

TK-3107

SERVICE MANUAL / 维修手册

SUPPLEMENT / 追补版 M6



This TK-3107 service manual contains a number of sections which differ from the service manual (B51-8489-10) for the TK-3107. For items other than those in this TK-3107 service manual please refer to the service manual (B51-8489-10) for the TK-3107.

本TK-3107维修手册记述了不同于TK-3107用维修手册（B51-8489-10）部分的内容。对于本TK-3107维修手册中未予记载的项目，请参阅TK-3107的维修手册（B51-8489-10）。

TK-3107 M6

CONTENTS

PARTS LIST	3
EXPLODED VIEW	9
PACKING	10
ADJUSTMENT	11
PC BOARD	
TX-RX UNIT (X57-6030-XX)	17
SCHEMATIC DIAGRAM	23
KNB-15A (Ni-Cd BATTERY)	31
SPECIFICATIONS	BACK COVER

目录

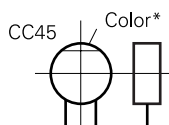
零件表	3
部件分解图	9
包装	10
调整	11
PC板视图	
发射-接收单元 (X57-6030-XX)	17
原理图	23
KNB-15A (镍-铬电池)	31
规格	背面

PARTS LIST / 零件表

CAPACITORS

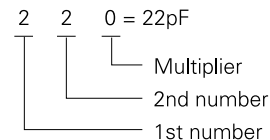
$\frac{CC}{1} \frac{45}{2} \frac{TH}{3} \frac{1H}{4} \frac{220}{5} \frac{J}{6}$

- 1 = Type ... ceramic, electrolytic, etc.
- 2 = Shape ... round, square, ect.
- 3 = Temp. coefficient
- 4 = Voltage rating
- 5 = Value
- 6 = Tolerance



• Capacitor value

- 010 = 1pF
- 100 = 10pF
- 101 = 100pF
- 102 = 1000pF = 0.001μF
- 103 = 0.01μF



• Temperature coefficient

1st Word	C	L	P	R	S	T	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
ppm/°C	0	-80	-150	-220	-330	-470	-750

2nd Word	G	H	J	K	L
ppm/°C	±30	±60	±120	±250	±500

Example : CC45TH = -470 ± 60ppm/°C

• Tolerance (More than 10pF)

Code	C	D	G	J	K	M	X	Z	P	No code
(%)	±0.25	±0.5	±2	±5	±10	±20	+40 -20	+80 -20	+100 -0	More than 10μF - 10 ~ +50 Less than 4.7μF - 10 ~ +75

(Less than 10pF)

Code	B	C	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	±2

• Voltage rating

2nd word \ 1st word	A	B	C	D	E	F	G	H	J	K	V
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	-
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	-
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	-

• Chip capacitors

(EX) C C 7 3 F S L 1 H 0 0 0 J



(Chip) (CH, RH, UJ, SL)

(EX) C K 7 3 F F 1 H 0 0 0 Z



(Chip) (B, F)

- Refer to the table above.
- 1 = Type
 - 2 = Shape
 - 3 = Dimension
 - 4 = Temp. coefficient
 - 5 = Voltage rating
 - 6 = Value
 - 7 = Tolerance

Dimension (Chip capacitors)

Dimension code	L	W	T
Empty	5.6 ± 0.5	5.0 ± 0.5	Less than 2.0
A	4.5 ± 0.5	3.2 ± 0.4	Less than 2.0
B	4.5 ± 0.5	2.0 ± 0.3	Less than 2.0
C	4.5 ± 0.5	1.25 ± 0.2	Less than 1.25
D	3.2 ± 0.4	2.5 ± 0.3	Less than 1.5
E	3.0 ± 0.2	1.6 ± 0.2	Less than 1.25
F	2.0 ± 0.3	1.25 ± 0.2	Less than 1.25
G	1.6 ± 0.2	0.8 ± 0.2	Less than 1.0
H	1.0 ± 0.05	0.5 ± 0.05	0.5 ± 0.05

RESISTORS

• Chip resistor (Carbon)

(EX) R K 7 3 E B 2 B 0 0 0 J



(Chip) (B,F)

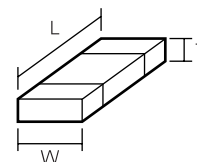
• Carbon resistor (Normal type)

(EX) R D 1 4 B B 2 C 0 0 0 J



- 1 = Type
- 2 = Shape
- 3 = Dimension
- 4 = Temp. coefficient
- 5 = Rating wattage
- 6 = Value
- 7 = Tolerance

Dimension



Dimension (Chip resistor)

Dimension code	L	W	T
E	3.2 ± 0.2	1.6 ± 0.2	1.0
F	2.0 ± 0.3	1.25 ± 0.2	1.0
G	1.6 ± 0.2	0.8 ± 0.2	0.5 ± 0.1
H	1.0 ± 0.05	0.5 ± 0.05	0.35 ± 0.05

Rating wattage

Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	3A	1W
2A	1/10W	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

PARTS LIST / 零件表

* New Parts. △ indicates safety critical components.
 Parts without **Parts No.** are not supplied.
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
 Teile ohne **Parts No.** werden nicht geliefert.

TK-3107 M6
TX-RX UNIT (X57-6030-28)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
TK-3107 M6						C7			CK73GB1H471K	CHIP C	470PF K
1	1A		A02-2448-33	CABINET ASSY		C9			CC73GCH1H100D	CHIP C	10PF D
2	3B		A82-0034-03	REAR PANEL		C10			CC73GCH1H470J	CHIP C	47PF J
3	3D		B09-0351-03	CAP		C12			C92-0001-05	CHIP-C	0.1UF 35WV
4	1C	*	B62-1687-00	INSTRUCTION MANUAL		C14			CC73GCH1H100D	CHIP C	10PF D
5	3A	*	B72-2120-04	MODEL NAME PLATE		C15			C92-0004-05	CHIP-TAN	1.0UF 16WV
6	2B		E04-0413-05	RF COAXIAL RECEPTACLE (SMA)		C16			CC73GCH1H680J	CHIP C	68PF J
7	3A		E23-1183-04	RELAY TERMINAL		C17			CK73GB1H331K	CHIP C	330PF K
8	1A		G01-0881-04	COIL SPRING (BATT RELEASE)		C18			C92-0001-05	CHIP-C	0.1UF 35WV
9	2B		G11-2588-04	RUBBER SHEET (CHASSIS)		C19,20			CK73GB1H103K	CHIP C	0.010UF K
10	2B		G13-1709-04	CUSHION		C23			C92-0560-05	CHIP-TAN	10UF 6.3WV
11	3B		G13-1763-04	CUSHION (CHASSIS-BATT)		C24			CK73GB1H103K	CHIP C	0.010UF K
12	2B,3A		G13-1834-04	CUSHION		C25			CK73GB1H471K	CHIP C	470PF K
13	2B		G13-1959-04	CUSHION		C26			CC73GCH1H121J	CHIP C	120PF J
14	2B		G53-0791-03	PACKING (SP/MIC PLUG)		C27			CK73GB1H471K	CHIP C	470PF K
15	2A		G53-0842-13	PACKING (SPEAKER)		C28			CC73GCH1H330J	CHIP C	33PF J
16	2A		G53-0860-04	PACKING (SIDE)		C29			CC73GCH1H020C	CHIP C	2.0PF C
17	1C		H12-3037-02	PACKING FIXTURE		C30			CK73GB1H102K	CHIP C	1000PF K
18	1C		H25-0085-04	PROTECTION BAG (100/200/0.07)		C31			CC73GCH1H101J	CHIP C	100PF J
19	2D		H25-2012-04	PROTECTION BAG (75/100/0.08)		C34			CC73GCH1H560J	CHIP C	56PF J
20	3C		H52-1560-02	ITEM CARTON CASE		C35			CC73GCH1H080B	CHIP C	8.0PF B
21	1A		J19-1572-04	HOLDER (BATT RELEASE)		C36			CC73GCH1H070B	CHIP C	7.0PF B
22	2B		J19-5344-03	HOLDER (VOL/ENC)		C37			CC73GCH1H060B	CHIP C	6.0PF B
23	3D		J21-4493-04	SP/MIC HOLDER		C38			CC73GCH1H050C	CHIP C	5.0PF C
24	3B(2D)		J29-0658-05	BELT HOOK		C39			CC73GCH1H040B	CHIP C	4.0PF B
25	2B		J82-0059-05	FPC		C40			CC73GCH1H0R5B	CHIP C	0.5PF B
26	1B		K29-5255-03	KNOB (VOL)		C41,42			CC73GCH1H060B	CHIP C	6.0PF B
27	1A		K29-5274-03	BUTTON KNOB (MONI)		C43			CK73GB1H102K	CHIP C	1000PF K
28	1A		K29-5275-23	BUTTON KNOB (PTT)		C44			CC73GCH1H060B	CHIP C	6.0PF B
29	1B		K29-5278-03	KNOB (ENC)		C45			CC73GCH1H090B	CHIP C	9.0PF B
30	1A		K29-5337-03	LEVER KNOB (BATT RELEASE)		C46			CK73GB1H471K	CHIP C	470PF K
A	2B		N09-2319-05	BINDING HEAD SCREW (SMA)		C47			CC73GCH1H0R3B	CHIP C	0.3PF B
B	1B		N14-0581-04	CIRCULAR NUT (VOL)		C48			CK73GB1H471K	CHIP C	470PF K
C	1B		N14-0582-14	CIRCULAR NUT (SMA)		C49			CC73GCH1H0R5B	CHIP C	0.5PF B
D	3A		N30-2606-46	PAN HEAD MACHINE SCREW		C51			CC73GCH1H680J	CHIP C	68PF J
E	3A		N79-2035-46	PAN HEAD TAPTITE SCREW		C52			CK73GB1H471K	CHIP C	470PF K
F	2A,2B		N83-2005-46	PAN HEAD TAPTITE SCREW		C53			CC73GCH1H060D	CHIP C	6.0PF D
G	2B		N78-2640-46	PAN HEAD TAPTITE SCREW		C54			CC73GCH1H030B	CHIP C	3.0PF B
H	3D		N99-0396-05	SCREW SET		C55			CK73GB1H471K	CHIP C	470PF K
32	2B		R31-0624-05	VARIABLE RESISTOR		C56			C92-0507-05	CHIP-TAN	4.7UF 6.3WV
33	2B		S60-0420-05	ROTARY SWITCH		C58			CC73GCH1H020B	CHIP C	2.0PF B
SP	1A		T07-0369-05	SPEAKER		C100			CC73GCH1H220J	CHIP C	22PF J
ANT	1C		T90-0735-05	HELICAL ANTENNA		C101-103			CK73GB1H471K	CHIP C	470PF K
TX-RX UNIT (X57-6030-28) :M6						C104			CK73GB1C104K	CHIP C	0.10UF K
D400			B30-2156-05	LED (RED)		C105			CC73GCH1H060D	CHIP C	6.0PF D
D401			B30-2157-05	LED (YELLOW)		C106,107			CK73GB1H471K	CHIP C	470PF K
C1			CK73GB1C104K	CHIP C	0.10UF K	C108			CC73GCH1H070D	CHIP C	7.0PF D
C2,3			CC73GCH1H101J	CHIP C	100PF J	C109,110			CK73GB1H471K	CHIP C	470PF K
C4			CK73GB1C104K	CHIP C	0.10UF K	C111			CC73GCH1H060D	CHIP C	6.0PF D
C5			C92-0507-05	CHIP-TAN	4.7UF 6.3WV	C112			CK73GB1H471K	CHIP C	470PF K
C6			CC73GCH1H101J	CHIP C	100PF J	C113			CK73GB1C104K	CHIP C	0.10UF K
						C114,115			CK73GB1H471K	CHIP C	470PF K
						C116			CK73GB1H102K	CHIP C	1000PF K
						C118			CC73GCH1H270J	CHIP C	27PF J
						C119			CK73GB1H102K	CHIP C	1000PF K

