

R70/R71 and R150 PARTS LIST

B - R70/R71 and R150 Parts List

Main PCB Assembly Parts

Ref.	Description	Part Number
R70/R150 Mkl (PCB 30/9115) Common Parts		
C2	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C3	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C4	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C5	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C8	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C9	Capacitor 68P 5% 63V NPO SM1206	46/3300/068P
C10	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C11	Capacitor 47P 2% 100V NPO Rad.1	45/2680/047P
C12	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C13	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C14	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C15	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C16	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C17	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C18	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C19	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C20	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C21	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C22	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C23	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C24	Capacitor 22P 2% 100V NPO Rad.1	45/2680/022P
C25	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C26	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C27	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C28	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C29	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C30	Capacitor 10U 35V Rad Electro	41/2001/010U
C31	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C32	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C33	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C34	Capacitor 100P 2% 100V NPO Rad1	45/2680/100P
C35	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C36	Capacitor 470U 25V RB Electro	41/2001/047U
C37	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C38	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C39	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C40	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C41	Capacitor 10U 35V Rad Electro	41/2001/010U
C42	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C43	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C44	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C47	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C48	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C49	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C53	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C54	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C55	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C56	Capacitor 15P 5% 63V NPO SM1206	46/3300/015P
C57	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C59	Capacitor 10U 35V Rad Electro	41/2001/010U
C62	Capacitor 100P 5% 63V NPO 1206	46/3300/100P
C63	Capacitor 100P 5% 63V NPO 1206	46/3300/100P
C64	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C65	Capacitor 100N 10% 63V X7R 1206	46/3310/100N

Ref.	Description	Part Number
C66	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C67	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C68	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C69	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C70	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C71	Capacitor 47P 2% 100V NPO Rad.1	45/2680/047P
C72	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C73	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C74	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C75	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C76	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C77	Capacitor 10U 35V Rad Electro	41/2001/010U
C78	Capacitor 4N7 10% COG Rad.2	46/2000/04N7
C79	Capacitor 47N 20% 50V X7R Rad.2	46/2001/047N
C80	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C81	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C82	Capacitor 47N 20% 50V X7R Rad.2	46/2001/047N
C83	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C84	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C85	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C86	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C87	Capacitor 8P2 5% 63V NPO SM1206	46/3300/08P2
C88	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C89	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C90	Capacitor 1N2 5% NPO Rad.2	46/2000/01N2
C91	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C92	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C93	Capacitor 22N 10% 63V MKT Rad.2	47/2007/022N
C94	Capacitor 1N2 5% NPO Rad.2	46/2000/01N2
C95	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C96	Capacitor 22N 10% 63V MKT Rad.2	47/2007/022N
C97	Capacitor 470U 25V RB Electro	41/2001/047U
C98	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C99	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C100	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C101	Capacitor 4N7 10% COG Rad.2	46/2000/04N7
C102	Capacitor 27P 2% 100V NPO Rad.1	45/2680/027P
C103	Capacitor 1N5 10% 50V COG Rad.2	46/2000/01N5
C104	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C105	Capacitor 470U 25V RB Electro	41/2001/470U
C106	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C107	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C108	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C109	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C110	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C111	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C112	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C113	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C114	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C115	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C116	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C117	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C118	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C119	Capacitor 470U 25V RB Electro	41/2001/047U
C120	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C121	Capacitor 2N2 5% 400V MKT Rad.2	47/2040/02N2
C122	Capacitor 15N 5% 400V MKT Rad.2	47/2040/015N
C123	Capacitor 33N 5% 400V MKT Rad.2	47/2040/033N
C124	Capacitor 6N8 10% 400V MKT Rad.2	47/2040/06N8
C125	Capacitor 10N 10% 400V MKT Rad.2	47/2040/010N
C126	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
C127	Capacitor 470U 25V RB Electro	41/2001/470U
C128	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C129	Capacitor 470U 25V RB Electro	41/2001/047U
C130	Capacitor 470U 25V RB Electro	41/2001/470U
C131	Capacitor 1UO 10% 50V MKT	47/2007/01UO
C132	Capacitor 1UO 10% 50V MKT	47/2007/01UO
C133	Capacitor 1UO 10% 50V MKT	47/2007/01UO
C134	Capacitor 2U2 10% 100V MKT Rad.2	47/2010/02U2
C135	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C136	Capacitor 470U 25V RB Electro	41/2001/470U
C137	Capacitor 10U 35V Rad Electro	41/2001/010U
C138	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C139	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C140	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C141	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C142	Capacitor 10U 35V Rad Electro	41/2001/010U
C143	Capacitor 10U 35V Rad Electro	41/2001/010U
C144	Capacitor 10U 35V Rad Electro	41/2001/010U
C145	Capacitor 10U 35V Rad Electro	41/2001/010U
C146	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C147	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C148	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C149	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C150	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C151	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C152	Capacitor 470U 25V RB Electro	41/2001/470U
C153	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C154	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C155	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C156	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C157	Capacitor 18P 2% 100V NPO Rad.1	45/2680/018P
C158	Capacitor 18P 2% 100V NPO Rad.1	45/2680/018P
C159	Capacitor 10U 35V Rad Electro	41/2001/010U
C160	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C161	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C162	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C163	Capacitor 10U 35V Rad Electro	41/2001/010U
C164	Capacitor 10U 35V Rad Electro	41/2001/010U
C166	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C167	Capacitor 10U 35V Rad Electro	41/2001/010U
C170	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C171	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C176	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C180	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C182	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C185	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C186	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C187	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C188	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
CF2	Filter Ceramic CFU455B	34/2000/CFUB
D1	Diode Zen 5V1 BZX84C5V1 SOT	21/3040/C5V1
D2	Diode Band SW BA682 SOD80	21/3050/0682
D3	Diode Schottkey BAT17 SOT23	21/3030/0017
D4	Diode VCapacitor MMBV432L SOT23	21/3060/V432
D5	Diode Silicon 1N4148	21/1010/4148
D6	Diode Silicon 1N4148	21/1010/4148
D7	Diode LED Yellow T1 3/4	21/1010/LEDY
D8	Diode Zen 1N4751 30V 1W Axial	21/1040/4751
D9	Diode 3Amplifier 1KV Rectifier	21/1080/5408
D10	Diode 8V2 Zener	21/1040/B8V2
D11	Diode LED Red T1 3/4	21/1010/LEDR
D12	Diode LED Green T1 3/4	21/1010/LEDG

