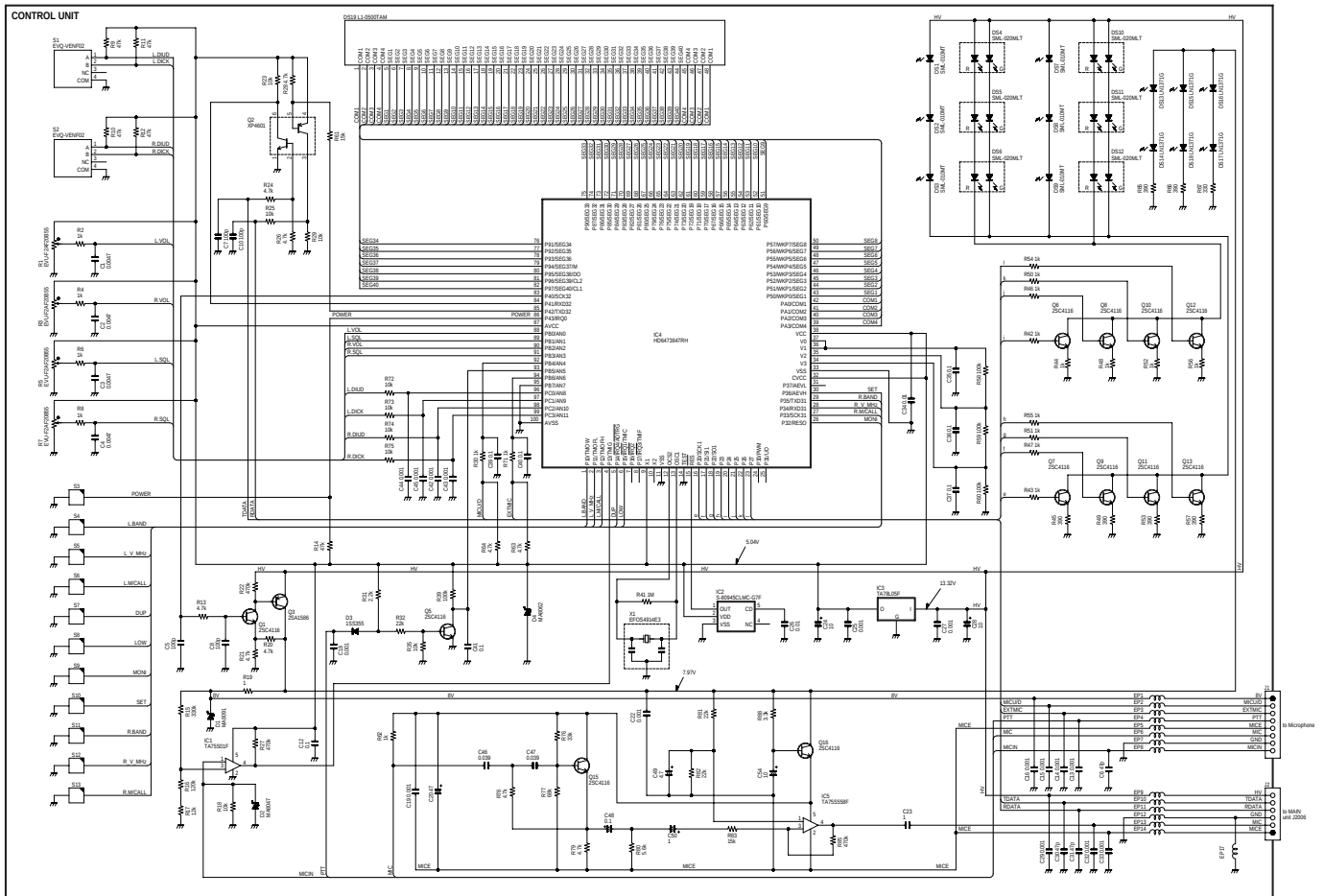
## SECTION 9 BLOCK DIAGRAM



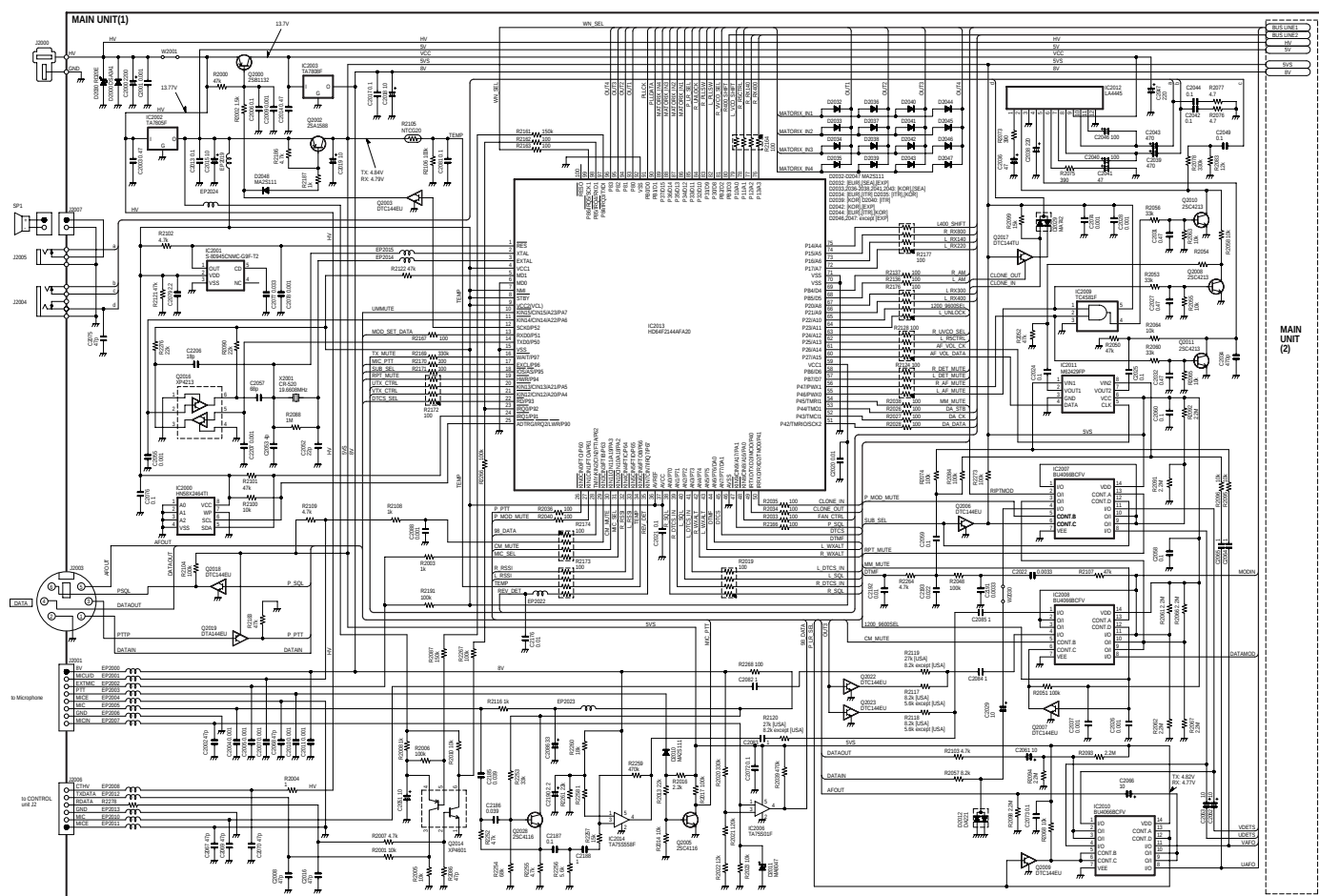


## SECTION 10 VOLTAGE DIAGRAMS

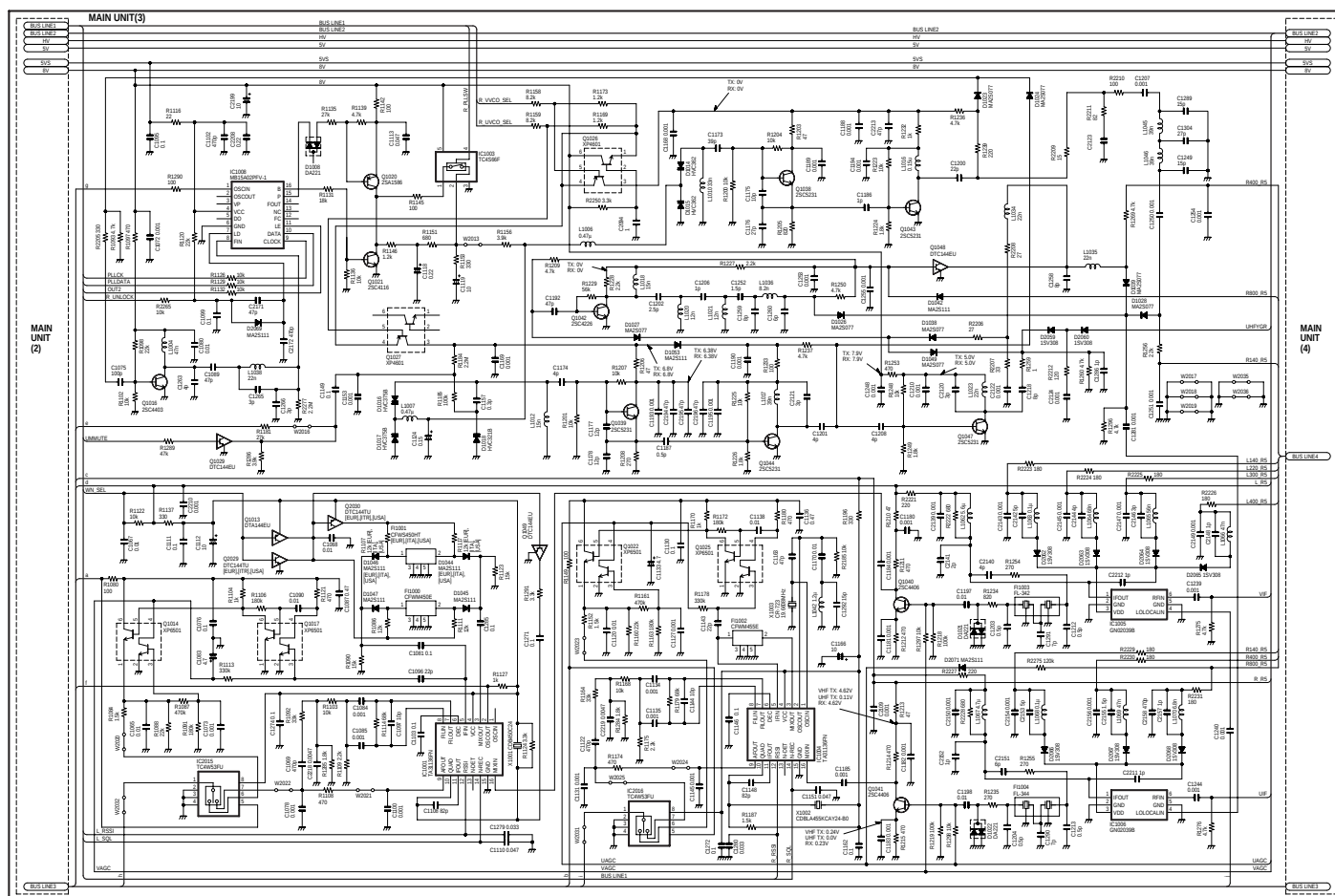
### 10-1 CONTROL UNIT

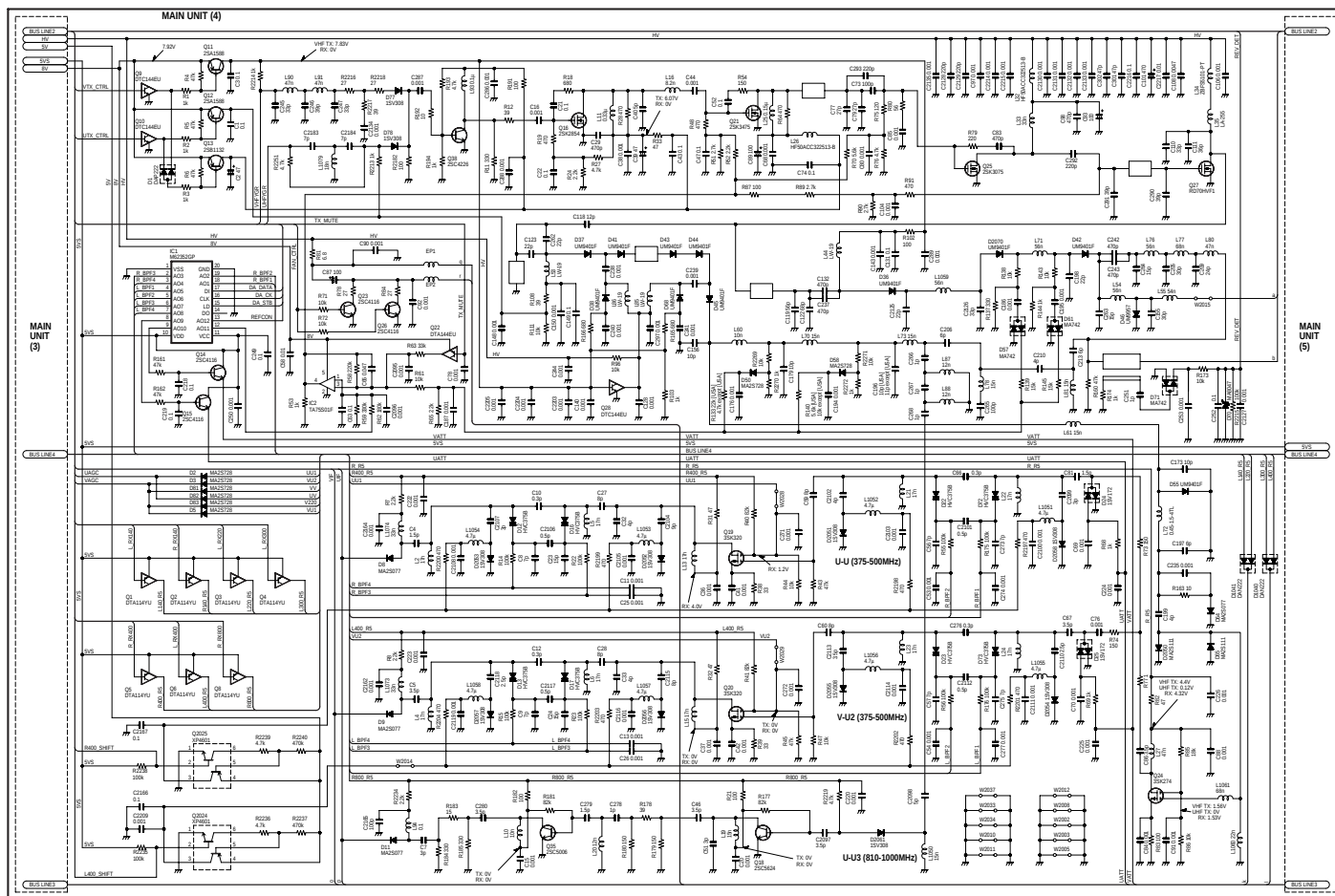


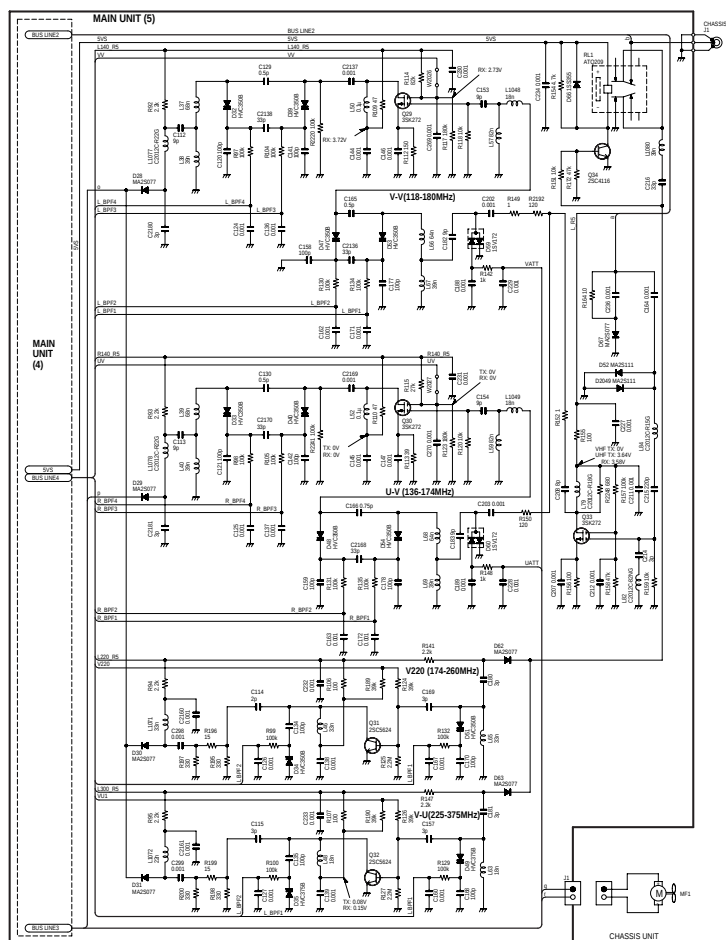
## 10-2 MAIN AND VCO UNITS











## Icom Inc.

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan  
Phone : 06 6793 5302  
Fax : 06 6793 0013  
URL : <http://www.icom.co.jp/world/index.html>

