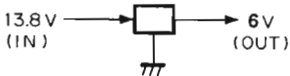
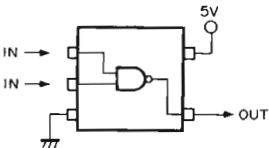
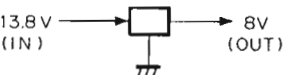


TM-742 A/742 E/942 A

DESCRIPTION OF COMPONENTS

CONTROL UNIT (X53-346X-XX)

No. 1

Device number	Use, function	Operation, condition, interchangeability
IC1	Microprocessor	Refer to circuit description
IC2	SRAM memory	
IC3	6VAVR	3 terminal regulator 
IC4	Address decoder	For chip selector (I/O expander)
IC5	Address decoder	For chip selector (SRAM)
IC6	Serial time clock	Refer to circuit description
IC7	Parallel → Serial converter IC	Refer to circuit description
IC8	Analog switch	For DTHF receiver
IC9	Low frequency amplifier-adder	Mic. amplifier DTMF modulation system adder
IC10	DTMF encoder	Refer to the circuit description
IC11	DTMF decoder	Refer to the circuit description
IC12	Reset IC	
IC13, 14	Serial data inverter buffer	For serial data 
IC15	Analog switch	For switching during backup, (RD, WR)
IC16	Analog switch	For switching during backup (CK)
IC101	I/O expander	Refer to the circuit description
IC102	8V AVR	3 terminal regulator 
IC103	Adder	For internal speaker. For level compensation
IC104, 105	Low frequency amplification	① Input (IC104-Band B, IC105-Common) ⑥ Output (IC104-Band B, IC105-Common) ⑦ 13.8V ④, ⑩, ⑫, GND ⑧ Output (IC104-Band C, IC105-Band A) ⑬ Input (IC104-Band C, IC105-Band A)

DESCRIPTION OF COMPONENTS

CONTROL UNIT (X53-346X-XX)

No. 2

Device number	Use, function	Operation, condition, interchangeability
IC106	Analog switch for speaker switching	④ Band C AF input ⑭ Band A AF input ⑮ Band B AF input ② Band B internal SP output, ⑤ Band C external SP output ⑫ Band A internal SP output ① Band B external SP output, ③ Band C external SP output ⑬ Band A external SP output ⑪ Band A switching input ⑩ Band B switching input ⑨ Band C switching input ⑨ to ⑪ Internal SP when stuck at "L"
IC108, 109	Analog switch	For CTCSS, DTSS, RD switching. (Refer to the circuit description)
IC110	Analog switch	For RD switching
IC112	HIC for electronic potentiometer	Refer to the circuit description
IC113	HIC for SQ	Refer to the circuit description
IC114	HIC for dimmer	Refer to the circuit description
Q1	Low frequency amplification	Mic. amplifier
Q2	Buffer amplifier	For mic. RD
Q3	For mic. line muting	Mic. muting during ON (During DTMF signal transmission)
Q4	5C switch	Switch for 5C line
Q5	Switch	For RESET
Q6, 9	Switch	Power detection circuit, for backup
Q7	Switch	For and dual and single tone switching of the DTMF signal
Q8	Mute switch	
Q10	Buffer amplifier	For DTMF
Q11	Switch	For controlling IC15-16 during backup
Q101, 102	SB system power switch	Q101, 102 are ON when power is ON, Q101, 102 are OFF when power is OFF
Q103, 104	Mute switch	Q103 instantaneously ON when POWER ON, Q104 instantaneously ON when POWER OFF.
Q105	Fan motor switch	Fan operates when switch is ON, fan does not operate when switch is OFF
Q106	Reset switch	For I/O expander resetting

TM-742 A/742 E/942 A

DESCRIPTION OF COMPONENTS

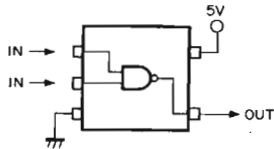
CONTROL UNIT (X53-346X-XX)

No. 3

Device number	Use, function	Operation, condition, interchangeability
IC107, 108, 109	Mute switch	Q107 for band C, Q108 for band A, Q109 for band B
D1	Back flow prevention, lithium battery switching	Lithium battery OFF when power supply is connected.
D2	Voltage compensation	
D3	Back flow prevention	
D4	Surge protection	
D5	Reset detection	
D6	Back flow prevention	

DISPLAY UNIT (X54-3130-11)

No. 1

Device number	Use, function	Operation, condition, interchangeability
IC1	Microprocessor	Refer to circuit description
IC2	5V AVR, reset	
IC3, 4, 5, 6, 203, 206	Serial data inverter buffer	
IC201, 202	LCD driver	
IC204	Flip-flop	Enable generation circuit
IC205	5V AVR	For LCD driver, flip-flop, inverter
Q1	5V power switch	ON when Q3 is ON
Q2	5V power switch	ON when Q4 is ON
Q3	5V power switch	Turned ON by port DO of microcomputr when PS ON
Q4	5V power switch	ON when Q1 is ON
Q5	Reset switch	
Q101	LED switch for function	ON during function
D1	Back-flow prevention	
D2	Back-flow prevention	Prevention of back-flow when common terminal is connected by mistake with CN3.
D3, 4	LED for illumination	Green
D101,102,103 104, 105	LED for function	Red
D107,108,109, 110 111,112, 114	LED for illumination	Yellow