Ref.	Description	Part Number
D13	Diode VCapacitor MMBV432L SOT23	21/3060/V432
D14	Diode VCapacitor MMBV432L SOT23	21/3060/V432
D15	Diode VCapacitor MMBV432L SOT23	21/3060/V432
D16	Diode VCapacitor MMBV432L SOT23	21/3060/V432
D17	Diode Silicon 1N4148	21/1010/4148
H1	Hybrid CTCSS	18/1000/1752
ISO1	IC Opto-Isolator 4N35	25/1010/4N35
JP1	Connector 3Way Header	35/2501/0003
JP2	Connector 3Way Header	35/2501/0003
JP3	Connector 3Way Header	35/2501/0003
JP4	Connector 3Way Header	35/2501/0003
JP6	Connector 3Way Header	35/2501/0003
JP7	Connector 3Way Header	35/2501/0003
JP8	Connector 2Way Header	35/2501/0002
JP9	Connector 3Way Header	35/2501/0003
JP11	Connector 3Way Header	35/2501/0003
JP12	Connector 2Way Header	35/2501/0002
L1	Inductor 220N 10% Choke SM1206	37/3320/220N
L2	Inductor 220N 10% Choke SM1206	37/3320/220N
L3	Inductor 220N 10% Choke SM1206	37/3320/220N
L4	Inductor 1uH Axial	37/2021/001U
L5	Inductor 680N 10mm	37/2021/680N
L6	Inductor 680N 10mm	37/2021/680N
L7	Inductor 680N 10mm	37/2021/680N
L8	Inductor 680N 10mm	37/2021/680N
L9	Inductor 1.5u 10mm	37/2021/1.5U
L10	Inductor VAR 455KHz 10mm	37/2031/97HM
L11	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L12	Inductor 1uH Axial	37/2021/001U
L14	Inductor 220N 10% Choke SM1206	37/3320/220N
L16	Inductor 220N 10% Choke SM1206	37/3320/220N
L17	Ferrite Bead SMD	37/3321/LM31
L18	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L19	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L20	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L21	Ferrite Bead SMD	37/3321/LM31
L22	Ferrite Bead SMD	37/3321/LM31
L23	Inductor 150mH 10RBH	37/2021/1RBH
L24	Inductor 6 Hole Ferrite RFC	37/1021/0001
L25	Ferrite Bead SMD	37/3321/LM31
L26	Inductor 1uH Axial	37/2021/001U
L27	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L33	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L40	Inductor 1uH Axial	37/2021/001U
MA1	Amplifier MMIC MWA0211L SOT143	24/3010/211L
MA2	Amplifier MMIC MWA0211L SOT143	24/3010/211L
MA3	Amplifier MMIC MWA0211L SOT143	24/3010/211L
MA4	Amplifier MMIC MWA0211L SOT143	24/3010/211L
MX1	Mixer RFMX 1-13	37/2070/0113
P1	Filter D RT AGL 25W M 1NF	35/5011/025M
P2	Filter D RT AGL 9W F Ferrite	35/5012/009F
P3	Filter D RT AGL 9W F Ferrite	35/5012/009F
Q1	Transistor NPN MRF9511 SOT143	27/3020/9511
Q2	FET NJ J309 TO92M	27/2030/J309
Q3	FET NJ J309 TO92M	27/2030/J309
Q4	FET NJ 2N5484 TO92M	27/2030/5484
Q5	Transistor RF NPN MRF5812 SO8	27/3020/5812
Q6	FET NJ MMBFJ309 SOT23	27/3030/J309
Q7	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q8	Transistor GP NPN MPS2369 TO92	27/2010/2369
Q9	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q10	Transistor GP PNP 2N3906 TO92	27/2010/3906