### Icom America Inc.

<Corporate Headquarters>  
2380 116th Avenue N.E., Bellevue, WA 98004, U.S.A.  
Phone : (425) 454-8155 Fax : (425) 454-1509  
URL : <http://www.icomamerica.com>  
<Customer Service>  
Phone : (425) 454-7619

### Icom Canada

Glenwood Centre #150-6165  
Highway 17 Delta, B.C., V4K 5B8, Canada  
Phone : (604) 952-4266 Fax : (604) 952-0090  
URL : <http://www.icomcanada.com>

### Icom (Australia) Pty. Ltd.

A.B.N. 88 006 092 575  
290-294 Albert Street, Brunswick, Victoria, 3056, Australia  
Phone : 03 9387 0666 Fax : 03 9387 0022  
URL : <http://www.icom.net.au>

### Icom New Zealand

146A Harris Road, East Tamaki,  
Auckland, New Zealand  
Phone : 09 274 4062 Fax : 09 274 4708  
URL : <http://www.icom.co.nz>

### Beijing Icom Ltd.

1305, Wanshang Plaza, Shijingshan Road, Beijing China  
Phone : (010) 6866 6337 Fax : (010) 6866 3553

### Icom (Europe) GmbH

Communication Equipment  
Himmelgeister Str. 100, D-40225 Düsseldorf, Germany  
Phone : 0211 346047 Fax : 0211 333639  
URL : <http://www.icomeurope.com>

### Icom Spain S.L

Crta. de Gracia a Manresa Km. 14.750  
08190 Sant Cugat del Valles Barcelona, SPAIN  
Phone : (93) 590 26 70 Fax : (93) 589 04 46  
URL : <http://www.icomspain.com>

### Icom (UK) Ltd.

Unit 9, Sea St., Herne Bay, Kent, CT6 8LD, U.K.  
Phone : 01227 741741 Fax : 01227 741742  
URL : <http://www.icomuk.co.uk>

### Icom France S.a

Zac de la Plaine, Rue Brindejonc des Moulinais  
BP 5804, 31505 Toulouse Cedex, France  
Phone : 561 36 03 03 Fax : 561 36 03 00  
URL : <http://www.icom-france.com>

### Asia Icom Inc.

6F No. 68, Sec. 1 Cheng-Teh Road, Taipei, Taiwan, R.O.C.  
Phone : (02) 2559 1899 Fax : (02) 2559 1874

**Count on us!**

**Icom Inc.**

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan

Downloaded from [www.Manualslib.com](http://www.Manualslib.com) manuals search engine

S-13907HZ-C1  
© 2002 Icom Inc.