PARTS LIST / 零件表

TX-RX UNIT (X57-6030-28)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
C120,121			CK73GB1H471K	CHIP C 470PF K		C238			CC73GCH1H030B	CHIP C 3.0PF B	
C123			CK73GB1H102K	CHIP C 1000PF K		C239			CC73GCH1H120G	CHIP C 12PF G	
C125			CK73GB1H471K	CHIP C 470PF K		C241			CC73GCH1H060B	CHIP C 6.0PF B	
C126			CK73FB1A105K	CHIP C 1.0UF K		C252			CC73GCH1H120G	CHIP C 12PF G	
C127			C92-0565-05	CHIP-TAN 6.8UF 10WV		C253,254			CK73GB1H471K	CHIP C 470PF K	
C128			CK73GB1H103K	CHIP C 0.010UF K		C255			CC73GCH1H120G	CHIP C 12PF G	
C129			CK73GB1H471K	CHIP C 470PF K		C256			CK73GB1C104K	CHIP C 0.10UF K	
C130			CC73FCH1H220G	CHIP C 22PF G		C257			CK73GB1H471K	CHIP C 470PF K	
C131			CK73GB1C104K	CHIP C 0.10UF K		C258			CK73GB1C104K	CHIP C 0.10UF K	
C132			CK73GB1H471K	CHIP C 470PF K		C259			CC73GCH1H100C	CHIP C 10PF C	
C134			CC73GCH1H101J	CHIP C 100PF J		C260			CC73GCH1H080B	CHIP C 8.0PF B	
C135			CC73GCH1H010C	CHIP C 1.0PF C		C300			CK73GB1H822K	CHIP C 8200PF K	
C136			CC73GCH1H070B	CHIP C 7.0PF B		C301			CK73GB1H103J	CHIP C 0.010UF J	
C138,139			CK73GB1H471K	CHIP C 470PF K		C302,303			CK73GB1C104K	CHIP C 0.10UF K	
C140			CC73GCH1H150G	CHIP C 15PF G		C304			C92-0560-05	CHIP-TAN 10UF 6.3WV	
C141			CK73GB1H471K	CHIP C 470PF K		C305			CK73GB1E123K	CHIP C 0.012UF K	
C142			CC73GCH1H090B	CHIP C 9.0PF B		C306			CK73GB1C473K	CHIP C 0.047UF K	
C143			CK73GB1H471K	CHIP C 470PF K		C307			C92-0560-05	CHIP-TAN 10UF 6.3WV	
C144			CC73GCH1H020B	CHIP C 2.0PF B		C308			CK73GB1H562K	CHIP C 5600PF K	
C145			CK73GB1H471K	CHIP C 470PF K		C309			CK73GB1H103J	CHIP C 0.010UF J	
C147			CC73GCH1H030B	CHIP C 3.0PF B		C311			C92-0560-05	CHIP-TAN 10UF 6.3WV	
C149			CC73GCH1H030B	CHIP C 3.0PF B		C312			CK73GB1H103J	CHIP C 0.010UF J	
C150			CC73GCH1H070B	CHIP C 7.0PF B		C313			CK73FB1A105K	CHIP C 1.0UF K	
C151			CC73GCH1H030B	CHIP C 3.0PF B		C314			CK73GB1H102K	CHIP C 1000PF K	
C153			CC73GCH1H050B	CHIP C 5.0PF B		C316			CK73GB1H103J	CHIP C 0.010UF J	
C154			CC73GCH1H020B	CHIP C 2.0PF B		C318			CK73GB1C333J	CHIP C 0.033UF J	
C156			CK73GB1C104K	CHIP C 0.10UF K		C319			CK73GB1C473J	CHIP C 0.047UF J	
C157			CK73GB1H471K	CHIP C 470PF K		C320,321			CK73GB1C333J	CHIP C 0.033UF J	
C165			CK73GB1H471K	CHIP C 470PF K		C322			CK73FB1E104K	CHIP C 0.10UF K	
C200			C92-0560-05	CHIP-TAN 10UF 6.3WV		C327			CK73GB1C104K	CHIP C 0.10UF K	
C201			CK73GB1H103K	CHIP C 0.010UF K		C330			CC73GCH1H101J	CHIP C 100PF J	
C202			CC73GCH1H180J	CHIP C 18PF J		C331			CK73FB1C474K	CHIP C 0.47UF K	
C203			CK73GB1H471K	CHIP C 470PF K		C332			C92-0560-05	CHIP-TAN 10UF 6.3WV	
C204			CK73GB1H472K	CHIP C 4700PF K		C333			CK73GB1A474K	CHIP C 0.47UF K	
C205,206			CC73GCH1H221J	CHIP C 220PF J		C334			CC73GCH1H221J	CHIP C 220PF J	
C207			CK73GB1C104K	CHIP C 0.10UF K		C335			CK73GB1C473K	CHIP C 0.047UF K	
C208			CC73GCH1H270J	CHIP C 27PF J		C336			CK73GB1H103K	CHIP C 0.010UF K	
C209			CK73GB1C104K	CHIP C 0.10UF K		C337			C92-0665-05	TANTAL 100UF 6.3WV	
C210			CK73GB1H103K	CHIP C 0.010UF K		C338			CC73GCH1H560J	CHIP C 56PF J	
C211			CK73GB1C104K	CHIP C 0.10UF K		C400			CK73GB1C104K	CHIP C 0.10UF K	
C212			CC73GCH1H330J	CHIP C 33PF J		C402-404			CK73GB1H471K	CHIP C 470PF K	
C213			CK73GB1C104K	CHIP C 0.10UF K		C406			CK73GB1H471K	CHIP C 470PF K	
C214			CK73GB1H103K	CHIP C 0.010UF K		C407			CK73GB1H102K	CHIP C 1000PF K	
C215			CC73GCH1H130J	CHIP C 13PF J		C408			C92-0560-05	CHIP-TAN 10UF 6.3WV	
C217			CK73GB1H103K	CHIP C 0.010UF K		C409			CC73GCH1H030B	CHIP C 3.0PF B	
C218			CK73GB1H471K	CHIP C 470PF K		C410,411			CK73GB1H471K	CHIP C 470PF K	
C219			CC73GCH1H150J	CHIP C 15PF J		C412			CC73GCH1H100D	CHIP C 10PF D	
C220,221			CK73GB1H103K	CHIP C 0.010UF K		C413			CK73GB1H102K	CHIP C 1000PF K	
C222			CC73GCH1H060B	CHIP C 6.0PF B		C414			CK73GB1H471K	CHIP C 470PF K	
C223			CC73GCH1H020C	CHIP C 2.0PF C		C415			CC73GCH1H100D	CHIP C 10PF D	
C224			CK73GB1H471K	CHIP C 470PF K		C416			CK73GB1H471K	CHIP C 470PF K	
C226			CC73GCH1H020B	CHIP C 2.0PF B		C417			CK73EF1C105Z	CHIP C 1.0UF Z	
C227			CC73GCH1H220J	CHIP C 22PF J		C418			CK73GB1H103K	CHIP C 0.010UF K	
C228			CC73GCH1H080B	CHIP C 8.0PF B		C420-422			CK73GB1H103K	CHIP C 0.010UF K	
C229			CK73GB1H471K	CHIP C 470PF K		C423			CK73GB1C333K	CHIP C 0.033UF K	
C231,232			CK73GB1H471K	CHIP C 470PF K		C424			CK73FB1A105K	CHIP C 1.0UF K	
C233			CC73GCH1H0R3B	CHIP C 0.3PF B		C425			CK73GB1H103K	CHIP C 0.010UF K	
C234			CC73GCH1HR75B	CHIP C 0.75PF B		C427			CK73GB1H471K	CHIP C 470PF K	
C235			CC73GCH1H070B	CHIP C 7.0PF B		C429,430			CK73FB1A105K	CHIP C 1.0UF K	
C237			CK73GB1H471K	CHIP C 470PF K		C500,501			CK73GB1C273K	CHIP C 0.027UF K	

