

**TJ4A MAIN BOARD****RESISTOR**

R1	1K	R51	10K	R101	1K
R2	300	R52	10K	R102	56
R3	18	R53	10K	R103	2.2
R4	300	R54	300K*	R104	10
R5	470	R55	4.7K	R105	10K
R6	1K	R56	10K	R106	4.7K
R7	56	R57	4.7K	R107	10K
R8	5.6	R58	10K	R108	4.7K
R9	100 1/4W	R59	10K	R109	22K
R10	150	R60	10K	R110	10K
R11	36	R61	10K	R111	100
R12	150	R62	22K	R112	10K
R13	220	R63	10K	R113	10K
R14	4.7K	R64	470		Between Pins of 2 and 5 of CN5
R15	100K	R65	4.7K	VR1	10K
R16	100K	R66	36	VR2	33K
R17	100K	R67	36	VR3	10K
R18	100K	R68	10K	VR4	10K
R19	100K	R69	4.7K	VR5	10K
R20	10K	R70	470		
R21	6.8K	R71	47K		
R22	47K	R72	100		
R23	6.8K	R73	1K		
R24	10K	R74	22K		
R25	220	R75	300		
R26	4.7K	R76	18		
R27	680	R77	300		

R28	10K	R78	100
R29	4.7K	R79	470
R30	470	R80	470
R31	1K	R81	470 1/4W
R32	22K	R82	100 1/4W
R33	100	R83	220 1/4W
R34	10	R84	100 1/4W
R35	10 1/4W	R85	220 1/4W
R36	10	R86	100 1/4W
R37	10 1/4W	R87	220 1/4W
R38	10K	R88	100 1/4W
R39	10K	R89	220 1/4W
R40	22K	R90	470 1/4W
R41	1K	R91	470
R42	1K	R92	1K
R43	100	R93	1K
R44	10K	R94	2.2K
R45	1K	R95	4.7K
R46	100	R96	5.6
R47	100	R97	470
R48	10K	R98	470
R49	10K	R99	10
R50	10K	R100	470

## CAPACITOR

C1	103	C51	103	C101	20P
C2	103	C52	101	C102	151
C3	103	C53	103	C103	2P

C4	103	C54	1P	C104	151
C5	103	C55	104	C105	20P
C6	103	C56	103	C106	103
C7	471	C57	103	C107	103
C8	221	C58	103	C108	103
C9	103	C59	33P	C109	103
C10	47P	C60	103	C110	103
C11	103	C61	104	C111	103
C12	103	C62	104	C112	103
C13	47P	C63	104	C113	103
C14	103	C64	104	C114	103
C15	103	C65	104	C115	472
C16	10UF	C66	103	C116	104
C17	103	C67	104	C117	103
C18	10UF	C68	821	C118	103
C19	103	C69	821	C119	821
C20	103	C70	103	C120	NC
C21	101	C71	104	C121	NC
C22	103	C72	2P	C122	NC
C23	104	C73	103	C123	470UF
C24	20P	C74	104	VC1	BROWN
C25	103	C75	104	VC2	GREEN
C26	103	C76	471		
C27	104	C77	103		
C28	104	C78	103		
C29	103	C79	103		
C30	103	C80	101		
C31	103	C81	271		
C32	104	C82	12P		

C33	103	C83	271
C34	10UF	C84	101
C35	220UF	C85	103
C36	104	C86	103
C37	220UF	C87	47P
C38	104	C88	221
C39	104	C89	4.3
C40	103	C90	221
C41	10UF	C91	47
C42	220UF	C92	103
C43	104	C93	103
C44	1UF	C94	20P
C45	1UF	C95	101
C46	104	C96	2P
C47	101	C97	101
C48	101	C98	47P
C49	103	C99	103
C50	20P	C100	103

## SEMICONDUCTOR

D1	4148	U1	HSB88WS	Q1	2N4427
D2	NC	U2	LA1201	Q2	J6
D3	NC	U3	NE602	Q3	J6
D4	4148	U4	LM386	Q4	J6
D5	1SV49	U5	LM386	Q5	108
D6	1SV49	U6	12F509	Q6	108
D7	1SV49	U7	NC	Q7	108
D8	1SV49	U8	NE602	Q8	NC
D9	1SV49	U9	ULN2004	Q9	9018