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
Q11	Transistor GP PNP MPS3640	27/2010/3640
Q12	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q13	Transistor GP PNP MPS3640	27/2010/3640
Q14	Transistor GP NPN MPS2369 TO92	27/2010/2369
Q15	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q16	Transistor GP PNP 2N3906 TO92	27/2010/3906
Q17	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q18	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q19	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q20	Transistor PNP MJF6107 TO22O	27/2010/6107
Q21	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q22	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q23	FET NJ 2N5459 TO92M	27/2030/5459
Q24	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q26	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q27	Transistor GP NPN 2N3904 TO92	27/2020/3904
R1	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R2	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R4	Resistor 47R 5% 0.25W SM1206	1/3380/0047
R5	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R6	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R8	Resistor 150 5% 0.25W Axial	51/1040/0150
R9	Resistor 150 5% 0.25W Axial	51/1040/0150
R10	Resistor 150 5% 0.25W Axial	51/1040/0150
R11	Resistor 5K6 5% 0.25W Axial	51/1040/05K6
R12	Resistor 150 5% 0.25W Axial	51/1040/0150
R13	Resistor 12K 5% 0.25W Axial	51/1040/012K
R14	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R16	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R17	Resistor 68K 5% 0.25W Axial	51/1040/068K
R18	Resistor 470K 5% 0.25W Axial	51/1040/470K
R19	Resistor 10K 5% 0.25W Axial	51/1040/010K
R20	Resistor 10K 5% 0.25W Axial	51/1040/010K
R21	Resistor 470 5% 0.25W Axial	51/1040/0470
R22	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R23	Resistor 680 5% 0.25W Axial	51/1040/0680
R25	Resistor 100K 5% 0.25W Axial	51/1040/100K
R26	Resistor 270 5% 0.25W SM1206	51/3380/0270
R27	Resistor 270 5% 0.25W SM1206	51/3380/0270
R28	Resistor 1K0 5% 0.25W SM1206	1/3380/01K0
R29	Resistor 39R 5% 0.25W SM1206	1/3380/0039
R30	Resistor 39R 5% 0.25W SM1206	1/3380/0039
R31	Resistor 180 5% 0.25W SM1206	1/3380/0180
R32	Resistor 180 5% 0.25W SM1206	1/3380/0180
R33	Resistor 270 5% 0.25W SM1206	1/3380/0270
R34	Resistor 10K 5% 0.25W SM1206	1/3380/010K
R35	Resistor 10K 5% 0.25W SM1206	1/3380/010K
R36	Resistor 10R 5% 0.25W SM1206	1/3380/0010
R37	Resistor 2K2 5% 0.25W SM1206	1/3380/02K2
R38	Resistor 2K2 5% 0.25W SM1206	1/3380/02K2
R39	Resistor 100 5% 0.25W SM1206	13380/0100
R40	Resistor 100 5% 0.25W SM1206	51/3380/0100
R41	Resistor 100 5% 0.25W SM1206	51/3380/0100
R42	Resistor 100 5% 0.25W SM1206	51/3380/0100
R43	Resistor 220 5% 0.25W Axial	51/1040/0220
R44	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R45	Resistor 15R 5% 0.25W SM1206	51/3380/0015
R46	Resistor 22 5% 0.25W Axial	51/1040/0022
R47	Resistor 560 5% 0.25W Axial	51/1040/0560
R50	Resistor 100 5% 0.25W Axial	51/1040/0100
R51	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R52	Resistor 3K3 5% 0.25W Axial	51/1040/03K3

Ref.	Description	Part Number
R53	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R54	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R55	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R56	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R57	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R58	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R59	Resistor 560 5% 0.25W Axial	51/1040/0560
R60	Resistor 10K 5% 0.25W SM1206	51/3380/010K
R61	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R62	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R63	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R64	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R65	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R66	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R67	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R68	Resistor 180 5% 0.25W SM1206	51/3380/0180
R69	Resistor 18R 5% 0.25W SM1206	51/3380/0018
R71	Resistor 220K 5% 0.25W Axial	51/1040/220K
R72	Resistor 47K 5% 0.25W Axial	51/1040/047K
R73	Resistor 51K 5% 0.25W Axial	51/1040/051K
R74	Resistor 51K 5% 0.25W Axial	51/1040/051K
R75	Resistor 51K 5% 0.25W Axial	51/1040/051K
R76	Resistor 47K 5% 0.25W Axial	51/1040/047K
R77	Resistor 47K 5% 0.25W Axial	51/1040/047K
R78	Resistor 47K 5% 0.25W Axial	51/1040/047K
R79	Resistor 10K 5% 0.25W Axial	51/1040/010K
R80	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R81	Resistor 10K 5% 0.25W Axial	51/1040/010K
R82	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R83	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R84	Resistor 270K 5% 0.25W Axial	51/1040/270K
R85	Resistor 22K 5% 0.25W Axial	51/1040/022K
R86	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R87	Resistor 220K 5% 0.25W Axial	51/1040/220K
R88	Resistor 5K6 5% 0.25W Axial	51/1040/05K6
R89	Resistor 100K 5% 0.25W Axial	51/1040/100K
R90	Resistor 150K 5% 0.25W Axial	51/1040/150K
R91	Resistor 560K 5% 0.25W Axial	51/1040/560K
R92	Resistor 10K 5% 0.25W Axial	51/1040/010K
R93	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R94	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R95	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R96	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R97	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R98	Resistor 15K 5% 0.25W Axial	51/1040/015K
R99	Resistor 15K 5% 0.25W Axial	51/1040/015K
R100	Resistor 10M 5% 0.25W Axial	51/1040/010M
R101	Resistor 6K49 1% 0.25W Axial	51/1010/6K49
R102	Resistor 28K7 1% 0.25W Axial	51/1010/28K7
R103	Resistor 562K 1% 0.25W Axial	51/1010/562K
R104	Resistor 28K7 1% 0.25W Axial	51/1010/28K7
R105	Resistor 6K49 1% 0.25W Axial	51/1010/6K49
R106	Resistor 562K 1% 0.25W Axial	51/1010/562K
R107	Resistor 75K 1% 0.25W Axial	51/1010/075K
R108	Resistor 10K 5% 0.25W Axial	51/1040/010K
R109	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R110	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R111	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R112	Resistor 10K 5% 0.25W Axial	51/1040/010K
R113	Resistor 390 5% 0.25W Axial	51/1040/0390
R114	Resistor 10K 5% 0.25W Axial	51/1040/010K
R115	Resistor 39 5% 0.25W Axial	51/1040/0039