PARTS LIST / 零件表

TX-RX UNIT (X57-6030-28)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
C502			CK73GB1H392K	CHIP C 3900PF K		L16, 17			L40-2285-38	SMALL FIXED INDUCTOR (220NH)	
C503			CK73GB1C333K	CHIP C 0.033UF K		L19			L92-0140-05	FERRITE CHIP	
C504			C92-0507-05	CHIP-TAN 4.7UF 6.3WV		L20			L40-3391-86	SMALL FIXED INDUCTOR (3.3U)	
C505			CK73FB1A105K	CHIP C 1.0UF K		L21			L40-2275-77	SMALL FIXED INDUCTOR (22NH)	
C506			CK73GB1H471K	CHIP C 470PF K		L100			L40-2275-77	SMALL FIXED INDUCTOR (22NH)	
C507			C92-0587-05	CHIP-TAN 2.2UF 4WV		L101			L40-1875-77	SMALL FIXED INDUCTOR (18NH)	
C508			CK73GB1H103K	CHIP C 0.010UF K		L102			L40-1575-77	SMALL FIXED INDUCTOR (15NH)	
C509			CK73GB1H332K	CHIP C 3300PF K		L103			L92-0140-05	FERRITE CHIP	
C510			CC73GCH1E681J	CHIP C 680PF J		L104			L40-1098-76	SMALL FIXED INDUCTOR (1UH)	
C511			CK73GB1C473K	CHIP C 0.047UF K		L105			L92-0149-05	FERRITE CHIP	
C512			CK73GB1H332K	CHIP C 3300PF K		L106			L34-4551-05	AIR-CORE COIL	
C513			CC73GCH1E681J	CHIP C 680PF J		L107			L92-0149-05	FERRITE CHIP	
C514			CK73GB1C473K	CHIP C 0.047UF K		L109			L40-2285-54	SMALL FIXED INDUCTOR (220NH)	
C515			CK73GB1H103K	CHIP C 0.010UF K		L110			L34-4547-05	AIR-CORE COIL	
C516			CC73GCH1H100D	CHIP C 10PF D		L112			L34-4547-05	AIR-CORE COIL	
C517			CK73GB1H471K	CHIP C 470PF K		L113			L34-4548-05	AIR-CORE COIL	
C518			CK73GB1E223J	CHIP C 0.022UF J		L114			L34-4547-05	AIR-CORE COIL	
C519			C92-0507-05	CHIP-TAN 4.7UF 6.3WV		L118			L40-1092-81	SMALL FIXED INDUCTOR	
C520			CK73GB1E393J	CHIP C 0.039UF J		L119			L40-4763-92	SMALL FIXED INDUCTOR (4.7NH)	
C521			CK73GB1H102K	CHIP C 1000PF K		L120			L33-1273-05	SMALL FIXED INDUCTOR	
C522			CK73FB1E104K	CHIP C 0.10UF K		L200			L40-3385-85	SMALL FIXED INDUCTOR (0.33U)	
C523			C92-0587-05	CHIP-TAN 2.2UF 4WV		L201			L40-5685-85	SMALL FIXED INDUCTOR (0.56U)	
C524			CK73GB1C223K	CHIP C 0.022UF K		L202			L40-2275-77	SMALL FIXED INDUCTOR (22NH)	
C525			CK73GB1C104K	CHIP C 0.10UF K		L203,204			L34-4546-05	AIR-CORE COIL	
C526			CK73GB1H471K	CHIP C 470PF K		L206			L40-1875-77	SMALL FIXED INDUCTOR (18NH)	
C527			C92-0560-05	CHIP-TAN 10UF 6.3WV		L207			L40-3975-77	SMALL FIXED INDUCTOR (39NH)	
C528			CK73GB1H471K	CHIP C 470PF K		L208-211			L34-4546-05	AIR-CORE COIL	
C529			CK73FB1H471K	CHIP C 470PF K		L212			L34-4554-05	COIL	
C530,531			CC73GCH1H221J	CHIP C 220PF J		L212			L34-4585-05	COIL	
C532			CK73GB1H471K	CHIP C 470PF K		L214			L34-4546-05	AIR-CORE COIL	
TC1,2			C05-0384-05	CERAMIC TRIMMER CAP (10P)		L400			L40-2281-86	SMALL FIXED INDUCTOR (0.22U)	
TC201			C05-0383-05	CERAMIC TRIMMER CAP (6P)		L401			L92-0140-05	FERRITE CHIP	
TC202,203			C05-0369-05	CERAMIC TRIMMER CAP		L402,403			L40-2281-86	SMALL FIXED INDUCTOR (0.22U)	
34	2B		E23-1182-04	RELAY TERMINAL		L500			L92-0140-05	FERRITE CHIP	
CN400			E40-5998-05	PIN ASSY		L501,502			L92-0149-05	FERRITE CHIP	
J500			E11-0457-05	PHONE JACK		X1			L77-1877-05	TCXO	
F500			F53-0130-05	FUSE		X400			L77-1761-05	CRYSTAL RESONATOR (7.3728MHZ)	
F500			F53-0217-05	FUSE		XF201			L71-0522-05	MCF (38.85MHZ)	
12	2B,3A		G13-1834-04	CUSHION		G	2B		N78-2640-46	PAN HEAD TAPTITE SCREW	
35	2B		G53-0862-04	PACKING		CP1			R90-0724-05	MULTI-COMP 1K X4	
36	1B		J19-1571-04	HOLDER		R1,2			RK73GB1J102J	CHIP R 1.0K J 1/16W	
37	1B		J30-1249-04	SPACER		R3			RK73GB1J100J	CHIP R 10 J 1/16W	
CF200			L72-0958-05	CERAMIC FILTER		R4			RK73GB1J102J	CHIP R 1.0K J 1/16W	
L1			L92-0140-05	FERRITE CHIP		R5			RK73GB1J561J	CHIP R 560 J 1/16W	
L2			L40-1005-85	SMALL FIXED INDUCTOR (10U)		R6			RK73GB1J154J	CHIP R 150K J 1/16W	
L4			L40-4781-86	SMALL FIXED INDUCTOR (0.47U)		R7			RK73GB1J561J	CHIP R 560 J 1/16W	
L5			L40-5681-86	SMALL FIXED INDUCTOR (0.56U)		R8			RK73GB1J334J	CHIP R 330K J 1/16W	
L6			L40-1875-77	SMALL FIXED INDUCTOR (18NH)		R9			RK73GB1J272J	CHIP R 2.7K J 1/16W	
L7			L92-0140-05	FERRITE CHIP		R10			RK73GB1J222J	CHIP R 2.2K J 1/16W	
L8			L40-2785-92	SMALL FIXED INDUCTOR (270NH)		R11			RK73GB1J473J	CHIP R 47K J 1/16W	
L9			L40-3391-86	SMALL FIXED INDUCTOR (3.3U)		R12			RK73GB1J274J	CHIP R 270K J 1/16W	
L10			L92-0140-05	FERRITE CHIP		R13			R92-1252-05	CHIP R 0 OHM J 1/16W	
L11			L40-3391-86	SMALL FIXED INDUCTOR (3.3U)		R14			RK73GB1J101J	CHIP R 100 J 1/16W	
L12			L40-2785-92	SMALL FIXED INDUCTOR (270NH)		R15			RK73GB1J103J	CHIP R 10K J 1/16W	
L13			L33-0746-05	SMALL FIXED INDUCTOR		R16			RK73GB1J473J	CHIP R 47K J 1/16W	
L14			L33-0751-05	SMALL FIXED INDUCTOR		R18			RK73GB1J104J	CHIP R 100K J 1/16W	
L15			L40-1885-92	SMALL FIXED INDUCTOR (180NH)		R19			RK73GB1J101J	CHIP R 100 J 1/16W	
						R20			RK73GB1J102J	CHIP R 1.0K J 1/16W	
						R21			RK73GB1J104J	CHIP R 100K J 1/16W	

PARTS LIST / 零件表

TX-RX UNIT (X57-6030-28)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
R22			RK73GB1J473J	CHIP R 47K J 1/16W		R210,211			RK73GB1J471J	CHIP R 470 J 1/16W	
R23			RK73GB1J392J	CHIP R 3.9K J 1/16W		R212			RK73GB1J470J	CHIP R 47 J 1/16W	
R24			RK73GB1J472J	CHIP R 4.7K J 1/16W		R213			R92-1252-05	CHIP R 0 OHM J 1/16W	
R25			RK73GB1J181J	CHIP R 180 J 1/16W		R214			RK73GB1J103J	CHIP R 10K J 1/16W	
R26			RK73GB1J101J	CHIP R 100 J 1/16W		R215			RK73GB1J221J	CHIP R 220 J 1/16W	
R27			RK73GB1J331J	CHIP R 330 J 1/16W		R216			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R28			RK73GB1J220J	CHIP R 22 J 1/16W		R217			R92-1252-05	CHIP R 0 OHM J 1/16W	
R29			R92-1252-05	CHIP R 0 OHM J 1/16W		R218			RK73GB1J101J	CHIP R 100 J 1/16W	
R30			RK73GB1J124J	CHIP R 120K J 1/16W		R219			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R31			RK73GB1J101J	CHIP R 100 J 1/16W		R220			RK73GB1J151J	CHIP R 150 J 1/16W	
R32			RK73GB1J472J	CHIP R 4.7K J 1/16W		R221			RK73GB1J224J	CHIP R 220K J 1/16W	
R33			RK73GB1J102J	CHIP R 1.0K J 1/16W		R222			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R34			RK73GB1J104J	CHIP R 100K J 1/16W		R223			RK73GB1J104J	CHIP R 100K J 1/16W	
R100			RK73GB1J332J	CHIP R 3.3K J 1/16W		R224,225			R92-1252-05	CHIP R 0 OHM J 1/16W	
R101			RK73GB1J562J	CHIP R 5.6K J 1/16W		R226			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R102			RK73GB1J271J	CHIP R 270 J 1/16W		R227			R92-1252-05	CHIP R 0 OHM J 1/16W	
R103			RK73GB1J332J	CHIP R 3.3K J 1/16W		R228			RK73GB1J104J	CHIP R 100K J 1/16W	
R104			RK73GB1J100J	CHIP R 10 J 1/16W		R230-232			RK73GB1J104J	CHIP R 100K J 1/16W	
R105,106			RK73GB1J332J	CHIP R 3.3K J 1/16W		R300			RK73GH1J913D	RESISTOR	
R107			RK73GB1J473J	CHIP R 47K J 1/16W		R301,302			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R108			RK73GB1J331J	CHIP R 330 J 1/16W		R303			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R109			RK73GB1J220J	CHIP R 22 J 1/16W		R304			RK73GB1J105J	CHIP R 1.0M J 1/16W	
R110			RK73GB1J681J	CHIP R 680 J 1/16W		R305			RK73GB1J183J	CHIP R 18K J 1/16W	
R111			RK73GB1J220J	CHIP R 22 J 1/16W		R306			RK73GB1J124J	CHIP R 120K J 1/16W	
R112			RK73GB1J152J	CHIP R 1.5K J 1/16W		R307			RK73GB1J473J	CHIP R 47K J 1/16W	
R113			RK73GB1J331J	CHIP R 330 J 1/16W		R308			RK73GB1J103J	CHIP R 10K J 1/16W	
R115			RK73GB1J100J	CHIP R 10 J 1/16W		R309			RK73GB1J474J	CHIP R 470K J 1/16W	
R117,118			RK73GB1J473J	CHIP R 47K J 1/16W		R310,311			R92-0670-05	CHIP R 0 OHM	
R119			RK73GB1J472J	CHIP R 4.7K J 1/16W		R312			RK73GB1J123J	CHIP R 12K J 1/16W	
R120			R92-1252-05	CHIP R 0 OHM J 1/16W		R313			RK73GB1J104J	CHIP R 100K J 1/16W	
R121			RK73GB1J470J	CHIP R 47 J 1/16W		R314			RK73GJ1J564D	RESISTOR	
R122			RK73GB1J681J	CHIP R 680 J 1/16W		R315			RK73GH1J474D	RESISTOR	
R123			R92-0670-05	CHIP R 0 OHM		R316			RK73GB1J274J	CHIP R 270K J 1/16W	
R124			RK73GB1J681J	CHIP R 680 J 1/16W		R317			RK73GH1J274D	RESISTOR	
R125			RK73GB1J183J	CHIP R 18K J 1/16W		R318			RK73GB1J184J	CHIP R 180K J 1/16W	
R126			RK73GB1J473J	CHIP R 47K J 1/16W		R320			RK73GB1J473J	CHIP R 47K J 1/16W	
R128			RK73GB1J470J	CHIP R 47 J 1/16W		R321			RK73GB1J223J	CHIP R 22K J 1/16W	
R130-132			RK73EB2ER39K	CHIP R 0.39 K 1/4W		R322			RK73GH1J224D	RESISTOR	
R133-138			RK73GH1J154D	RESISTOR		R323			RK73GB1J104J	CHIP R 100K J 1/16W	
R139			RK73GB1J271J	CHIP R 270 J 1/16W		R324			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R140			RK73GB1J103J	CHIP R 10K J 1/16W		R325			RK73GB1J104J	CHIP R 100K J 1/16W	
R141			RK73GB1J473J	CHIP R 47K J 1/16W		R326			RK73GH1J562D	CHIP R 5.6K D 1/16W	
R142			RK73GB1J105J	CHIP R 1.0M J 1/16W		R327			R92-1252-05	CHIP R 0 OHM J 1/16W	
R143			R92-1252-05	CHIP R 0 OHM J 1/16W		R328			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R144			RK73GB1J222J	CHIP R 2.2K J 1/16W		R329			R92-1252-05	CHIP R 0 OHM J 1/16W	
R145			RK73GB1J184J	CHIP R 180K J 1/16W		R330			RK73GB1J473J	CHIP R 47K J 1/16W	
R146			RK73GB1J104J	CHIP R 100K J 1/16W		R331			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R147			R92-1252-05	CHIP R 0 OHM J 1/16W		R332			RK73GB1J151J	CHIP R 150 J 1/16W	
R152			RK73GB1J391J	CHIP R 390 J 1/16W		R333			RK73GB1J474J	CHIP R 470K J 1/16W	
R153			RK73GB1J332J	CHIP R 3.3K J 1/16W		R334			RK73GB1J100J	CHIP R 10 J 1/16W	
R154			RK73GB1J271J	CHIP R 270 J 1/16W		R335			RK73GB1J563J	CHIP R 56K J 1/16W	
R200			RK73GB1J100J	CHIP R 10 J 1/16W		R336			RK73GB1J333J	CHIP R 33K J 1/16W	
R201			RK73GB1J392J	CHIP R 3.9K J 1/16W		R338			RK73GB1J473J	CHIP R 47K J 1/16W	
R202			RK73GB1J823J	CHIP R 82K J 1/16W		R339			RK73GB1J822J	CHIP R 8.2K J 1/16W	
R203,204			RK73GB1J332J	CHIP R 3.3K J 1/16W		R340			RK73GH1J124D	CHIP R 120K D 1/16W	
R205			RK73GB1J153J	CHIP R 15K J 1/16W		R341			RK73GB1J104J	CHIP R 100K J 1/16W	
R206			RK73GB1J184J	CHIP R 180K J 1/16W		R342			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R207			RK73GB1J104J	CHIP R 100K J 1/16W		R400			RK73GB1J334J	CHIP R 330K J 1/16W	
R208			RK73GB1J684J	CHIP R 680K J 1/16W		R401			RK73GB1J104J	CHIP R 100K J 1/16W	
R209			RK73GB1J272J	CHIP R 2.7K J 1/16W		R402			RK73GB1J221J	CHIP R 220 J 1/16W	

