

Parts List for 56KB Modem R.F. Circuit board REV-A
Board code: RF (082286-B)
Schematics: RF_TX, RF_RX
Compiled by WA4FIB
Last Modified: 2/2/88 (WA4DSY)

Capacitors (ALL Capacitors can be +/- 10% Tolerance with 0.2" lead spacing unless otherwise noted)

Receive Section

Digi-Key part

C1	220 pF	ceramic disk	P3221
C2	33 pF	ceramic disk NPO	P4406
C3	NOT USED		
C4	6.8 pF	ceramic disk	?????
C5	33 pF	ceramic disk NPO	P4406
C6	100 pF	ceramic disk	P4116
C7	.001uF	5% polypropylene	P3102
C8	.1 uF	Monolithic block ceramic 20%	P4525
C9	.0047 uF	polyester or ceramic	P4559
C10	.1 uF	Monolithic block ceramic 20%	P4525
C11	220 pF	ceramic disk	P3221
C12	.1 uF	Monolithic block Ceramic 20%	P4525
C13	.1 uF	Monolithic block Ceramic 20%	P4525
C14	82 pF	ceramic disk	P4011
C15	33 pF	ceramic disk NPO	P4406
C16	.1 uF	Monolithic block Ceramic 20%	P4525
C17	.1 uF	monolithic block ceramic 20%	P4525
C18	.0022 uF	polypropylene 5%	P3222
C19	270 pF	polypropylene 5%	P3271
C20	.001 uF	polypropylene 5%	P3102
C21	270 pF	polypropylene 5%	P3271
C22	.0022 uF	polypropylene 5%	P3222
C23	.1 uF	Monolithic Ceramic +/-20%	P4525
C24	68 pF	ceramic disk	P4010
C25	.1 uF	Monolithic Ceramic +/-20%	P4525

Modulator section

C26	.0047 uF	polyester or ceramic	P4559
C27	.0047uF	polyester or ceramic	P4559
C28	56 pF	ceramic disk NPO	P4409
C29	120 pF	ceramic disk	P4117
C30	.1 uF	block ceramic +/-20%	P4525
C31	.0047 uF	polyester or ceramic	P4559
C32	470 pF	ceramic disk	P4124
C33	.1 uF	block ceramic +/- 20%	P4525
C34	.1 uF	block ceramic +/- 20%	P4525
C35	33 pF	ceramic disk NPO	P4406
C36	.0047 uF	polyester or ceramic	P4559
C37	.1 uF	block ceramic +/- 20%	P4525
C38	470 pF	ceramic disk	P4124
C39	33 pF	ceramic disk NPO	P4406
C40	.1 uF	block ceramic +/- 20%	P4525
C41	22 pF	ceramic disk NPO	P4404
C42	220 pF	ceramic disk	P3221

C43	.0047 uF	polyester or ceramic	P4559
C44	.1 uF	block ceramic +/- 20%	P4525
C45	.1 uF	block ceramic +/- 20%	P4525
C46	.0047 uF	polyester or ceramic	P4559
C47	.1uf	block ceramic +/- 20%	P4525
C48	100 pF	ceramic disk	P4116

Resistors

Receive section

R1	10 Kohm	composition or film
R2	3.3 Kohm	composition or film
R3	100 ohm	composition or film
R4	10 Kohm	composition or film
R5	1.8 Kohm	composition or film
R6	330 ohm	composition or film
R7	47 Kohm	composition or film
R8	330ohm	composition or film
R9	330ohm	composition or film
R10	15 Kohm	composition or film
R11	2.2 Kohm	composition or film
R41	4.7 Kohm	composition or film

Transmit Section

R12	10 Kohm	composition or film
R13	3.3 Kohm	composition or film
R14	10 Kohm	composition or film
R15	330 ohm	composition or film
R16	4.7 Kohm	composition or film
R17	330 ohm	composition or film
R18	NOT USED	
R19	120 ohm	composition or film
R20	75 ohm	composition or film
R21	51 ohm	composition or film
R22	120 ohm	composition or film
R23	75 ohm	composition or film
R24	2.7 Kohm	composition or film
R25	1 Kohm	composition or film
R26	1 Kohm	composition or film
R27	1 Kohm	composition or film
R28	1.5 Kohm	composition or film
R29	1.5 Kohm	composition or film
R30	6.8 Kohm	composition or film
R31	470 ohm	composition or film
R32	470 ohm	composition or film
R33	51 ohm	composition or film
R34	1 Kohm	composition or film
R35	1 Kohm	composition or film
R36	1 Kohm	composition or film
R37	2.7 Kohm	composition or film
R38	6.8 Kohm	composition or film
R39	220 ohm	composition or film
R40	220 ohm	composition or film
R42	51 ohm	composition or film

Crystals, Misc.

- Y1 29.XX MHz Series Resonance .0025% HC-18u 3rd Overtone
 Freq(operation) - Transverter Local Osc = Crystal Freq.
 Example: 433.00 Mhz - 404 Mhz = 29.0 Mhz
- Y2 39.XX Mhz Series Resonance .0025% HC-18u 3rd Overtone
 Transmit Crystal Freq + 10.7 Mhz = Receive crystal freq.
 Example: 29.00 + 10.7 Mhz = 39.70 Mhz
- Y3 10.245 MHz .0025% Parallel Res. 30pf load Cap. HC-18u
- FL1 10.7 MHz ceramic filter (180 kHz BW)
 Toko Coils # SK107M3-AE-20
 Digi-Key stock number TK2203

Note: There are pads in parallel with R9 for use
 with a crystal filter, They are not used in this application.

Inductors

	description	TOKO part #	Digi-Key part #
L1	1 uH slug tuned coil	BTKXNS-T1050Z	TK1411
L2	.47 uH slug tuned coil	BTKXNS-T1048Z	TK1408
L3	33 uH fixed coil	348LS-330K	TK3903
L4	33 uH fixed coil	348LS-330K	TK3903
L5	2.2 mH slug tuned coil	CLNS-T1022Z	TK1707
L6	56 uH slug tuned coil	154ANS-T1018Z	TK1216
L7	56 uH slug tuned coil	154ANS-T1018Z	TK1216
L8	56 uH slug tuned coil	154ANS-T1018Z	TK1216
L9	.47 uH slug tuned coil	BTKXNS-T1048Z	TK1408
L10	1 uH slug tuned coil	BTKXNS-T1050Z	TK1411
L11	33 uH fixed coil	348LS-330K	TK3903
L12	33 uH fixed coil	348LS-330K	TK3903
L13	.22 uH slug tuned coil	BTKENS-T1046Z	TK1405
L14	.22 uH slug tuned coil	BTKENS-T1046Z	TK1405

Transistors

- Q1 3N204 or 40673 Dual Gate MOSFET
- Q2 2N4401 NPN Transistor
- Q3 2N4401 NPN Transistor
- Q4 2N4401 NPN Transistor
- Q5 2N4401 NPN Transistor
- Q6 2N4401 NPN Transistor
- Q7 2N4401 NPN Transistor

Diode

- CR1 1N4148 Silicon Diode

Integrated Circuits

- U1 MC3359 FM IF Demodulator IC
- U2 MC1496 Balanced modulator I.C.
- U3 MC1496 Balanced modulator I.C.

U4 uA733 Video amplifier

Connectors

P1	Molex 2 Pin .1 center keyed connector
P2	Molex 4 Pin .1 center keyed connector
P3	Molex 6 Pin .1 center keyed connector
P4	Molex 6 Pin .1 center keyed connector

End of Parts list for 56K Modem R.F. Board