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
R116	Resistor 220 5% 0.25W Axial	51/1040/0220
R117	Resistor 10 5% 0.25W Axial	51/1040/0010
R118	Resistor 2R2 5% 0.25W Axial	51/1040/02R2
R119	Resistor 10K 5% 0.25W Axial	51/1040/010K
R120	Resistor 330 5% 0.25W Axial	51/1040/0330
R121	Resistor 33K 5% 0.25W Axial	51/1040/033K
R122	Resistor 270 5% 0.25W Axial	51/1040/0270
R123	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R124	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R125	Resistor 680 5% 0.25W Axial	51/1040/0680
R126	Resistor 680 5% 0.25W Axial	51/1040/0680
R127	Resistor 680 5% 0.25W Axial	51/1040/0680
R128	Resistor 1K5 5% 0.25W Axial	51/1040/01K5
R129	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R130	Resistor 680 5% 0.25W Axial	51/1040/0680
R131	Resistor 10K 5% 0.25W Axial	51/1040/010K
R132	Resistor 51K1 1% 0.25W Axial	51/1010/51K1
R133	Resistor 274K 1% 0.25W Axial	51/1010/274K
R134	Resistor 10K 5% 0.25W Axial	51/1040/010K
R135	Resistor 10K 5% 0.25W Axial	51/1040/010K
R136	Resistor 10K 5% 0.25W Axial	51/1040/010K
R137	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R138	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R139	Resistor 47 5% 0.25W Axial	51/1040/0047
R140	Resistor 680 5% 0.25W Axial	51/1040/0680
R141	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R142	Resistor 10M 5% 0.25W Axial	51/1040/010M
R143	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R144	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R145	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R146	Resistor 10M 5% 0.25W Axial	51/1040/010M
R147	Resistor 10K 5% 0.25W Axial	51/1040/010K
R148	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R149	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R150	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R151	Resistor 680 5% 0.25W Axial	51/1040/0680
R152	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R153	Resistor 100K 5% 0.25W Axial	51/1040/100K
R154	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R155	Resistor 680 5% 0.25W Axial	51/1040/0680
R156	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R157	Resistor 10K 5% 0.25W Axial	51/1040/010K
R160	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R161	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R162	Resistor 270 5% 0.25W SM1206	51/3380/0270
R163	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R164	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R165	Resistor 100 5% 0.25W SM1206	51/3380/0100
R166	Resistor 100 5% 0.25W SM1206	51/3380/0100
R168	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R169	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R170	Resistor 270 5% 0.25W SM1206	51/3380/0270
R171	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R172	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R177	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R178	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R179	Resistor 680 5% 0.25W Axial	51/1040/0680
R180	Resistor 470K 5% 0.25W Axial	51/1040/470K
R181	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R182	Resistor 100 5% 0.25W Axial	51/1040/0100
R183	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R184	Resistor 3K3 5% 0.25W Axial	51/1040/03K3

Ref.	Description	Part Number
R185	Resistor 470K 5% 0.25W SM1206	51/3380/470K
R186	Resistor 10 5% 0.25W Axial	51/1040/0010
R187	Resistor 100K 5% 0.25W Axial	51/1040/100K
R188	Resistor 10K 5% 0.25W Axial	51/1040/010K
RN1	Resistor Pack 100K X8 DIP16	52/2002/100K
RN2	Resistor Pack 10K SIP10	52/2002/010K
RV1	Trimpot 10K 1 Turn Vertical	53/1020/010K
RV3	Trimpot 10K Multiturn Horizontal	53/2060/010K
RV4	Trimpot 10K Multiturn Horizontal	53/2060/010K
RV5	Trimpot 10K Multiturn Horizontal	53/2060/010K
T1	Transformer Line 600 Ohm	37/2040/5065
U1	IC Mixer RX NE612N	25/2050/612N
U2	IC Dual OP Amplifier MC3458	25/2050/3458
U3	IC IF Amplifier LIM DISC NE614A	25/2020/614A
U4	IC Frequency SYN MB1501 SO16SP	26/2000/1501
U5	IC Audio Amplifier TDA2003	25/2070/2003
U6	IC Volt Regulator LM7805	25/2040/7805
U7	IC Quad Nand 74C00 DIP14	26/2031/4C00
U11	IC 3 State BUF 74HC244N	26/2030/244N
U12	IC EPROM 27C256	26/2090/C256
U13	IC 8 Bit Latch 74HC573N	26/2030/C573
U14	IC Micro Super MC34064P-5	26/2000/064P
U15	IC Micro 68HC11A1P	26/2000/HC11
U16	IC RS232 Inter MAX232C	26/2001/232C
U17	IC Analogue Gate MC14066B	26/2040/4066
U22	IC Dual OP Amplifier MC1458B	25/2050/1458
U24	IC Hex IN Vertical CD4049	26/2040/4049
U26	IC Quad OP Amplifier TLC274	25/2050/274C
U27	IC Quad OP Amplifier TLC274	25/2050/274C
U28	IC Quad OP Amplifier TLC274	25/2050/274C
XF1	Crystal Filter	33/2000/45MZ
XF2	Crystal Filter	33/2000/45MZ
Y1	Crystal,45.455 HC-45/U	32/2045/45M455
Y2	Crystal 5.0MHz	32/2049/05M0
Y3	Crystal 8.0MHz	32/2049/08M0