PARTS LIST / 零件表

TX-RX UNIT (X57-6030-28)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
R403			RK73GB1J181J	CHIP R 180 J 1/16W		R534			RK73GB1J182J	CHIP R 1.8K J 1/16W	
R404			R92-1252-05	CHIP R 0 OHM J 1/16W		R535			RK73GB1J471J	CHIP R 470 J 1/16W	
R405			RK73GB1J102J	CHIP R 1.0K J 1/16W		R536			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R406			RK73GB1J222J	CHIP R 2.2K J 1/16W		R537,538			RK73GB1J101J	CHIP R 100 J 1/16W	
R407			RK73GB1J102J	CHIP R 1.0K J 1/16W		R539			R92-1252-05	CHIP R 0 OHM J 1/16W	
R408			RK73GB1J104J	CHIP R 100K J 1/16W		R540			R92-0670-05	CHIP R 0 OHM	
R409			RK73GB1J102J	CHIP R 1.0K J 1/16W		R541			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R410			RK73GB1J822J	CHIP R 8.2K J 1/16W		R542,543			R92-1252-05	CHIP R 0 OHM J 1/16W	
R411			RK73GB1J224J	CHIP R 220K J 1/16W		R548			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R412			RK73GB1J100J	CHIP R 10 J 1/16W		VR1			R12-7491-05	TRIMMING POT.(68K)	
R413			RK73GB1J102J	CHIP R 1.0K J 1/16W		VR500			R12-7494-05	TRIMMING POT.(220K)	
R414,415			RK73GB1J473J	CHIP R 47K J 1/16W		VR501			R32-0647-05	SEMI FIXED VARIABLE RESISTOR	
R416			RK73GB1J472J	CHIP R 4.7K J 1/16W		S402,403			S70-0414-05	TACT SWITCH	
R417			RK73GB1J100J	CHIP R 10 J 1/16W		MIC			T91-0543-05	MIC ELEMENT	
R418			RK73GB1J222J	CHIP R 2.2K J 1/16W		D1-4			MA2S376	VARIABLE CAPACITANCE DIODE	
R419			R92-1252-05	CHIP R 0 OHM J 1/16W		D5			1SV214	VARIABLE CAPACITANCE DIODE	
R420			RK73GB1J102J	CHIP R 1.0K J 1/16W		D6,7			MA2S111	DIODE	
R421			RK73GB1J473J	CHIP R 47K J 1/16W		D100			HSC277	DIODE	
R422			RK73GB1J272J	CHIP R 2.7K J 1/16W		D101			HVU131	DIODE	
R423			RK73GB1J473J	CHIP R 47K J 1/16W		D102,103			HSC277	DIODE	
R424,425			RK73GB1J332J	CHIP R 3.3K J 1/16W		D200			HSC277	DIODE	
R426			RK73GB1J822J	CHIP R 8.2K J 1/16W		D201-204			HVC350B	VARIABLE CAPACITANCE DIODE	
R427			RK73GB1J102J	CHIP R 1.0K J 1/16W		D300			DA221	DIODE	
R428			RK73GB1J272J	CHIP R 2.7K J 1/16W		D500			1SS372	DIODE	
R429			RK73GB1J821J	CHIP R 820 J 1/16W		D501			DAN222	DIODE	
R430			RK73GB1J101J	CHIP R 100 J 1/16W		D502			1SR154-400	DIODE	
R431			R92-1252-05	CHIP R 0 OHM J 1/16W		IC1			MB15A02	MOS IC	
R432			RK73GB1J103J	CHIP R 10K J 1/16W		IC100			NJM2904V	MOS IC	
R433,434			RK73GB1J153J	CHIP R 15K J 1/16W		IC200			TA31136FN	MOS IC	
R435			RK73GB1J103J	CHIP R 10K J 1/16W		IC300			NJM2902V	MOS IC	
R500,501			RK73GB1J472J	CHIP R 4.7K J 1/16W		IC301			NJM2904V	MOS IC	
R502			RK73GB1J823J	CHIP R 82K J 1/16W		IC302			TA7368F	MOS IC	
R503			RK73GB1J123J	CHIP R 12K J 1/16W		IC400			PST9140NR	MOS IC	
R504			RK73GB1J683J	CHIP R 68K J 1/16W		IC401			AT2408N10SI2.5	ROM IC	
R505			RK73GB1J124J	CHIP R 120K J 1/16W		IC402			RN5VL45C	MOS IC	
R506			RK73GB1J103J	CHIP R 10K J 1/16W		IC403	*		M38267M8L292GP	MPU	
R507			RK73GB1J473J	CHIP R 47K J 1/16W		IC404			S-81350HG-KD	MOS IC	
R508			RK73GB1J222J	CHIP R 2.2K J 1/16W		IC500			NJM2100V	MOS IC	
R509			RK73GB1J124J	CHIP R 120K J 1/16W		Q1			2SC4649(N,P)	TRANSISTOR	
R510			RK73GB1J332J	CHIP R 3.3K J 1/16W		Q2			2SC5108(Y)	TRANSISTOR	
R511			RK73GB1J103J	CHIP R 10K J 1/16W		Q3			2SK508NV(K52)	FET	
R512			RK73GB1J185J	CHIP R 1.8M J 1/16W		Q4			2SC4228(R44)	TRANSISTOR	
R513			RK73GB1J273J	CHIP R 27K J 1/16W		Q5			2SJ243	FET	
R514,515			RK73GB1J333J	CHIP R 33K J 1/16W		Q6			2SC5108(Y)	TRANSISTOR	
R516			RK73GB1J103J	CHIP R 10K J 1/16W		Q7			UMC4N	TRANSISTOR	
R517			RK73GB1J185J	CHIP R 1.8M J 1/16W		Q8			2SC4617(S)	TRANSISTOR	
R518			RK73GB1J682J	CHIP R 6.8K J 1/16W		Q100,101			2SC5108(Y)	TRANSISTOR	
R519,520			RK73GB1J333J	CHIP R 33K J 1/16W		Q102			2SC4988	TRANSISTOR	
R521			RK73GB1J332J	CHIP R 3.3K J 1/16W		Q103			2SK1824	FET	
R522			RK73GB1J182J	CHIP R 1.8K J 1/16W		Q104			FMMT717	TRANSISTOR	
R523			RK73GB1J682J	CHIP R 6.8K J 1/16W		Q105			2SK2596	FET	
R524			RK73GB1J513J	CHIP R 51K J 1/16W		Q106			2SK1824	FET	
R525			RK73GB1J102J	CHIP R 1.0K J 1/16W		Q107			2SK2595	FET	
R526,527			RK73GH1J153D	CHIP R 15K D 1/16W		Q108			DTC114EE	DIGITAL TRANSISTOR	
R528			RK73GB1J105J	CHIP R 1.0M J 1/16W		Q109			DTA144EE	DIGITAL TRANSISTOR	
R529			RK73GB1J183J	CHIP R 18K J 1/16W		Q110			DTC114TE	DIGITAL TRANSISTOR	
R530			RK73GB1J101J	CHIP R 100 J 1/16W		Q200			DTA114EE	DIGITAL TRANSISTOR	
R531			R92-1252-05	CHIP R 0 OHM J 1/16W		Q201			2SC4649(N,P)	TRANSISTOR	
R532			RK73GB1J821J	CHIP R 820 J 1/16W							
R533			RK73GB1J104J	CHIP R 100K J 1/16W							

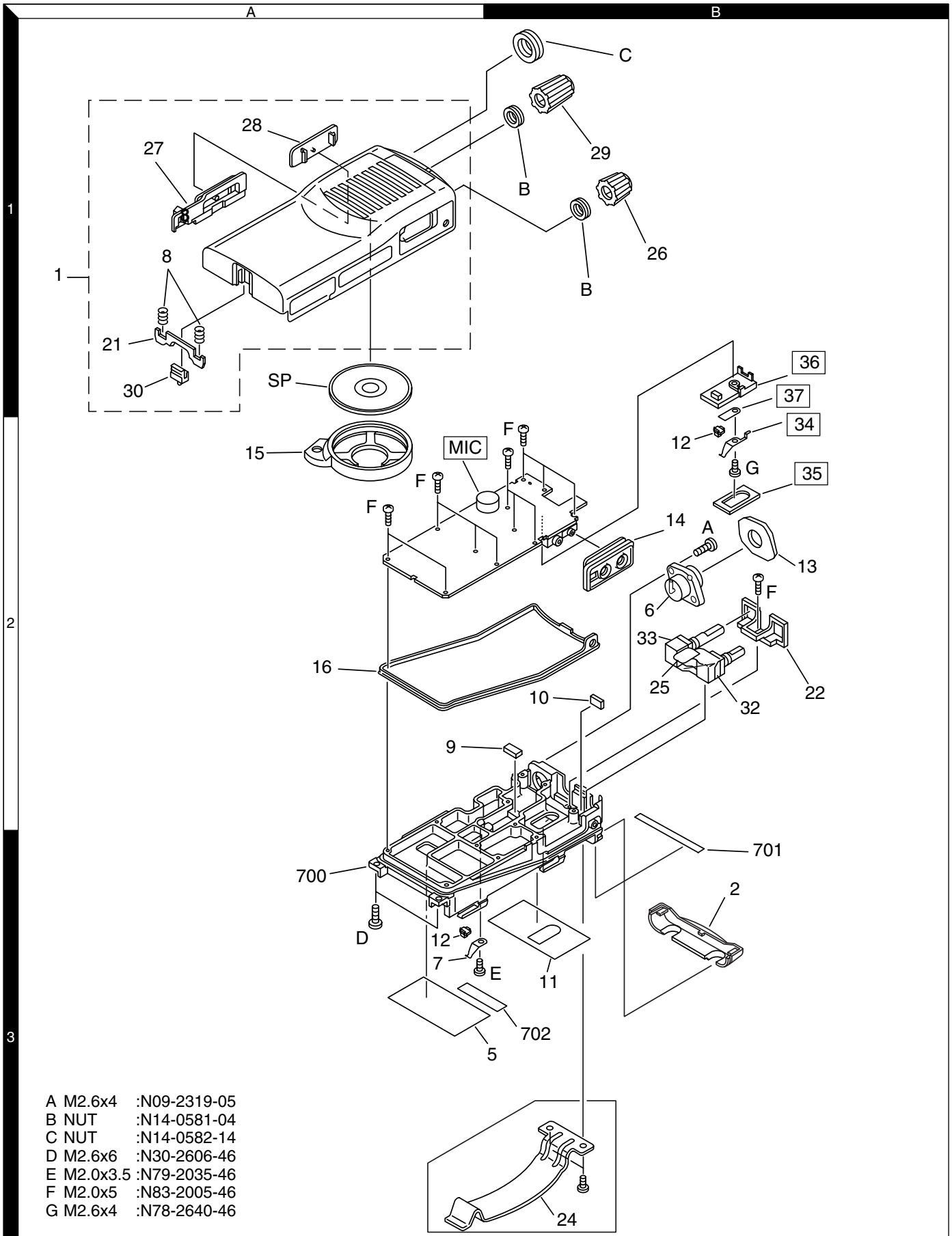
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PARTS LIST / 零件表