DESCRIPTION OF COMPONENTS

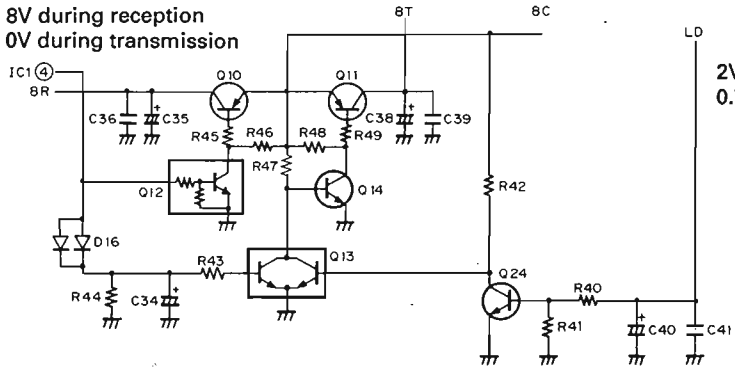
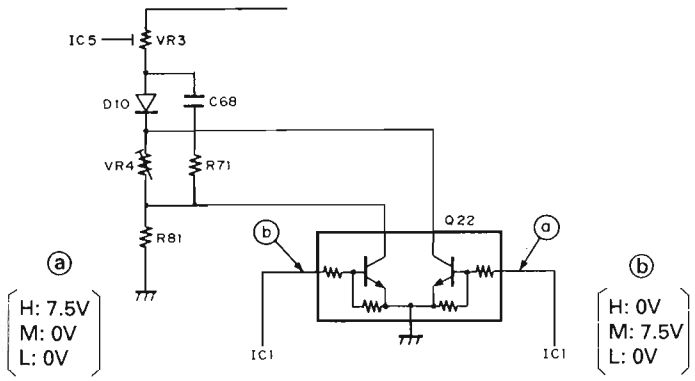
28TX-RX unit (X57-3790-01): UT-28S(M)

No. 1

Component	Use/Function	Operation/Condition/Compatibility
IC1	Shift register	See Circuit Description.
IC2	VCO, PLL	
IC3	Low-frequency amplifier, limiter	Microphone amplifier
IC4	28-MHz band transmission Drive	Operation during transmission 28 - 29.695 MHz ① Input ⑭ Output
IC5	APC	
IC6	Second local oscillator, mixer IF amplifier, detector Low-frequency amplifier Noise detector Squelch switch	① First IF input 8.83 MHz ③ Second local oscillator input 9.285 MHz ⑨ Squelch output, busy signal, 0 V while busy ⑩ Noise detection voltage output (DC) ⑪ Signal-strength meter output ⑫ Detection output ⑭ RD output ⑮ AF OUT
IC7	9V AVR	
IC8	Out-of-band reception Mixer, RF amplifier	① HET input 2 IF output ③ 8 V (8 V outside band; 0 V within band) ⑤ RF output ⑥ 8 V (8 V within band; 0 V outside band) ⑧ RF input
Q1	High-frequency amplifier	Operation during reception, 28-MHz band
Q2	First mixer	Operation during reception
Q3	First IF amplifier	Operation during reception 8.83 MHz
Q4	ATT switch	ON when ATT is ON
Q5	First mixer selection switch	OFF during out-of-band reception

DESCRIPTION OF COMPONENTS

No. 2

Component	Use/Function	Operation/Condition/Compatibility
Q6~7	In-band/out-of-band power switch	Q6 OFF, Q7 ON: In-band reception; Q6 ON, Q7 OFF: Out-of-band reception
Q8	Second local oscillator buffer	Operation during reception 9.285 MHz
Q9	Squelch hysteresis switch	ON while busy
Q10~Q14 Q24	Transmit/receive power switch	 <p>8V during reception 0V during transmission</p> <p>2V while locked; 0.7V while unlocked</p> <p>Q10, Q12, Q13 OFF, Q11, Q14, Q24 ON: During transmission Q10, Q12, Q13, Q24 ON, Q11, Q14 OFF: During reception</p>
Q15~17	Inverter	
Q18	Modulation system mute	ON during reception
Q19	CV line buffer	
Q20	HET output amplifier	28-29.695 MHz: During transmission; 36.83-38.525 MHz: During reception
Q21	VCO 8V ripple filter	
Q22	Middle (not for 10 W), LOW Power switch	 <p>(a) H: 7.5V M: 0V L: 0V</p> <p>(b) H: 0V M: 7.5V L: 0V</p>
Q23	APC control	Operation during transmission
Q25~Q26	AM/FM selection switch	Q25 and Q26 OFF: During FM reception Q25 and Q26 ON: During AM reception