R70 Specific Parts

C1	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C45	Capacitor 33P 5% 63V NPO SM1206	46/3300/033P
C46	Capacitor 33P 5% 63V NPO SM1206	46/3300/033P
C50	Capacitor 100P 5% 63V NPO 1206	46/3300/100P
C60	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C169	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C172	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C175	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C177	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C179	Capacitor 10P 5% 63V NPO SM1206	46/3300/010P
L13	Inductor 68N 10% Choke SM1008	37/3320/068N
L15	Inductor 220N 10% Choke SM1008	37/3320/220N
L28	Inductor 39N 10% Choke SM1008	37/3320/039N
L30	Inductor 2U2 10% Choke SM1206	37/3320/02U2
L32	Inductor 39N 10% Choke SM1008	37/3320/039N
L35	Inductor 39N 10% Choke SM1008	37/3320/039N
L37	Inductor 2U2 10% Choke SM1206	37/3320/02U2
L39	Inductor 12N 10% Choke SM1008	37/3320/012N
R48	Resistor 1K5 5% 0.25W Axial	51/1040/01K5
R49	Resistor 1K5 5% 0.25W Axial	51/1040/01K5

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
R150 Specific Parts		
C1	Capacitor 100P 5% 63V NPO 1206	46/3300/100P
C45	Capacitor 15P 5% 63V NPO SM1206	46/3300/015P
C46	Capacitor 15P 5% 63V NPO SM1206	46/3300/015P
C50	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C60	Capacitor 33P 5% 63V NPO SM1206	46/3300/033P
C165	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
C169	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C172	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C173	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
C174	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
C175	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C177	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C178	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
C179	Capacitor 22P 5% 63V NPO SM1206	46/3300/022P
L13	Inductor 39N 10% Choke SM1008	37/3320/039N
L15	Inductor 18N 10% Choke SM1008	37/3320/018N
L28	Inductor 12N 10% Choke SM1008	37/3320/012N
L30	Inductor 680N 10% Choke SM1206	37/3320/680N
L32	Inductor 12N 10% Choke SM1008	37/3320/012N
L35	Inductor 12N 10% Choke SM1008	37/3320/012N
L37	Inductor 680N 10% Choke SM1206	37/3320/680N
L39	Inductor 12N 10% Choke SM1008	37/3320/012N
R48	Resistor 680 5% 0.25W Axial	51/1040/0680
R49	Resistor 680 5% 0.25W Axial	51/1040/0680
R70 66 - 88 MHz		
L29	Coil 10mm 5T Shield Ferrite Core	37/2022/0298
L31	Coil 10mm 5T Shield Ferrite Core	37/2022/0298
L34	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L36	Coil 10mm 5T Shield Ferrite Core	37/2022/0298
L38	Coil 10mm 5T Shield Ferrite Core	37/2022/0298
R150A 136 - 156 MHz		
L29	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L31	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L34	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L36	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L38	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
R150B 154 - 174 MHz		
L29	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L31	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L34	Coil 10mm 2T Shield Aluminium Core	37/2022/1111
L36	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L38	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L41	Inductor 220N 10% Choke SM1206	37/3320/220N
R70/R150 25 KHz Channels		
CF1	Filter Ceramic CFR455D	34/2000/CFRad
R15	Resistor 10 5% 0.25W Axial	51/1040/0010
R24	Resistor 22K 5% 0.25W Axial	51/1040/022K

Ref.	Description	Part Number
R70N/R150N 12.5 KHz Channels		
CF1	Filter Ceramic CFS455G	34/2000/CFSG
R15	Resistor 470 5% 0.25W Axial	51/1040/0470
R24	Resistor 33K 5% 0.25W Axial	51/1040/033K
R70/R150 Std. Ref. Osc.		
C181	Capacitor TRIM 2-18P HI-TMP FLM	49/3001/018P
C182	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C183	Capacitor 220P 5% 50V COG Rad.1	46/2003/220P
C184	Capacitor 220P 5% 50V COG Rad.1	46/2003/220P
Q25	Transistor GP NPN 2N3904 TO92	27/2020/3904
R173	Resistor 10K 5% 0.25W Axial	51/1040/010K
R174	Resistor 10K 5% 0.25W Axial	51/1040/010K
R175	Resistor 15 5% 0.25W Axial	51/1040/0015
R176	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
Y4	Crystal, 12.8MHZ HC-49U	32/2049/12M8
R70N/R150N TCXO Ref. Osc.		
XO1	TCXO 12.8 MHz HI-Q TCO474	32/3031/12.8

B - R70/R71 and R150 Parts List**R71 common parts (for PCB 30/9132/xxxx)**

Ref.	Description	Part Number
C1	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C2	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C3	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C4	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C5	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C7	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C8	Capacitor 150P 5% 63V NPO SM1206	46/3300/150P
C9	Capacitor 68P 5% 63V NPO SM1206	46/3300/068P
C10	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C11	Capacitor 39P 2% 100V NPO Rad.1	45/2680/039P
C12	Capacitor 1N 10% 50V COG Rad.1	46/2003/01N0
C13	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C14	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C15	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C16	Capacitor 150P 2% 100V NPO Rad.1	45/2680/150P
C17	Capacitor 47P 2% 100V NPO Rad.1	45/2680/047P
C18	Capacitor 220P 5% 50V COG Rad.1	46/2003/220P
C19	Capacitor 39P 2% 100V NPO Rad.1	45/2680/039P
C20	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C21	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C22	Capacitor 22P 2% 100V NPO Rad.1	45/2680/022P
C23	Capacitor 68P 2% 100V NPO Rad.1	45/2680/068P
C24	Capacitor 47P 2% 100V NPO Rad.1	45/2680/047P
C25	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C26	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C27	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C28	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C29	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C30	Capacitor 10U 35V Rad Electro	41/2001/010U
C31	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C32	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C33	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C34	Capacitor 100P 2% 100V NPO Rad1	45/2680/100P
C35	Capacitor 470N 20% 50V Z5U Rad.2	46/2001/470N
C36	Capacitor 47U 25V RB Electro	41/2001/047U
C37	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C38	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C39	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C40	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C41	Capacitor 10U 35V Rad Electro	41/2001/010U
C42	Capacitor 1N 10% 50V COG Rad.1	46/2003/01N0
C43	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C44	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C45	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C46	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C47	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C48	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C49	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C50	Capacitor 100P 5% 63V NPO SM1206	46/3300/100P
C53	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C54	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C55	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C56	Capacitor 15P 5% 63V NPO SM1206	46/3300/015P
C57	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C59	Capacitor 10U 35V Rad Electro	41/2001/010U
C60	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C62	Capacitor 100P 5% 63V NPO 1206	46/3300/100P
C63	Capacitor 100P 5% 63V NPO 1206	46/3300/100P