TX-RX UNIT (X57-6030-28)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
Q202,203			3SK228	FET							
Q300			2SC4617(S)	TRANSISTOR							
Q302			2SK1824	FET							
Q303			DTA144EE	DIGITAL TRANSISTOR							
Q304			DTC144EE	DIGITAL TRANSISTOR							
Q305			2SA1362(GR)	TRANSISTOR							
Q306			DTC144EE	DIGITAL TRANSISTOR							
Q307			2SK1588	FET							
Q400,401			DTC114EE	DIGITAL TRANSISTOR							
Q402			DTA114YE	DIGITAL TRANSISTOR							
Q403			DTC144EE	DIGITAL TRANSISTOR							
Q404			UMG3N	TRANSISTOR							
Q405			UPA672T	FET							
Q406			FP210	TRANSISTOR							
Q407			UMG3N	TRANSISTOR							
Q408			DTA123JE	DIGITAL TRANSISTOR							
Q500			2SK1824	FET							
Q501,502			2SC4617(S)	TRANSISTOR							
Q503			2SC4919	TRANSISTOR							
Q504			DTA143ZE	DIGITAL TRANSISTOR							
TH102			157-503-65001	THERMISTOR							
TH500,501			157-302-65801	THERMISTOR							

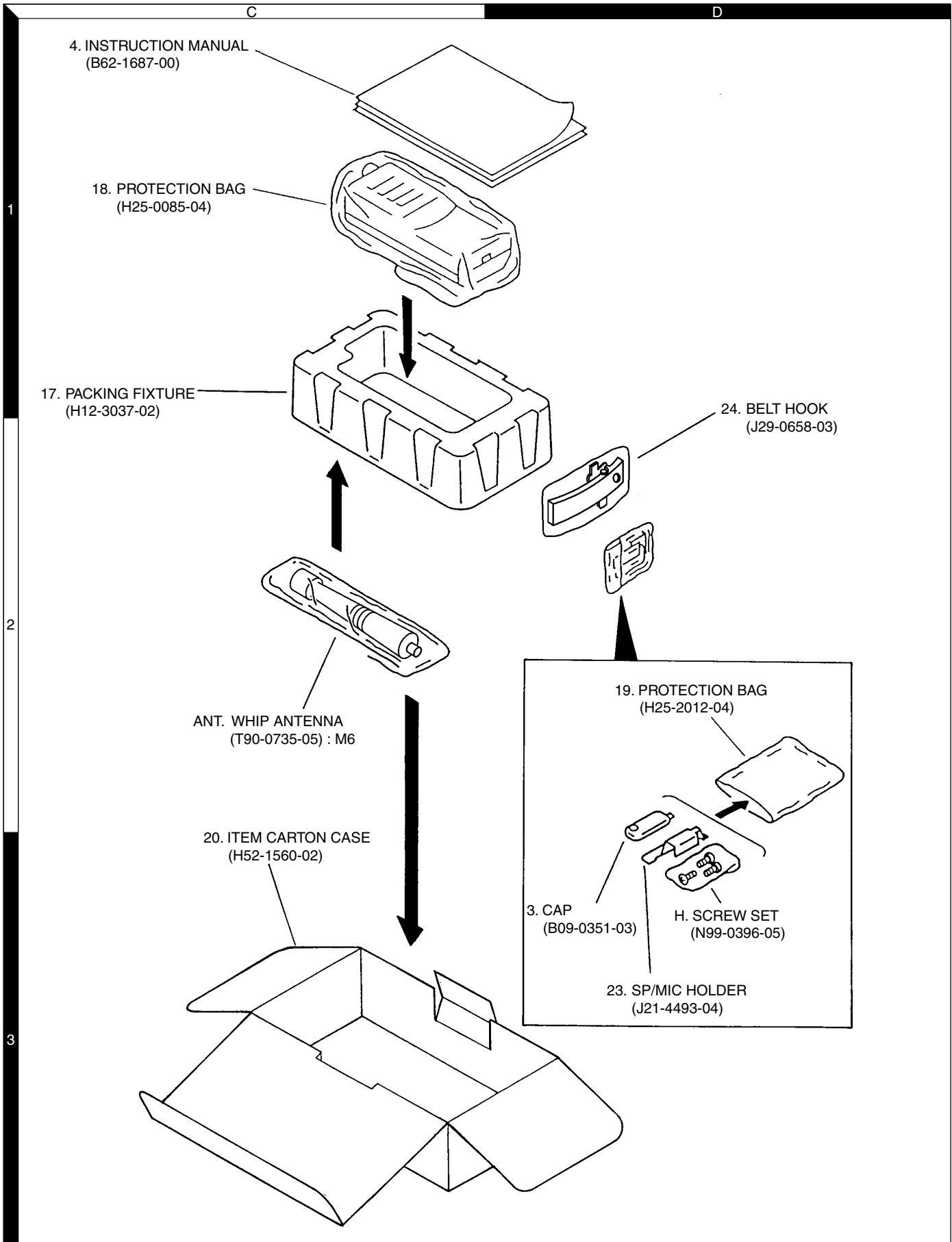
EXPLODED VIEW / 部件分解图



- A M2.6x4 :N09-2319-05
- B NUT :N14-0581-04
- C NUT :N14-0582-14
- D M2.6x6 :N30-2606-46
- E M2.0x3.5 :N79-2035-46
- F M2.0x5 :N83-2005-46
- G M2.6x4 :N78-2640-46

Parts with exploded numbers larger than 700 are not supplied.

PACKING / 包装



Parts with exploded numbers larger than 700 are not supplied.

ADJUSTMENT / 调整

Required Test Equipment

1. Stabilized Power supply

1. The supply voltage can be changed between 5V and 18V, and the current is 3A or more.
2. The standard voltage is 7.5V.

2. DC Ammeter

1. Class 1 ammeter (17 ranges and other features).
2. The full scale can be set to either 300mA or 3A.
3. A cable of less internal loss must be used.

3. Frequency Counter (f. counter)

1. Frequencies of up to 1GHz or so can be measured.
2. The sensitivity can be changed to 500MHz or below, and measurements are highly stable and accurate (0.2ppm or so).

4. Power Meter

1. Measurable frequency : Up to 500MHz
2. Impedance : 50Ω, unbalanced
3. Measuring range : Full scale of 10W or so
4. A standard cable (5D2W 1m) must be used.

5. RF Voltmeter (RF V.M)

1. Measurable frequency : Up to 500MHz or so.

6. Linear Detector

1. Measurable frequency : Up to 500MHz or so
2. Characteristics are flat, and CN is 60dB or more.

7. Digital Voltmeter

1. Voltage range : FS=18V or so
2. Input resistance : 1MΩ or more

8. Oscilloscope

1. Measuring range : DC to 30MHz
2. Provides highly accurate measurements for 5 to 25MHz.

9. AF Voltmeter (AF V.M)

1. Measurable frequency : 50Hz to 1MHz
2. Maximum sensitivity : 1mV or more

10. Spectrum Analyzer

1. Measuring range : DC to 1GHz or more

11. Standard Signal Generator (SSG)

1. Maximum frequency : 500MHz or more
2. Output : -133dBm/0.05μV to 7dBm/501mV
3. Output impedance : 50Ω

12. Tracking Generator

1. Center frequency : 50kHz to 500MHz
2. Frequency deviation : ±35MHz
3. Output voltage : 100mV or more

13. Dummy Load

1. 8Ω, 3W or more

14. AF Generator (AG)

1. Frequency range : 100Hz to 100kHz
2. Output : 0.5mV to 1V

15. Distortion Meter

1. Measurable frequency : 30Hz to 100kHz
2. Input level : 50mV to 10Vrms

所需的测试设备

1. 稳定电源

1. 输出电源在5V和18V之间可调，并且电流为3A或更大。
2. 标准电压为7.5V。

2. 电流表

1. 高级电流表（17档和其他功能）。
2. 满刻度可设定为300mA也可设定为3A。
3. 必须使用低损耗电缆。

3. 频率计数器 (f.counter)

1. 可以测量到最大量程大约为1GHz的频率。
2. 灵敏度可调到500MHz或更低，测量为高稳定性和高准确度（大约为0.2ppm）。

4. 功率表

1. 可测量的频率：最高到500MHz
2. 阻抗：50Ω，不稳定
3. 测量范围：满刻度大约为10W。
4. 必须使用标准电缆（5D2W 1m）。

5. 射频电压表 (RF V.M)

1. 频率范围：最高大约到500MHz。

6. 线性检测器

1. 频率范围：最高大约到500MHz。
2. 特征函数是平展的，CN为60dB或更大。

7. 数字电压表

1. 电压范围：大约FS = 18V。
2. 输入阻抗值：1MΩ或更大。

8. 示波器

1. 测量范围：直流到30MHz
2. 5到25MHz间提供高准确度测量。

9. 音频电压表 (AF V.M)

1. 频率范围：50Hz到1MHz
2. 最高灵敏度：1mV或更高

10. 频谱分析仪

1. 测量范围：直流到1GHz或更大

11. 标准信号发射器 (SSG)

1. 最高频率：500MHz或更高
2. 输出：-133dBm/0.05μV到7dBm/501mV
3. 输出阻抗：50Ω

12. 轨迹发生器

1. 中心频率：50kHz到500MHz
2. 频偏：±35MHz
3. 输出电压：100mV或更高

13. 假负载

1. 8Ω, 3W或更高

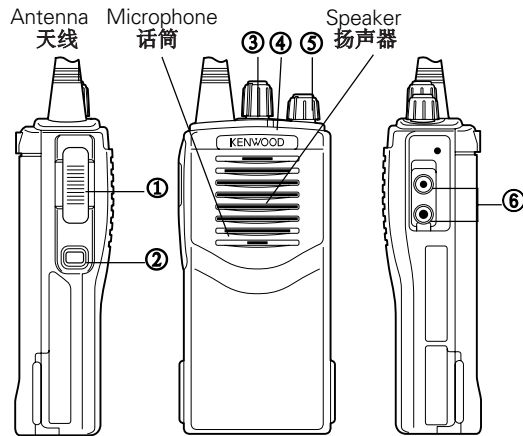
14. 音频发生器 (AG)

1. 频率范围：100Hz到100kHz
2. 输出：0.5mV到1V

15. 失真测试仪

1. 频率范围：30Hz到100kHz
2. 输入电平：50mV到10Vrms

ADJUSTMENT / 调整



- ① PTT switch
- ② Monitor key
- ③ Channel switch

- ④ LED indicator
- ⑤ Power switch
- ⑥ SP/MIC JAC

- ① PTT 通话转换开关
- ② 监听键
- ③ 信道转换开关

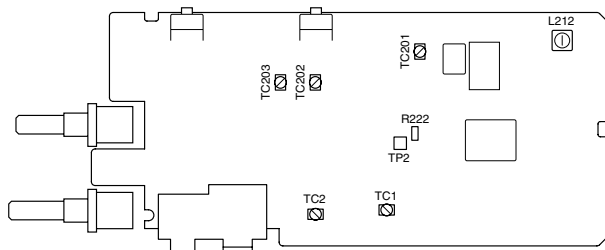
- ④ 发光二极管指示灯
- ⑤ 电源开关
- ⑥ 扬声器/话筒插口

- Use a non-conductive rod such as a Ceramic rod for adjustment (especially of trimmers and coils).
Kenwood order No. A-0910 (0.4X0.9mm)
Kenwood order No. A-1310 (0.4X1.3mm)
- To protect the SSG, do not send out signals while adjusting the receiving unit.
- The indicated SSG output levels are for maximum output.

- 使用一个专用调整棒进行调整（特别是微调电容器和线圈）。
建伍订单号码 A-0910 (0.4 × 0.9mm)
建伍订单号码 A-1310 (0.4 × 1.3mm)
- 为了保护标准信号发生器，在调整接收部分时通信机不要发射。
- 显示的标准信号发生器输出电平为最大输出值。

Adjustment point

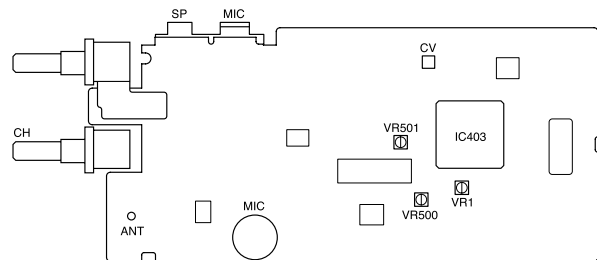
Foil Side View



- TC201: } Band-pass filter waveform adjustment
- TC202: }
- TC203: }
- L212: AF level adjustment
- TC1: Transmit lock voltage adjustment
- TC2: Receive lock voltage adjustment
- TP2: Band-pass filter test point

- TC201: } 带通滤波器波形调整
- TC202: }
- TC203: }
- L212: 音频电平调整
- TC1: 发射锁定电压调整
- TC2: 接收锁定电压调整
- TP2: 带通滤波器测试点

Component Side View



- ANT: Antenna connector
- CH: Channel selector
- SP: Speaker jack
- MIC: Microphone jack
- CV: Lock voltage adjustment terminal
- VR500: DQT waveform adjustment
- VR501: DEV adjustment

Note: To fine tune the frequency when not using a computer, adjust VR1.