DESCRIPTION OF COMPONENTS

No. 3

Component	Use/Function	Operation/Condition/Compatibility
Q27	Transmission band selection switch	ON: Narrow OFF: Wide
D1 ~ D2	ATT selection switch	D1 OFF and D2 ON: When ATT ON D1 ON and D2 OFF: When ATT OFF
D3 ~ D6	Varicap tuner	
D7	HET selection switch	
D8	Reverse-flow prevention	
D9	HET selection switch	
D10	Temperature compensation	APC
D11, D12	Antenna transmit/receive switch	ON: Transmit; OFF: Receive
D13, D14	Power detection	APC
D15	Reverse-power connection prevention	
D16	Reverse-flow prevention	
D17	Temperature compensation	

DESCRIPTION OF COMPONENTS

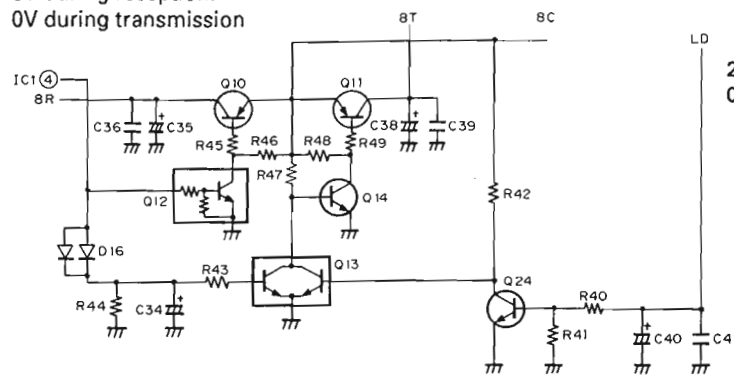
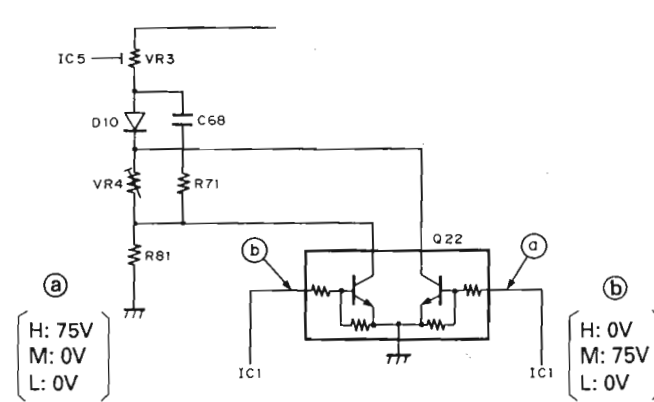
50 TX-RX Unit (X57-3800-01): UT-50S(M)

No. 1

Component	Use/Function	Operation/Condition/Compatibility
IC1	Shift register	See Circuit Description.
IC2	VCO, PLL	
IC3	Low-frequency amplifier, limiter	Microphone amplifier
IC4	50 MHz band transmission Drive	Operation during transmission 50 - 53.995 MHz ① Input ② Output
IC5	APC	
IC6	Second local oscillator, mixer IF amplifier, detector Low-frequency amplifier Noise detector Squelch switch	① First IF input 10.595 MHz ③ Second local oscillator input 11.05 MHz ⑨ Squelch output, busy signal, 0 V while busy ⑩ Noise detection voltage output (DC) ⑪ Signal-strength meter output ⑫ Detection output ⑭ RD output ⑮ AF OUT
IC7	9V AVR	
IC8	Out-of-band reception	① HET input 2 IF output ③ 8 V (8 V outside band; 0 V within band)
	Mixer, RF amplifier	⑤ RF output ⑥ 8 V (8 V within band; 0 V outside band) ⑧ RF input
Q1	High-frequency amplifier	Operation during reception, 50 MHz band
Q2	First mixer	Operation during reception
Q3	First IF amplifier	Operation during reception 10.595 MHz
Q4	ATT switch	ON when ATT is ON
Q5	First mixer selection switch	OFF during out-of-band reception

DESCRIPTION OF COMPONENTS

No. 2

Component	Use/Function	Operation/Condition/Compatibility
Q6~7	In-band/out-of-band power switch	Q6 OFF, Q7 ON: In-band reception; Q6 ON, Q7 OFF: Out-of-band reception
Q8	Second local oscillator buffer	Operation during reception 11.05 MHz
Q9	Squelch hysteresis switch	ON while busy
Q10~Q14 Q24	Transmit/receive power switch 8V during reception: 0V during transmission  Q10, Q12, Q13 OFF, Q11, Q14, Q24 ON: During transmission Q10, Q12, Q13, Q24 ON, Q11, Q14 OFF: During reception	
Q15~17	Inverter	
Q18	Modulation system mute	ON during reception
Q19	CV line buffer	
Q20	HET output amplifier	50 - 53.995 MHz: During transmission; 60.595 - 64.590 MHz: During reception
Q21	VCO 8V ripple filter	
Q22	Middle (not for 10 W), LOW Power switch	 H: 75V M: 0V L: 0V
Q23	APC control	Operation during transmission
Q25~Q26	AM/FM selection switch	Q25 and Q26 OFF: During FM reception Q25 and Q26 ON: During AM reception