Ref.	Description	Part Number
C64	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C65	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C66	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C67	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C68	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C69	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C70	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C71	Capacitor 47P 2% 100V NPO Rad.1	45/2680/047P
C72	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C73	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C74	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C75	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C76	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C77	Capacitor 10U 35V Rad Electro	41/2001/010U
C78	Capacitor 4N7 10% COG Rad.2	46/2000/04N7
C79	Capacitor 47N 20% 50V X7R Rad.2	46/2001/047N
C80	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C81	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C82	Capacitor 47N 20% 50V X7R Rad.2	46/2001/047N
C83	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C84	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C85	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C86	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C87	Capacitor 8P2 5% 63V NPO SM1206	46/3300/08P2
C88	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C89	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C90	Capacitor 1N2 5% NPO Rad.2	46/2000/01N2
C91	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C92	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C93	Capacitor 22N 10% 63V MKT Rad.2	47/2007/022N
C94	Capacitor 1N2 5% NPO Rad.2	46/2000/01N2
C95	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C96	Capacitor 22N 10% 63V MKT Rad.2	47/2007/022N
C97	Capacitor 47U 25V RB Electro	41/2001/047U
C98	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C99	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C100	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C101	Capacitor 4N7 10% COG Rad.2	46/2000/04N7
C102	Capacitor 27P 2% 100V NPO Rad.1	45/2680/027P
C103	Capacitor 1N5 10% 50V COG Rad.2	46/2000/01N5
C104	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C105	Capacitor 470U 25V RB Electro	41/2001/470U
C106	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C107	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C108	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C109	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C110	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C111	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C112	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C113	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C114	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C115	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C116	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C117	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C118	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C119	Capacitor 47U 25V RB Electro	41/2001/047U
C120	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C121	Capacitor 2N2 5% 400V MKT Rad.2	47/2040/02N2
C122	Capacitor 15N 5% 400V MKT Rad.2	47/2040/015N
C123	Capacitor 33N 5% 400V MKT Rad.2	47/2040/033N
C124	Capacitor 6N8 10% 400V MKT Rad.2	47/2040/06N8
C125	Capacitor 10N 10% 400V MKT Rad.2	47/2040/010N

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
C126	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C127	Capacitor 470U 25V RB Electro	41/2001/470U
C128	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C129	Capacitor 47U 25V RB Electro	41/2001/047U
C130	Capacitor 470U 25V RB Electro	41/2001/470U
C131	Capacitor 1UO 10% 50V MKT	47/2007/01UO
C132	Capacitor 1UO 10% 50V MKT	47/2007/01UO
C133	Capacitor 1UO 10% 50V MKT	47/2007/01UO
C134	Capacitor 2U2 10% 100V MKT Rad.2	47/2010/02U2
C135	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C136	Capacitor 470U 25V RB Electro	41/2001/470U
C137	Capacitor 10U 35V Rad Electro	41/2001/010U
C138	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C139	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C140	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C141	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C142	Capacitor 10U 35V Rad Electro	41/2001/010U
C143	Capacitor 10U 35V Rad Electro	41/2001/010U
C144	Capacitor 10U 35V Rad Electro	41/2001/010U
C145	Capacitor 10U 35V Rad Electro	41/2001/010U
C146	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C147	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C148	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C149	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C150	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C151	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C152	Capacitor 470U 25V RB Electro	41/2001/470U
C153	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C154	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C155	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C156	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C157	Capacitor 18P 2% 100V NPO Rad.1	45/2680/018P
C158	Capacitor 18P 2% 100V NPO Rad.1	45/2680/018P
C159	Capacitor 10U 35V Rad Electro	41/2001/010U
C160	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C161	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C162	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C163	Capacitor 10U 35V Rad Electro	41/2001/010U
C164	Capacitor 10U 35V Rad Electro	41/2001/010U
C166	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C167	Capacitor 10U 35V Rad Electro	41/2001/010U
C169	Capacitor 1N 5% 63V NPO SM1206	46/3300/01N0
C170	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C171	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C172	Capacitor 1N 5% 63V NPO SM1206	46/3300/01N0
C175	Capacitor 1N 5% 63V NPO SM1206	46/3300/01N0
C176	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C177	Capacitor 1N 5% 63V NPO SM1206	46/3300/01N0
C179	Capacitor 8P2 5% 63V NPO SM1206	46/3300/08P2
C180	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C185	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C186	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C187	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C188	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C189	Capacitor 150P 5% 63V NPO SM1206	46/3300/150P
CF2	Filter Ceramic CFU455B	34/2000/CFUB
D1	Diode Zen 5V1 BZX84C5V1 S OT	21/3040/C5V1
D2	Diode Band SW BA682 SOD80	21/3050/0682
D3	Diode Schottkey BAT17 SOT23	21/3030/0017
D4	DiodeVCapacitor MMBV432L SOT23	1/3060/V432
D5	Diode Silicon IN4148	21/1010/4148
D6	Diode Silicon IN4148	21/1010/4148