- ANT: 天线连接器
- CH: 信道选择器
- SP: 扬声器插座
- MIC: 话筒插座
- CV: 锁定电压调整终端
- VR500: DQT波形调整
- VR501: DEV调整

注意: 当不使用电脑微调频率时，可调整VR1。

ADJUSTMENT / 调整

ADJUSTMENT FREQUENCY LIST

Destination	M6	
	TX f (MHz)	RX f (MHz)
Center	360.05	
Low	350.05	
Hi	369.95	

Remarks

- Connect the transceiver to the PC
- Send the channel data to the transceiver, then backup the data.
- Program the adjustment frequencies which are in the list, into the transceiver.

Note : Remember to reload the channel data you backed up after making the adjustments.

1. Jig (chassis) for adjustment (part number A10-1392-03)

2. Use the jig as follows:

1. Insert the coaxial antenna connector into the jig.
2. Place the unit on the jig and fix it with 12 screws. ①
3. Solder the antenna terminal to the terminal of the unit.

Notes: Supply power from an external power supply.

(Relay terminal : +)
(jig (chassis) : -)

调整频率清单

型式	M6	
	发射频率 (MHz)	接收频率 (MHz)
信道		
中心		360.05
低		350.05
高		369.95

备注

- 将手持机与计算机连接。
 - 向手持机发送信道数据，然后备份数据。
 - 将清单中的调整频率编程，输入手持机。
- 注意：在进行调整后，重新载入备份的信道数据。

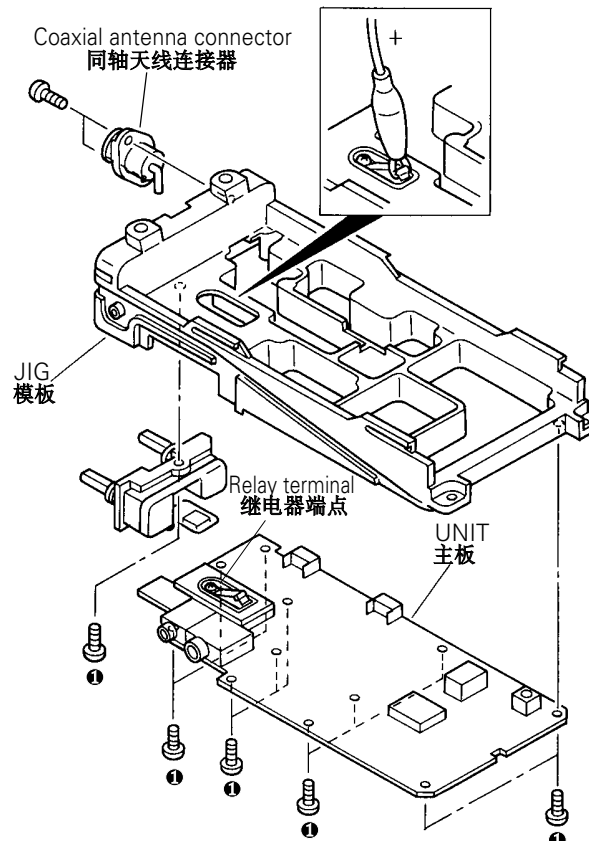
1.用于调整的模板（机架）（部件号码A10-1392-03）

2.按照下述方法使用模板：

- 1.将同轴天线连接器插入模板。
- 2.将主板放置在模板上、然后用12颗螺钉拧紧。①
- 3.将天线的端点与主板的焊点焊接。

注意：供电来自于外部电源。

(继电器端点 : +)
(模板〈机架〉 : -)



ADJUSTMENT

Use the KPG-55D programming software for adjustment of the next item in PC MODE (see page B51-8489-10).


Squelch Level, Transmit frequency, DQT Balance, RF Power, QT Deviation, DQT Deviation, Battery Level
Section common to the transmitter and receiver (VCO)

Item	Condition	Measurement		Adjustment		Specifications/ Remarks	
		Test equipment	Terminal	Parts	Method		
1. Setting	1) Power supply voltage Battery terminal: 7.5V						
2. VCO lock voltage	1) CH: TX high	Digital voltmeter	CV	TC1	3.7V	±0.1V	
	2) CH: RX high			TC2	3.7V	±0.1V	
	3) CH: TX low					Check	more than 1.0V
	4) CH: RX low						

Receiver Section

Item	Condition	Measurement		Adjustment		Specifications/ Remarks
		Test equipment	Terminal	Parts	Method	
1. Band-pass filter	1) CH: RX center 2) Tra generator output -40dBm Connect the spectrum analyzer to TP2 terminal.	Tra generator Spectrum analyzer	ANT TP2	TC201 TC202 TC203	Adjust the frequency so that it becomes the spectrum waveform shown in Fig.1.	
2. AF level	1) CH: RX center SSG output: -53dBm (501µV) MOD: 1kHz DEV: ±3.0kHz (Wide) : ±1.5kHz (Narrow)	SSG Oscilloscope AF. V. M Distortion meter	ANT SP	L212	Adjust to the MAX AF level	
3. Sensitivity	1) CH: RX center CH: RX LO CH: RX Hi SSG output: -116dBm (0.35µV) MOD: 1kHz DEV: ±3.0kHz (Wide) : ±1.5kHz (Narrow)				Check	SINAD: 12dB or higher
4. Squelch Level (PC MODE)	1) CH: RX center MONI: ON			PC key	Level 9 Adjust to close the squelch.	The squelch must be closed.
	2) Level 9 SSG output: -116dBm 3) Level 3 SSG output: -125dBm (0.126µV)				Level 3 Adjust to close the squelch.	The squelch must be closed.

Transmitter section

Item	Condition	Measurement		Adjustment		Specifications/ Remarks
		Test equipment	Terminal	Parts	Method	
1. Transmit frequency (PC MODE)	1) CH: TX center PTT: ON	Frequency counter	ANT	PC key	Adjust to center frequency	within ± 100Hz
2. DQT/QT Balance (PC MODE)	1) CH: TX center	Modulation analyzer or linear detector (LPF: 3kHz) Oscilloscope		VR500	Rectify the waveform to square wave	
3. Power (PC MODE)	1) CH: TX LOW Battery terminal: 7.5V PTT: ON			Power meter Ammeter		Adjust it to 4.1W
4. MAX DEV	1) CH: TX center AG: 1kHz/120mV PTT: ON	Modulation analyzer or linear detector (LPF: 15kHz) Oscilloscope AG AF. V. M	ANT MIC	VR501	Adjust it to ± 4.2kHz (Wide) Narrow check (+, - Peak whichever is Maximum)	±100Hz ±1.8kHz~2.2kHz
5. MIC SENS	1) CH: TX center AG: 1kHz/12mV				Check (+, - Peak whichever is Maximum)	±2.2kHz~3.6kHz: (Wide) ±1.1kHz~1.8kHz: (Narrow)
6. QT DEV (PC MODE)	1) CH: TX high QT: 67.0Hz	Modulation analyzer or linear detector (LPF: 3kHz) Oscilloscope AG AF. V. M	ANT	PC key	Adjust it to ± 0.75kHz (Wide) Adjust it to ± 0.35kHz (Narrow)	±50Hz ±50Hz
7. DQT DEV (PC MODE)	1) DQT: 023N center			PC key	Adjust it to ± 0.75kHz (Wide) Adjust it to ± 0.35kHz (Narrow)	±50Hz ±50Hz
8. Battery Level (PC MODE)	1) Battery terminal: 5.8V	Digital voltmeter	BATT	PC key	Adjust so that the LED flashes.	The LED must flash.

调整

在计算机模式下使用KPG-55D编程软件调整下记项目（参见B51-8489-10）。
 噪音抑制电路电平发射频率DQT均衡射频功率QT偏差DQT偏差电池电平
 发射部和接收部共用部分（压控振荡器）

项目	条件	测量		调整		规格/备注	
		测试设备	终端	部件	方法		
1.设定	1)电源电压电池终端：7.5V						
2.压控振荡器	1)CH：发射高端频点	数字电压表	CV	TC1	3.7V	± 0.1V	
	2)CH：接收高端频点			TC2	3.7V	± 0.1V	
	3)CH：发射低端频点					检查	高于1.0V
	4)CH：接收低端频点						

接收部分

项目	条件	测量		调整		规格/备注	
		测试设备	终端	部件	方法		
1.带通滤波器	1)CH：接收中心频点 2)Tra发生器输出 - 40dBm 将频谱分析仪连接到TP2端点。	Tra发生器 频谱分析仪	ANT TP2	TC201 TC202 TC203	调整频率使其成为图1所示的频谱波形。		
2.音频电平	1)CH：接收中心频点 SSG输出：- 53dBm (501μV) MOD：1kHz DEV：± 3.0kHz(宽) ± 1.5kHz(窄)	标准信号发射器 示波器 音频电压表 失真测试仪	天线 扬声器	L212	调整到最大音频电平		
3.灵敏度	1)CH：接收中心频点 CH：接收低端频点 CH：接收高端频点 SSG输出：- 116dBm (0.35μV) MOD：1kHz DEV：± 3.0kHz(宽) ± 1.5kHz(窄)					检查	SINAD：12dB或更高
4.噪音抑制电路电平 (计算机模式)	1)CH：接收中心频点 MONI：开启 2)第9级 SSG输出：- 116dBm 3)第3级 SSG输出：- 125dBm (0.126μV)					PC机键	第9级 经调整关闭静音。 第3级 经调整关闭静音。

发射部

项目	条件	测量		调整		规格/备注	
		测试设备	终端	部件	方法		
1.发射频率 (计算机模式)	1)CH：发射中心频点 PTT：开启	频率计数器	天线	PC机按键	调整到中心频率	± 100Hz以内	
2.DQT/QT平衡	1)CH：发射中心频点	频谱分析仪或线性检测器 (LPF：3kHz) 示波器	天线 扬声器	VR500	将波形整流为方形波		
3.功率 (计算机模式)	1)CH：发射低端频点 电池终端：7.5V PTT：开启					调整到4.1W	± 0.1W
4.最大DEV	1)CH：发射中心频点 AG：1kHz/120mV PTT：开启					VR501	调整到 ± 4.2kHz (宽) 窄频带检查 (+、- 极端值)
5.调制灵敏度	1)CH：发射中心频点 AG：1kHz/12mV	音频发生器 音频电压表			检查 (+、- 极端值)	± 2.2kHz ~ 3.6kHz : (宽) ± 1.1kHz ~ 1.8kHz : (窄)	
6.QT DEV (计算机模式)	1)CH：发射高端频点 QT：67.0Hz	频谱分析仪或线性检测器 (LPF：3kHz) 示波器 音频发生器 音频电压表	天线	PC机按键	调整到 ± 0.75kHz (宽) 调整到 ± 0.35kHz (窄)	± 50Hz ± 50Hz	
7.DQT DEV (计算机模式)	1)DQT：023N 中心频点	频谱分析仪或线性检测器 (LPF：3kHz) 示波器		PC机按键	调整到 ± 0.75kHz (宽) 调整到 ± 0.35kHz (窄)	± 50Hz ± 50Hz	
8.电池电平 (计算机模式)	1)电池终端：5.8V	数字电压表	电池	PC机按键	经调整使指示灯闪烁	指示灯必须闪烁	