DESCRIPTION OF COMPONENTS

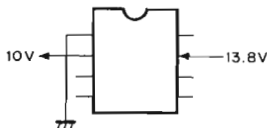
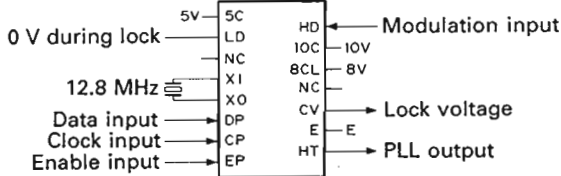
No. 3

Component	Use/Function	Operation/Condition/Compatibility
D1~D2	ATT selection switch	D1 OFF and D2 ON: When ATT ON D1 ON and D2 OFF: When ATT OFF
D3~D6	Varicap tuner	
D7	HET selection switch	
D8	Reverse-flow prevention	
D9	HET selection switch	
D10	Temperature compensation	
D11, D12	Antenna transmit/receive switch	APC
D13, D14	Power detection	ON: Transmit; OFF: Receive
D15	Reverse-power connection prevention	APC
D16	Reverse-flow prevention	
D17	Temperature compensation	

DESCRIPTION OF COMPONENTS

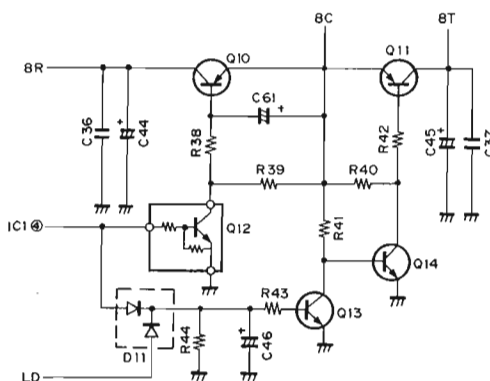
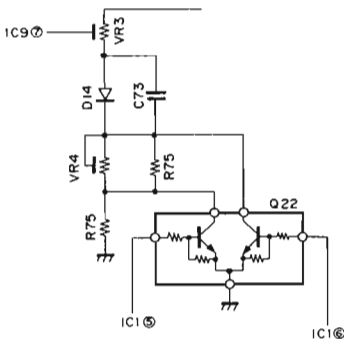
144TX-RX Unit (X57-3580-XX)

No. 1

Reference No.	Function	Description
IC1	Shift register	See the circuit description.
IC2	10V AVR	
IC5	Second local oscillation, mixer, IF amplification, detection, low-frequency amplification, noise amplification, noise detection, and squelch switching	① 10.7 MHz first IF input ③, ④ 10.245 MHz second local oscillation ⑨ 0 V when scan control and busy signals are busy. ⑩ Noise detection voltage output (DC) ⑪ Signal-strength meter output ⑫ Detection output ⑭ RD output ⑮ AF output
IC7	Low-frequency amplification and limiter	Microphone amplifier
IC8	144 MHz band transmission driver	Operation during transmission. 144 to 148 MHz band ⑭ Input ① Output
IC9	APC	
IC10	Power module	
IC11	VCO.PLL	
Q1	High-frequency amplification	Operation during reception. 144 MHz band
Q2	First mixer	Operation during reception
Q3	First IF amplification	Operation during reception. 10.7 MHz

DESCRIPTION OF COMPONENTS

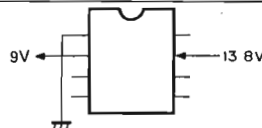
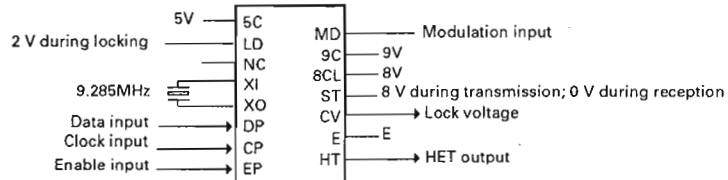
No. 2

Reference No.	Function	Description
Q10 ~ Q14	Transmission and reception power selection	 <p>(0 V during lock)</p> <p>(Q10, Q12, and Q13 are set "OFF" during transmission. Q11 and Q14 are set "ON" during transmission. Q10, Q12, and Q13 are set "ON" during reception. Q11 and Q14 are set "OFF" during reception.)</p>
Q15, Q16, Q17	Inverter	
Q18	Modulation muting	ON during reception
Q19	CV line buffer	144 MHz band
Q20	PLL output amplification	
Q21	PLL 8 V ripple filter	
Q22	Middle/low POWER switch	 <p>Middle and low POWER switches are set ON when high.</p>
Q23	APC control	Operation during transmission
Q24	Squelch hysteresis switch	OFF when busy
D1 ~ D7	Varicap diode tuning	
D11	Antireverse current	
D12	Antireverse current	
D13	PLL output switch	
D14	Temperature compensation	APC
D15, D16	Antenna transmission and reception selection	ON during transmission. OFF during reception.
D17, D18	Power detection	APC
D19	Power reverse connection protection	