Ref.	Description	Part Number
D7	Diode LED Yellow RT ANG MTG	21/1010/LEDY
D8	Diode Zen 1N4751 30V 1W AXI	21/1040/4751
D9	Diode 3Amplicifier 1KV Rectifier	21/1080/5408
D10	Diode 8V2 Zener	21/1040/B8V2
D11	Diode LED Red RT ANG MTG	21/1010/LEDR
D12	Diode LED Green RT ANG MTG	21/1010/LEDG
D13	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D14	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D15	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D16	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D17	Diode Silicon IN4148	21/1010/4148
H1	Hybrid CTCSS	13/9150/0002
ISO1	IC Opto-Isolator 4N33	25/1010/4N33
JP1	Connector 3Way Header	35/2501/0003
JP2	Connector 3Way Header	35/2501/0003
JP3	Connector 3Way Header	35/2501/0003
JP4	Connector 3Way Header	35/2501/0003
JP6	Connector 3Way Header	35/2501/0003
JP7	Connector 3Way Header	35/2501/0003
JP8	Connector 2Way Header	35/2501/0002
JP9	Connector 3Way Header	35/2501/0003
JP11	Connector 3Way Header	35/2501/0003
JP12	Connector 2Way Header	35/2501/0002
L1	Inductor 390N 10% Choke SM1008	37/3320/390N
L3	Inductor 390N 10% Choke SM1008	37/3320/390N
L4	Inductor 10uH Axial	37/2021/010U
L5	Inductor 1.5u 10mm	37/2021/1.5U
L6	Inductor 1.5u 10mm	37/2021/1.5U
L7	Inductor 1.5u 10mm	37/2021/1.5U
L8	Inductor 1.5u 10mm	37/2021/1.5U
L9	Inductor 3.3u 10mm	37/2021/03U3
L10	Inductor VAR 455KHz 10mm	37/2031/97HM
L11	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L12	Inductor 1uH Axial	37/2021/001U
L13	Inductor 68N 10% Choke SM1008	37/3320/068N
L14	Inductor 68N 10% Choke SM1008	37/3320/068N
L15	Inductor 220N 10% Choke SM1008	37/3320/220N
L16	Inductor 220N 10% Choke SM1008	37/3320/220N
L17	Ferrite Bead SMD	37/3321/LM31
L18	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L19	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L20	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L21	Ferrite Bead SMD	37/3321/LM31
L22	Ferrite Bead SMD	37/3321/LM31
L23	Inductor 150mH 10RBH	37/2021/1RBH
L24	Inductor 6 Hole Ferrite RFC	37/1021/0001
L25	Ferrite Bead SMD	37/3321/LM31
L26	Inductor 1uH Axial	37/2021/001U
L27	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L28	Inductor 39N 10% Choke SM1008	37/3320/039N
L29	Coil 10mm 6T Shield Ferrite Core	37/2022/0299
L30	Inductor 2U2 10% Choke SM1008	37/3320/02U2
L31	Coil 10mm 6T Shield Ferrite Core	37/2022/0299
L32	Inductor 39N 10% Choke SM1008	37/3320/039N
L33	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L34	Coil 10mm 4T Shield Ferrite Core	37/2022/0185
L35	Inductor 39N 10% Choke SM1008	37/3320/039N
L36	Coil 10mm 6T Shield Ferrite Core	37/2022/0299
L37	Inductor 2U2 10% Choke SM1008	37/3320/02U2
L38	Coil 10mm 6T Shield Ferrite Core	37/2022/0299
L39	Inductor 39N 10% Choke SM1008	37/3320/039N
L40	Inductor 10uH Axial	37/2021/010U

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
L42	Inductor 220N 10% Choke SM1008	37/3320/220N
MA1	Amplifier MMIC MWA311 SOT143	24/3010/0311
MA2	Amplifier MMIC VAM-6	24/3010/VAM6
MA3	Amplifier MMIC MWA311 SOT143	24/3010/0311
MA4	Amplifier MMIC MWA311 SOT143	24/3010/0311
MX1	Mixer RFMX 1-13	37/2070/0113
P1	Filter D RT AGL 25W M 1NF	35/5011/025M
P3	Filter D RT AGL 9W F Ferrite	35/5012/009F
PROG.	IC EPROM 27C256	26/2090/C256
Q1	Transistor NPN MRF9511 SOT143	27/3020/9511
Q2	FET NJ J309 TO92M	27/2030/J309
Q3	FET NJ J309 TO92M	27/2030/J309
Q4	FET NJ 2N5484 TO92M	27/2030/5484
Q5	Transistor RF NPN MRF5812 SO8	27/3020/5812
Q6	FET NJ MMBFJ309 SOT23	27/3030/J309
Q7	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q8	Transistor GP NPN MPS2369 TO92	27/2010/2369
Q9	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q10	Transistor GP PNP 2N3906 TO92	27/2010/3906
Q11	Transistor GP PNP MPS3640	27/2010/3640
Q12	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q13	Transistor GP PNP MPS3640	27/2010/3640
Q14	Transistor GP NPN MPS2369 TO92	27/2010/2369
Q15	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q16	Transistor GP PNP 2N3906 TO92	27/2010/3906
Q17	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q18	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q19	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q20	Transistor PNP MJF6107 TO22O	27/2010/6107
Q21	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q22	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q23	FET NJ 2N5459 TO92M	27/2030/5459
Q24	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q26	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q27	Transistor GP NPN 2N3904 TO92	27/2020/3904
R1	Resistor 56R 5% 0.25W SM1206	51/3380/0056
R2	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R3	Resistor 470 5% 0.25W SM1206	51/3380/0470
R4	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R5	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R6	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R7	Resistor 6R8 5% 0.25W SM1206	51/3380/06R8
R8	Resistor 150 5% 0.25W Axial	51/1040/0150
R9	Resistor 150 5% 0.25W Axial	51/1040/0150
R10	Resistor 150 5% 0.25W Axial	51/1040/0150
R11	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R12	Resistor 150 5% 0.25W Axial	51/1040/0150
R13	Resistor 18K 5% 0.25W Axial	51/1040/018K
R14	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R16	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R17	Resistor 68K 5% 0.25W Axial	51/1040/068K
R18	Resistor 1M 5% 0.25W Axial	51/1040/01M0
R19	Resistor 10K 5% 0.25W Axial	51/1040/010K
R20	Resistor 10K 5% 0.25W Axial	51/1040/010K
R21	Resistor 470 5% 0.25W Axial	51/1040/0470
R22	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R25	Resistor 100K 5% 0.25W Axial	51/1040/100K
R26	Resistor 270 5% 0.25W SM1206	51/3380/0270
R27	Resistor 270 5% 0.25W SM1206	51/3380/0270
R28	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R29	Resistor 39R 5% 0.25W SM1206	51/3380/0039