TK-3107

ADJUSTMENT / 调整

BPF-Wave

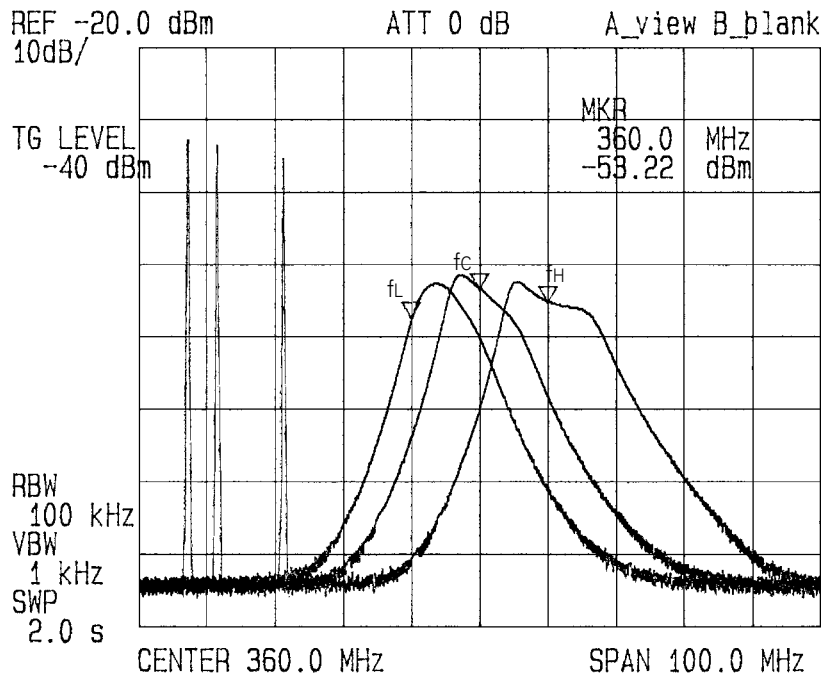


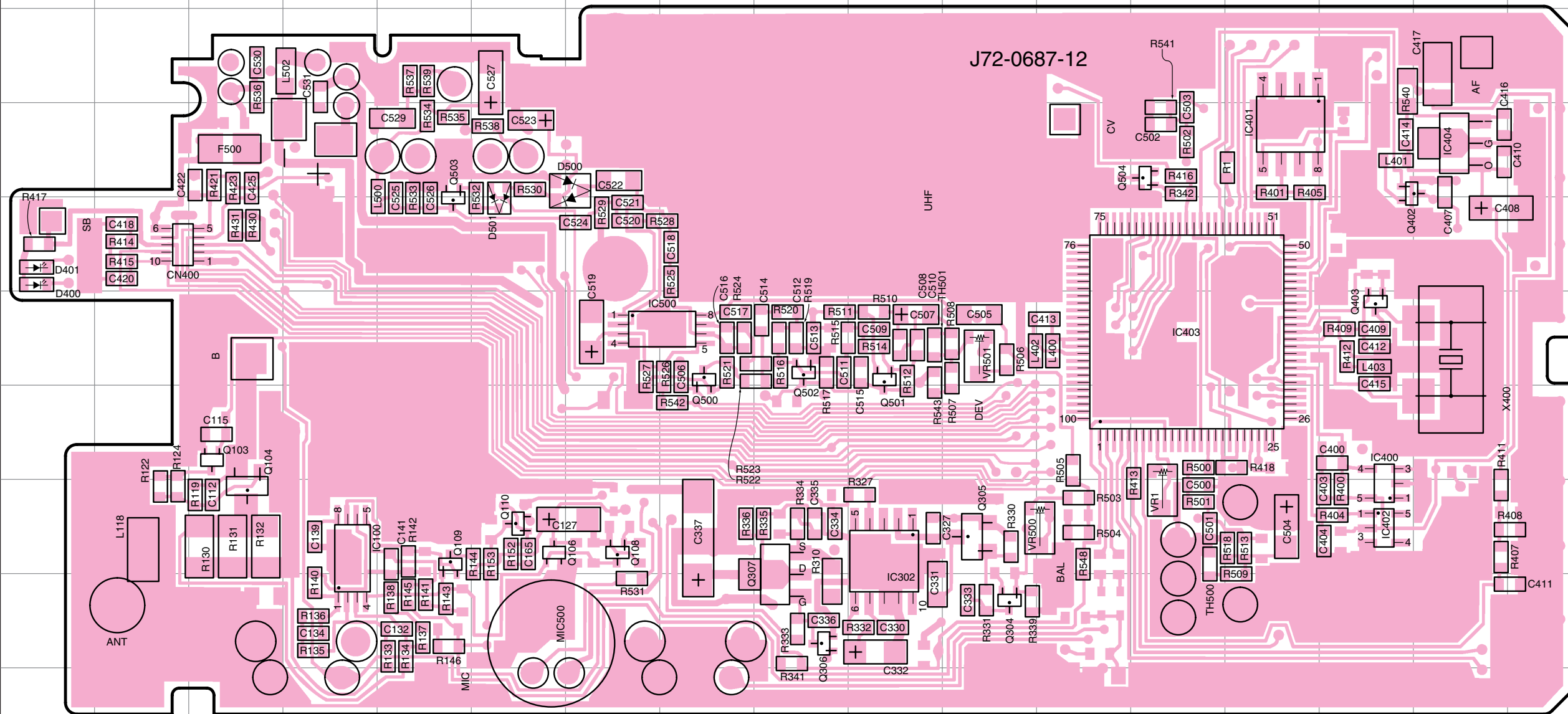
Fig. 1 / 图1

PC BOARD / PC 板视图 TK-3107

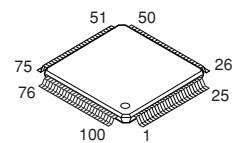
TX-RX UNIT (X57-6030-XX) -10 : M, -25 : M4, -28 : M6 Component side view

TX-RX UNIT (X57-6030-XX)

Ref. NO.	Address
IC100	8D
IC302	8J
IC400	8O
IC401	4N
IC402	8O
IC403	6M
IC404	4P
IC500	6H
Q103	7C
Q104	8C
Q106	8F
Q108	8G
Q109	8E
Q110	8F
Q304	9K
Q305	8K
Q306	9I
Q307	8I
Q402	4O
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Q503	5E
Q504	4M
D500	4G
D501	5F

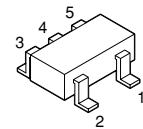


M38267M8L241GP

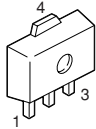


- DTA114EE
- DTA114YE
- DTA123JE
- DTA143ZE
- DTA144EE
- DTC114EE
- DTC114TE
- DTC144EE
- 2SA1362(GR)
- 2SC4617(S)
- 2SC5108(Y)
- FMMT717
- 2SC4649(N,P)
- 2SC4919

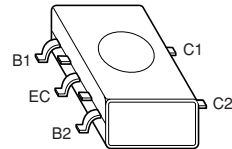
UMC4



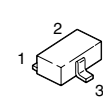
2SC4988



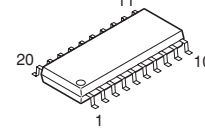
FP210



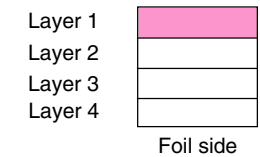
DA221



MB15A02



Connect 1 and 4
Component side

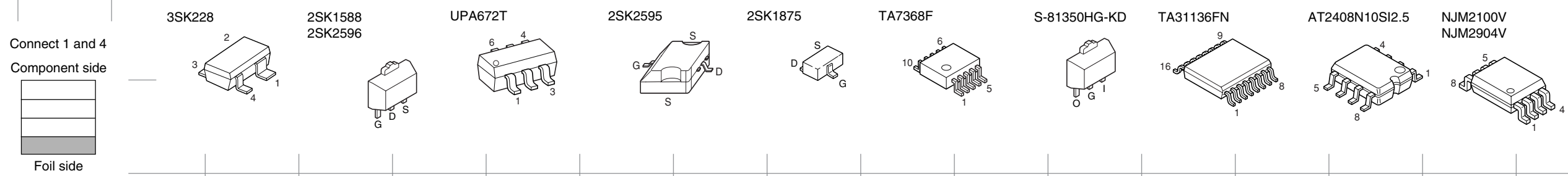


PC BOARD / PC 板视图 TK-3107

TX-RX UNIT (X57-6030-XX) -10 : M, -25 : M4, -28 : M6 Foil side view

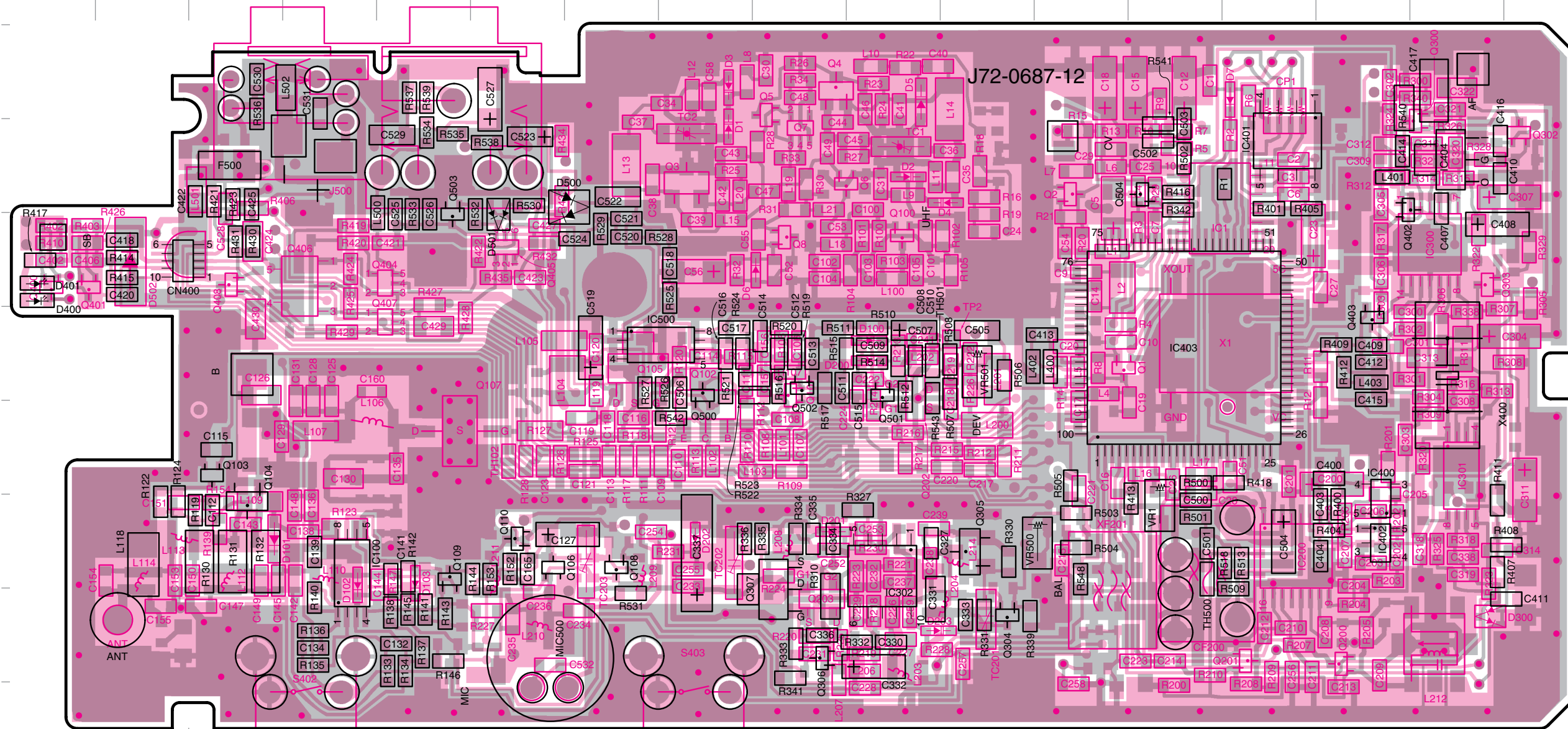
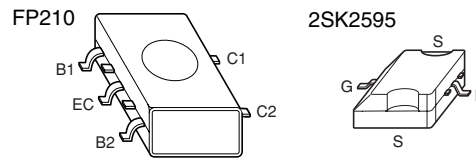
TX-RX UNIT
(X57-6030-XX)