DESCRIPTION OF COMPONENTS

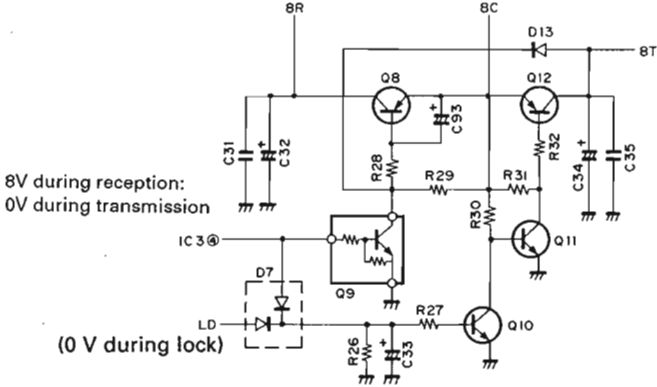
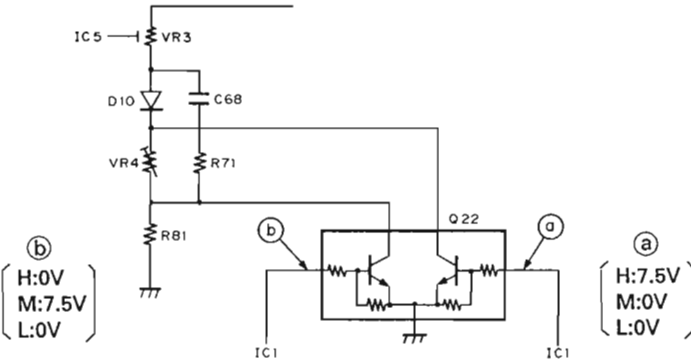
220 TX-RX Unit (X57-3810-10): UT-220S(K)

No. 1

Component	Use/Function	Operation/Condition/Compatibility
IC1	Shift register	See Circuit Description.
IC2	9V AVR	
IC5	Second local oscillator, mixer IF amplifier, detector Low-frequency amplifier Noise detector Squelch switch	① First IF input 30.825 MHz ③ ④ Second local oscillator 30.37 MHz ⑨ Squelch output, busy signal, 0 V while busy ⑩ Noise detection voltage output (DC) ⑪ Signal-strength meter output ⑭ RD output ⑮ AF OUT
IC7	Low-frequency amplifier, limiter	Microphone amplifier
IC8	220-MHz band transmission Drive	Operation during transmission 220 - 224.995 MHz ① Input ⑫ Output
IC9	APC	
IC10	Power module	
IC11	VCO, PLL	
Q1	High-frequency amplifier	Operation during reception, 220 MHz band
Q2	First mixer	Operation during reception
Q3	First IF amplifier	Operation during reception 30.825 MHz

DESCRIPTION OF COMPONENTS

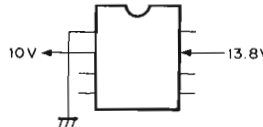
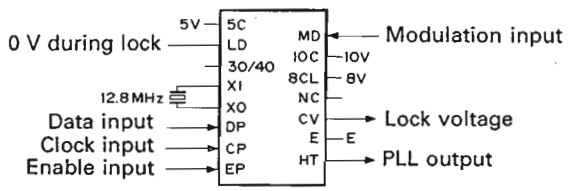
No. 2

Component	Use/Function	Operation/Condition/Compatibility
Q10~Q14	Transmit/receive power switch	 <p>8V during reception: 0V during transmission</p> <p>(0 V during lock)</p> <p>Q10, Q12, Q13 OFF, Q11, Q14 ON: During transmission Q10, Q12, Q13, ON, Q11, Q14 OFF: During reception</p>
Q15~Q17	Inverter	
Q18	Modulation system mute	ON during reception
Q19	CV line buffer	
Q20	HET output amplifier	220 - 224.995 MHz: During transmission: 189.175 - 194.17 MHz: During reception
Q21	VCO 8V ripple filter	 <p>(b) H:0V M:7.5V L:0V</p> <p>(a) H:7.5V M:0V L:0V</p>
Q22	Middle/low power switch	
Q23	APC control	Operation during transmission
Q24	Squelch hysteresis switch	ON while busy
D3, 5, 7, 20	Varicap tuner	
D11, 12	Reverse-flow prevention	
D13	HET selection switch	
D14	Temperature compensation	APC
D15, 16	Antenna transmit/receive switch	ON: Transmit; OFF: Receive
D17, 18	Power detection	
D19	Reverse-power connection prevention	

DESCRIPTION OF COMPONENTS

430 TX-RX Unit (X57-3590-XX)

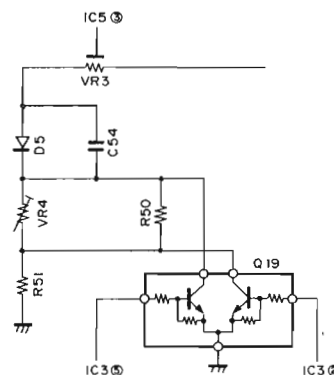
No. 1

Reference No.	Function	Description
IC1	Second local oscillation, mixer, IF amplification, detection, low-frequency amplification, noise amplification, noise detection, and squelch switching	① 21.6 MHz first IF input ③, ④ 21.145 MHz second local oscillation ⑨ 0 V when scan control and busy signals are busy. ⑩ Noise detection voltage output (DC) ⑪ Signal-strength meter output ⑫ Detection output ⑭ RD output ⑮ AF output
IC2	Low-frequency amplification and limiter	Microphone amplifier
IC3	Shift register	See the circuit description.
IC4	10V AVR	
IC5	APC	
IC6	430 MHz band transmission driver	① Output ⑮ Input
IC7	Power module	
IC10	VCO.PLL	
Q1, Q2	High-frequency amplification	Operation during reception
Q3	First mixer	Operation during reception
Q5	First IF amplification	Operation during reception. 21.6 MHz