D10	4148	U10	S6	Q10	V11
D11	7V2	U11	S6	Q11	J6
D12	4148	U12	S6	Q12	J6
D13	4148	U13	S6	Q13	J6
D14	4148			Q14	J6
D15	4148			Q15	J6
D16	1N60			Q16	J6
D17	1N60			Q17	A1015
D18	3V3			Q18	108
D19	4148			Q19	J6
D20	4148			Q20	108
D21	4148			Q21	V11
D22	4148			Q22	108
D23	4148			Q23	3355
D24	4148			Q24	2N4427
D25	7V2			Q25	A1015
D26	4148			Q26	A1015
D27	4148			Q27	9014
D28	4148				
D29	4148				
D30	4148				
D31	4148				
D32	4148				
D33	4148				
D34	4148				
D35	4148				
D36	4148				
D37	4148				
D38	4148				

D39

4148

**INDUCTOR**

L1	T37-2 toroid	RFC1	100UH	or 220uH	color code inductor
L2	Part Number 3	RFC2	100UH	or 220uH	color code inductor
L3	Part Number 3	RFC3	100UH	or 220uH	color code inductor
L4	Part Number 3	RFC4	100UH	or 220uH	color code inductor
L5	Part Number 3	RFC5	100UH	or 220uH	color code inductor
L6	Part Number 2	RFC6	100UH	or 220uH	color code inductor
L7	Part Number 2	RFC7	100UH	or 220uH	color code inductor
L8	Part Number 1	RFC8	100UH	or 220uH	color code inductor
L9	Part Number 1	RFC9	100UH	or 220uH	color code inductor
L10	Part Number 0	RF10	100UH	or 220uH	color code inductor
L11	Part Number 0				

T1	Mixer Coil	(PCB bottom side)
T2	Mixer Coil	(PCB bottom side)
T2	Broad Band Transformer	(PCB top side)
T3	Broad Band Transformer	
T4	9MHZ Can	No part Number
T5	9MHZ Can	No part Number
T6	Broad Band Transformer	
T7	Broad Band Transformer	
T8	Broad Band Transformer	

**RELAY**

RL1	TQ2	
RL2	TQ2	
RL3	G5V-1	or TR5V L-S-Z

**TJ4A PA**

## RESISOTR

R1 BRIDGE  
R2 100  
R3 470  
R4 2.2  
R5 330  
R6 1K  
R7 6.8K 1/4W  
R8 NC  
R9 NC  
R10 330 1/2W  
R11 330 1/2W

## SEMICONDUCTOR

Q1 2N4427  
Q2  
Q3  
  
D1 8.2K resistor

U1 7805  
U2 ULN2004

## RELAY

RL1 TR5V L-S-Z  
RL2 TR5V L-S-Z

## CAPACITOR

C1 103  
C2 NC  
C3 103  
C4 NC  
C5 103  
C6 103  
C7 100UF  
C8 104  
C9 103  
C10 NC  
C11 103  
C12 NC  
C13 103  
C14 104  
C15 104  
C16 470UF  
C17 103  
C18 100UF  
C19 104  
C20 104  
C21 100UF  
C22 220UF  
C23 103  
C24 103  
C25 150P MICA or 160P  
C26 330P MICA

## INDUCTOR

L1 1.2UH color code inductor  
L2 RFC  
L3 BEAD  
L4 BEAD  
L5 RFC  
L6 T37-2  
L7 T37-2  
L8 T37-2  
L9 T37-2  
L10 T37-2  
L11 T37-2  
L12 T37-2  
L13 T37-2  
L14 100UH or 220uH color code inductor  
L15 100UH or 220uH color code inductor  
L16 100UH or 220uH color code inductor  
L17 100UH or 220uH color code inductor  
L18 100UH or 220uH color code inductor  
  
T1 NC  
T2 BROADBAND TRANSFORMER  
T3 BROADBAND TRANSFORMER

RL3	TR5V L-S-Z	C27	150P	MICA	or 160P
RL4	TR5V L-S-Z	C28	220P	MICA	
RL5	TR5V L-S-Z	C29	470P	MICA	
RL6	TR5V L-S-Z	C30	220P	MICA	
RL7	TR5V L-S-Z	C31	470P	MICA	
RL8	TR5V L-S-Z	C32	820P	MICA	
RL9	G5V-1 or TR5V L-S-Z	C33	470P	MICA	
		C34	820P	MICA	
		C35	1500P	MICA	
		C36	820P	MICA	
		C37	103		
		C38	103		
		C39	103		
		C40	103		
		C41	103		
		C42	103		
		C43	103		
		C44	103		

NOTE:

1. Solder a 68-ohm resistor across secondary of T2
2. Solder a 221 cap across primary of T3.





2.