Ref. NO.	Address
IC1	4G
IC200	8F
IC300	5D
IC301	7D
Q1	6H
Q2	4H
Q3	4L
Q4	3K
Q5	3K
Q6	4K
Q7	4K
Q8	5K
Q100	5J
Q101	6K
Q102	6L
Q105	6M
Q107	7O
Q200	9E
Q201	9F
Q202	6J
Q203	9K
Q300	4D
Q302	4C
Q303	5D
Q400	5S
Q401	5S
Q404	5O
Q405	5N
Q406	5P
Q407	6O
Q408	5Q
D1	4L
D2	4J
D3	3L
D4	4I
D5	3J
D6	5K
D7	3F
D100	6J
D101	8Q
D102	8P
D103	8O
D200	6J
D201	8K
D202	8L
D203	9J
D300	9D
D502	5R



PC BOARD / PC 板视图 TK-3107

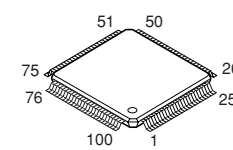
TX-RX UNIT (X57-6030-XX) -10 : M, -25 : M4, -28 : M6
Component side view + Foil side view



TX-RX UNIT (X57-6030-XX)

Ref. NO.	Address
IC1	4M
IC100	8D
IC200	8N
IC300	5P
IC301	7P
IC302	8J
IC400	8O
IC401	4N
IC402	8O
IC403	6M
IC404	4P
IC500	6H
Q1	6L
Q2	4L
Q3	4H
Q4	3I
Q5	3I
Q6	4I
Q7	4I
Q8	5I
Q100	5J
Q101	6I
Q102	6H
Q103	7C
Q104	8C
Q105	6G
Q106	8F
Q107	7E
Q108	8G
Q109	8E
Q110	8F
Q200	9O
Q201	9N
Q202	6J
Q203	9I
Q300	4P
Q302	4Q
Q303	5P
Q304	9K
Q305	8K
Q306	9I
Q307	8I
Q400	5A
Q401	5A
Q402	4O
Q403	6O
Q404	5E
Q405	5F
Q406	5D
Q407	6E
Q408	5C
Q500	6H
Q501	6J
Q502	6I
Q503	5E
Q504	4M
D1	4H
D2	4J
D3	3H
D4	4K
D5	3J

M38267M8L241GP

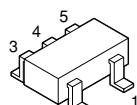


DA221

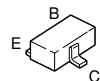
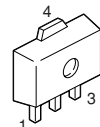


DTA114EE
DTA114YE
DTA123JE
DTA143ZE
DTA144EE
DTC114EE
DTC114TE
DTC144EE
2SA1362(GR)
2SC4617(S)
2SC5108(Y)
FMMT717
2SC4649(N,P)
2SC4919

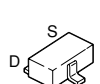
UMC4



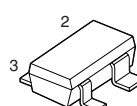
2SC4988



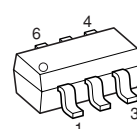
2SK1875



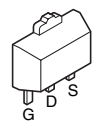
3SK228



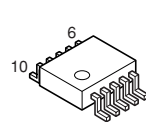
UPA672T



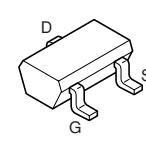
2SK1588
2SK2596



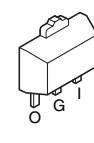
TA7368F



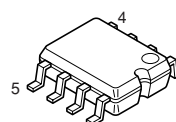
2SJ243
2SK1824



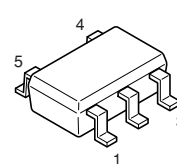
S-81350HG-KD



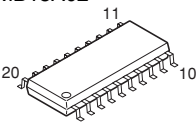
AT2408N10SI2.5



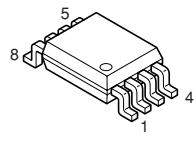
PST9140NR
RN5VL45C



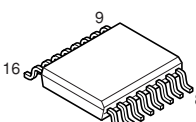
MB15A02



NJM2100V
NJM2904V



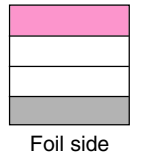
TA31136FN



● Connect 1 and 4.

Component side

Layer 1
Layer 2
Layer 3
Layer 4



Foil side

Ref. NO.	Address
D6	5I
D7	3N
D100	6J
D101	8C
D102	8D
D103	8E
D200	6J
D201	8I
D202	8H
D203	9J
D300	9P
D501	5F
D502	5B

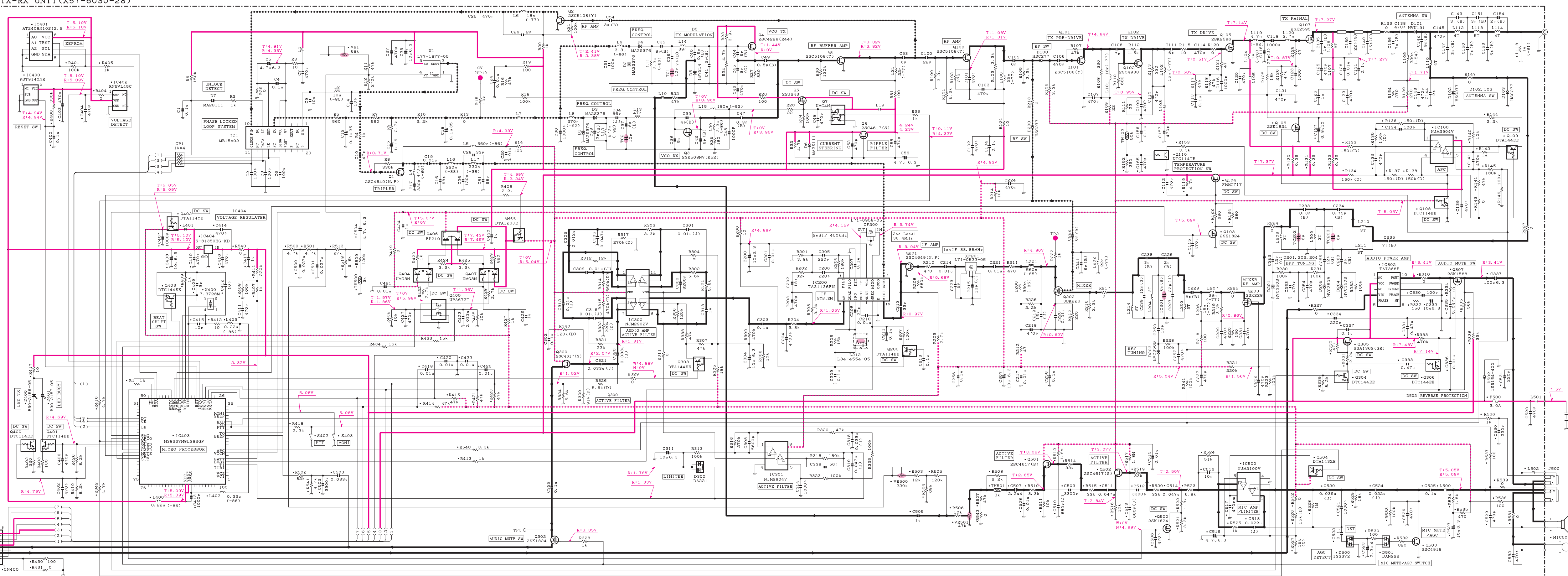
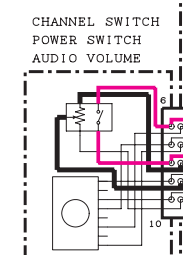
TK-3107 SCHEMATIC DIAGRAM / 原理图

TX-RX UNIT (X57-6030-28)

- IC1 MB15A02
- IC100, 301 INJ2904V
- IC200 TA31196FN
- IC300 NJM2902V
- IC302 TA7368F
- IC400 PST9140NR
- IC401 AT2408N10S12.5
- IC402 INSV45C
- IC403 MS8267M8L292GP
- IC404 MS-81350HG-KD
- IC500 NJM100V

- Q1, 201 2SC4649(N.P)
- Q2, 6, 100, 101 2SC5108(Y)
- Q4 2SC4228(R44)
- Q5 2SC4617(G)
- Q7 UMC4N
- Q8, 300, 501, 502 2SC4988
- Q103, 106 2SK1824
- Q104 FM7717
- Q105 2SK2596
- Q107 2SK2595
- Q108, 400, 401 DTC144EE
- Q109, 303 DTA144EE
- Q110 DTC1147E
- Q200 DTA144EE
- Q202, 203 1SK228
- Q304, 306, 403 DTC144EE
- Q305 2SA1362(GR)
- Q307 2SK1588
- Q402 DTA144YE
- Q404, 407 IMG3N
- Q405 UPA872T
- Q406 FP210
- Q408 DTA123JE
- Q409 DTA144EE
- Q504 DTA143ZE

- D1-4 MA2376
- D5 1SV214
- D6, 7 MA2311
- D100, 102, 103, 200 HSC277
- D101 HVU131
- D201-204 HVC350B
- D300 DA221
- D400 B30-2156-05
- D401 B30-2157-05
- D500 1SS372
- D501 DAN222
- D502 1SR154-400



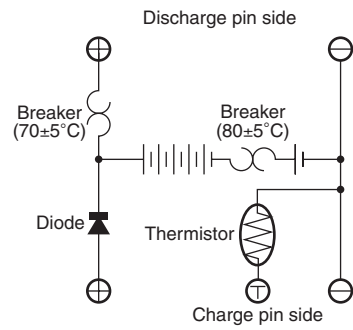
Note : Component marked with a dot (●) are parts of layer1.

KNB-15A (Ni-Cd Battery)

KNB-15A



CIRCUITDIAGRAM



SPECIFICATIONS

Voltage	: 7.2V (1.2V x 6)
Charging current	: 1100mAh
Dimensions	: 60.8W x 110.8H x 20.3D (mm) (projections included)
Charger and charging time:	
	KSC-15 (normal charger), approximately 8 hours
Weight	: 210g

TK-3107

SPECIFICATIONS / 规格

GENERAL

Frequency Range	350 to 370 MHz : M6
RF power output	4W
Number of channels	16CH
Operating Voltage	7.5 VDC \pm 20 %
Temperature Range	-30 °C to + 60 °C (-22 °F to + 140 °F)
Dimensions and Weight	
with KNB-15A (7.2V 1100mAh battery)	58 (2-5/16) W X 125.5 (4-15/16) H X 35 (1-3/8) D mm (inches)
	380g (0.83lbs)

概述

频率范围.....	350-370MHz:M6
射频功率输出.....	4W
信道数量.....	16信道
工作电压.....	7.5V直流 \pm 20 %
温度范围.....	- 30°C到 + 60°C (- 22°F到 + 140°F)
带有KNB - 15A (7.2V 1100mAh电池) 的	
尺寸和重量.....	58 (2-5/16) 宽 \times 125.5 (4-15/16) 高 \times 35 (1-3/8) 长毫米 (英寸)
	380g (0.83lbs)

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