DESCRIPTION OF COMPONENTS

No. 2

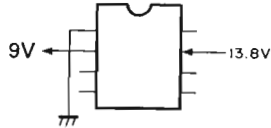
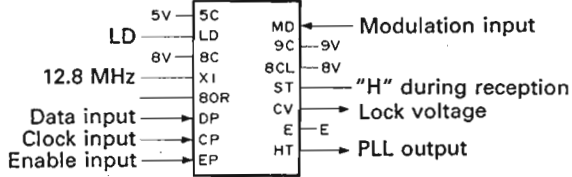
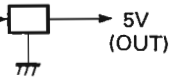
Reference No.	Function	Description
Q8~Q12	Transmission/reception power selection	<p>(0V during transmission)</p> <p>(0 V during lock)</p> <p>(Q8, Q9, and Q10 are set "OFF" during transmission. Q11 and Q12 are set "ON" during transmission. Q8, Q9, and Q10 are set "ON" during reception. Q11 and Q12 are set "OFF" during reception.)</p>
Q13, Q14, Q15	Inverter	
Q16	Modulation muting	ON during reception
Q17	PLL 8 V ripple filter	
Q18	PLL output amplification	
Q19	Middle/low POWER switch	Middle and low POWER switches are ON when high.
Q20	APC control	Operation during transmission
Q21	Squelch hysteresis switch	OFF when busy
D1	Antenna switch	OFF during reception
D4	PLL output switch	
D5	Temperature compensation	APC
D6, D7	Antireverse current	
D8, D9	Antenna transmission/reception selection	ON during transmission
D10, D11	Power detection	APC
D12	Power reverse connection protection	
D13	Antireverse current	8T pulse rise is faster during transmission and reception.
D14	IF level limiter	



DESCRIPTION OF COMPONENTS

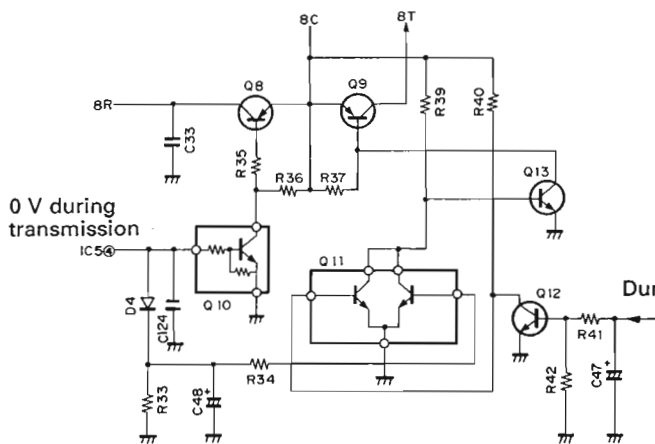
1200TX-RX Unit (X57-3600-11): TM-942A, UT-1200 (M)

No. 1

Reference No.	Function	Description
IC2	Second local oscillation, mixer, IF amplification, detection, low-frequency amplification, noise amplification, noise detection, and squelch switching	① 59.7 MHz first IF input ③, ④ 59.245 MHz second local oscillation ⑨ 0 V when scan control and busy signals are busy. ⑩ Noise detection voltage output (DC) ⑪ Signal-strength meter output ⑫ Detection output ⑭ RD output ⑮ AF output
IC3	ALT	② 8 V ③ "H" during ALT ⑩ Detection input (DC)
IC4	Low-frequency amplification and limiter	Microphone amplifier
IC5	Shift register	See the circuit description.
IC6	9V AVR	
IC7	Predrive	⑩ Input ① Output
IC8	Drive	① Output ⑧ Input
IC9	APC	
IC10	Power module	
IC11	VCO.PLL	
IC12	5V AVR	Three-terminal regulator 13.8 V (IN) → 
Q1, Q2	High-frequency amplification	Operation during reception
Q3	First mixer	Operation during reception
Q6	Receiving PLL output amplification	Operation during reception
Q7	First IF amplification	Operation during reception. 59.7 MHz

DESCRIPTION OF COMPONENTS

No. 2

Reference No.	Function	Description
Q8 ~ Q13	Transmission/reception power selection	 <p>0 V during transmission</p> <p>During lock</p> <p>Q8, Q10, and Q11 (b) are set "OFF" during transmission. Q9, Q12, and Q13 are set "ON" during transmission. Q8, Q10, Q11 (b), and Q12 are set "ON" during reception. Q9, Q11 (a), and Q13 are set "OFF" during reception.</p>
Q15, Q16, Q17	Inverter	
Q18	Modulation muting	ON during reception
Q19, Q20	8T voltage selection	OFF when low
Q21	PLL output amplification	
Q22	Transmitting PLL output amplification	Operation during transmission
Q23	8 V ripple filter	
Q24	APC control	Operation during transmission
Q25	Lower-power switch	ON when high
Q26	Squelch hysteresis switch	OFF when busy
Q28	Q1 POWER switch	ON during transmission
D3	IF level limiter	
D4, D17	Antireverse current	
D5, D15	Constant voltage circuit	
D6	Temperature compensation	APC
D7	Temperature compensation	Drive
D8	Overvoltage prevention	
D9	Power detection	APC
D10 ~ D13	Antenna switch	ON during transmission
D14	Power reverse connection protection	

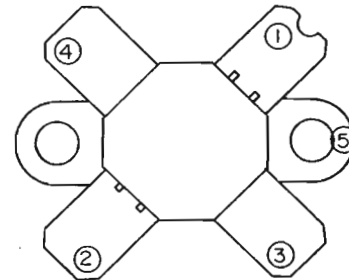
SEMICONDUCTOR DATA

Power Transistor 2SC3240(28 TX-RX Unit)

● Electrical characteristics

Item	Conditions	Maximum value
VCBO		50V
VEBO		5V
VCEO	$R_{BE} = \infty$	20V
IC		25A
Pc	$T_c = 25^\circ\text{C}$	270W
Tj		+175°C
Tstg		-55 ~ +175°C
Ta	25 ± 3°C	

● External view



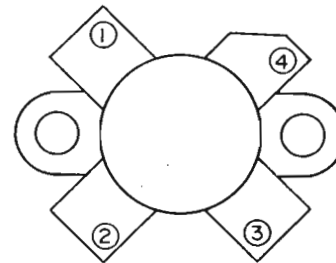
- ① Collector
- ② Base
- ③ Emitter
- ④ Emitter
- ⑤ Flange (Emitter)

Power Transistor MRF492 (50 TX-RX Unit)

● Electrical characteristics

Item	Conditions	Maximum value
VCBO		36V
VEBO		4.0V
VCEO		18V
IC		20A
Pd	$T_c = 25^\circ\text{C}$	250W
Tstg		-65 ~ +150°C

● External view

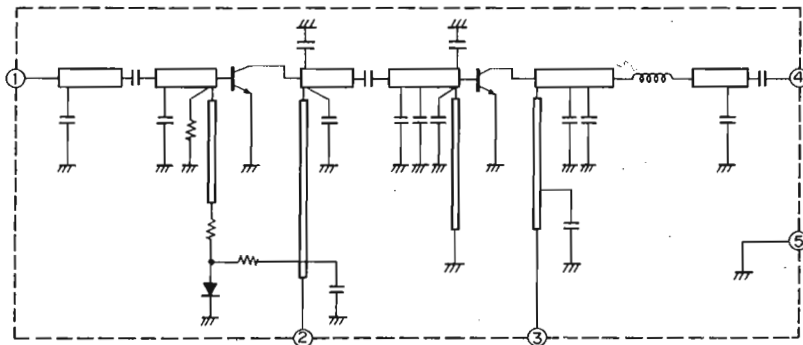


- ① Emitter
- ② Base
- ③ Emitter
- ④ Collector

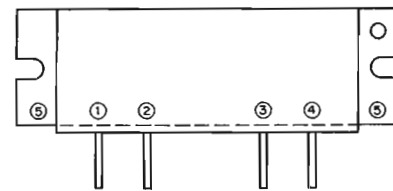
SEMICONDUCTOR DATA

Power module S-AV17 (144 TX-RX UNIT)

● Equivalent circuit diagram



● External view



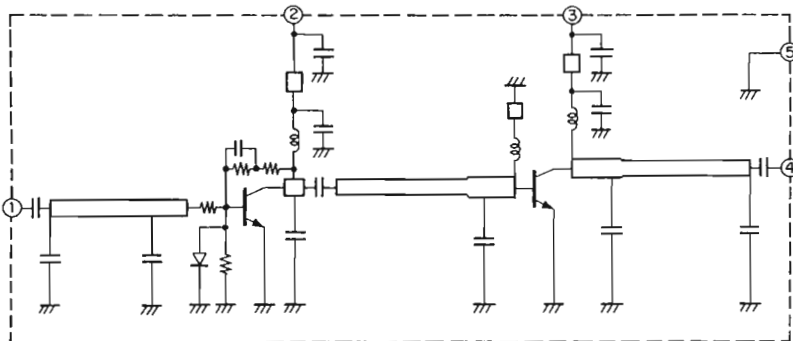
- ① Input terminal
- ② First power supply terminal
- ③ End power supply terminal
- ④ Output terminal
- ⑤ Fin (earth)

● Electrical characteristics

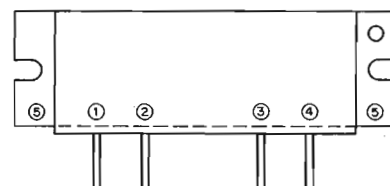
Item	Symbol	Tc (°C)	Conditions	Standard value			Unit
				Minimum	Standard	Maximum	
Frequency	f			144		148	MHz
Output power	Po	25	Vcc = 12.5V, Pin = 400mW, Zg = Zl = 50Ω			65	W
Combined efficiency	ηT	25	Same as above	45			%
Harmonics	HRM	25	Same as above		-30	-25	dB

Power module M57774 (220 TX-RX UNIT)

● Equivalent circuit diagram



● External view



- ① Input terminal
- ② First power supply terminal
- ③ End power supply terminal
- ④ Output terminal
- ⑤ Fin (earth)

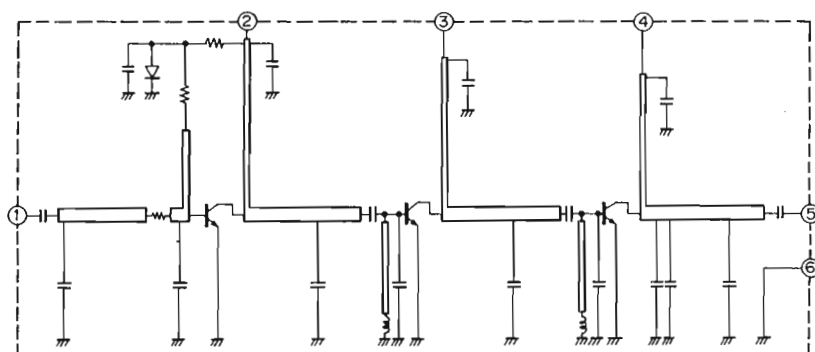
● Electrical characteristics

Item	Symbol	Tc (°C)	Conditions	Standard value			Unit
				Minimum	Standard	Maximum	
Frequency	f			220		225	MHz
Output power	Po	25	Vcc = 12.5V, Pin = 0.3W, Zg = Zl = 50Ω	30	33	40	W
Combined efficiency	ηT	25	Same as above	43	48		%
Secondary spurious strength		25	Same as above			-30	dB
Tertiary spurious strength		25	Same as above			-35	dB

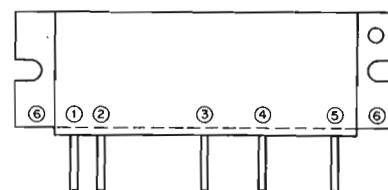
SEMICONDUCTOR DATA

Power module M57788M(430 TX-RX UNIT)

● Equivalent circuit diagram



● External view



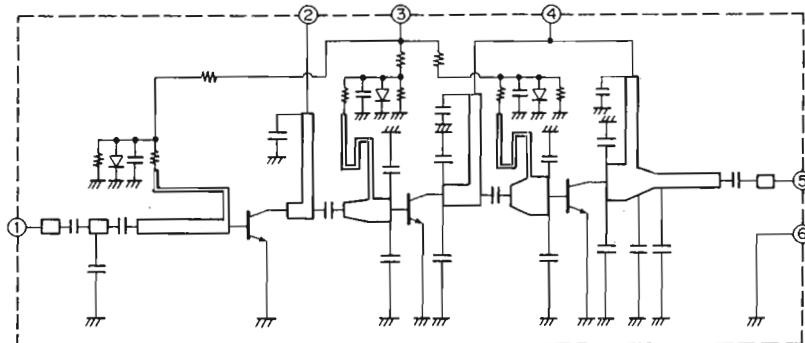
- ① Input terminal
- ② First power supply terminal
- ③ Driver power supply terminal
- ④ End power supply terminal
- ⑤ Output terminal
- ⑥ Fin (earth)

● Electrical characteristics

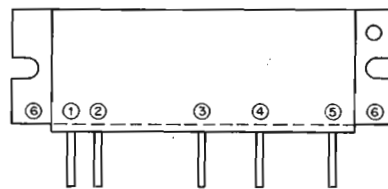
Item	Symbol	Tc (°C)	Conditions	Standard value			Unit
				Minimum	Standard	Maximum	
Frequency	f			430		450	MHz
Output power	Po	25	Vcc = 12.5V, Pin = 400mW, Zg = Zl = 50Ω	40	45		W
Combined efficiency	ηT	25	Same as above	40	45		%
Secondary spurious strength		25	Same as above			-30	dB
Tertiary spurious strength		25	Same as above			-30	dB

Power module M67711 (1200 TX-RX UNIT)

● Equivalent circuit diagram



● External view



- ① Input terminal
- ② First power supply terminal
- ③ Driver power supply terminal
- ④ End power supply terminal
- ⑤ Output terminal
- ⑥ Fin (earth)

● Electrical characteristics

Item	Symbol	Tc (°C)		Standard value			Unit
				Minimum	Standard	Maximum	
Frequency	f			1.24		1.3	GHz
Output power	Po	25	Vcc = 12.5 V, Vbb = 10 V Pin = 1 W, Zg = Zl = 50Ω	16	17		W
Combined efficiency	ηT	25	Same as above	30	35		%
Secondary spurious strength		25	Same as above			-45	dB