Ref.	Description	Part Number
R30	Resistor 39R 5% 0.25W SM1206	51/3380/0039
R31	Resistor 180 5% 0.25W SM1206	51/3380/0180
R32	Resistor 390 5% 0.25W SM1206	51/3380/0390
R33	Resistor 270 5% 0.25W SM1206	51/3380/0270
R34	Resistor 10K 5% 0.25W SM1206	51/3380/010K
R35	Resistor 10K 5% 0.25W SM1206	51/3380/010K
R36	Resistor 10R 5% 0.25W SM1206	51/3380/0010
R37	Resistor 2K2 5% 0.25W SM1206	51/3380/02K2
R38	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R39	Resistor 100 5% 0.25W SM1206	51/3380/0100
R40	Resistor 100 5% 0.25W SM1206	51/3380/0100
R41	Resistor 100 5% 0.25W SM1206	51/3380/0100
R42	Resistor 100 5% 0.25W SM1206	51/3380/0100
R43	Resistor 220 5% 0.25W Axial	51/1040/0220
R44	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R45	Resistor 15R 5% 0.25W SM1206	51/3380/0015
R46	Resistor 22 5% 0.25W Axial	51/1040/0022
R47	Resistor 560 5% 0.25W Axial	51/1040/0560
R48	Resistor 1K5 5% 0.25W Axial	51/1040/01K5
R49	Resistor 1K5 5% 0.25W Axial	51/1040/01K5
R50	Resistor 100 5% 0.25W Axial	51/1040/0100
R51	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R52	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R53	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R54	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R55	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R56	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R57	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R58	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R59	Resistor 560 5% 0.25W Axial	51/1040/0560
R60	Resistor 10K 5% 0.25W Axial	51/1040/010K
R61	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R62	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R63	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R64	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R65	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R66	Resistor 1K8 5% 0.25W Axial	51/1040/01K8
R67	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R68	Resistor 180 5% 0.25W SM1206	51/3380/0180
R69	Resistor 18R 5% 0.25W SM1206	51/3380/0018
R70	Resistor 6R8 5% 0.25W SM1206	51/3380/06R8
R71	Resistor 220K 5% 0.25W Axial	51/1040/220K
R72	Resistor 47K 5% 0.25W Axial	51/1040/047K
R73	Resistor 51K 5% 0.25W Axial	51/1040/051K
R74	Resistor 51K 5% 0.25W Axial	51/1040/051K
R75	Resistor 51K 5% 0.25W Axial	51/1040/051K
R76	Resistor 47K 5% 0.25W Axial	51/1040/047K
R77	Resistor 47K 5% 0.25W Axial	51/1040/047K
R78	Resistor 47K 5% 0.25W Axial	51/1040/047K
R79	Resistor 10K 5% 0.25W Axial	51/1040/010K
R80	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R81	Resistor 10K 5% 0.25W Axial	51/1040/010K
R82	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R83	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R84	Resistor 270K 5% 0.25W Axial	51/1040/270K
R85	Resistor 22K 5% 0.25W Axial	51/1040/022K
R86	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R87	Resistor 220K 5% 0.25W Axial	51/1040/220K
R88	Resistor 5K6 5% 0.25W Axial	51/1040/05K6
R89	Resistor 100K 5% 0.25W Axial	51/1040/100K
R90	Resistor 150K 5% 0.25W Axial	51/1040/150K
R91	Resistor 560K 5% 0.25W Axial	51/1040/560K

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
R92	Resistor 10K 5% 0.25W Axial	51/1040/010K
R93	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R94	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R95	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R96	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R97	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R98	Resistor 15K 5% 0.25W Axial	51/1040/015K
R99	Resistor 15K 5% 0.25W Axial	51/1040/015K
R100	Resistor 10M 5% 0.25W Axial	51/1040/010M
R101	Resistor 6K49 1% 0.25W Axial	51/1010/6K49
R102	Resistor 28K7 1% 0.25W Axial	51/1010/28K7
R103	Resistor 562K 1% 0.25W Axial	51/1010/562K
R104	Resistor 28K7 1% 0.25W Axial	51/1010/28K7
R105	Resistor 6K49 1% 0.25W Axial	51/1010/6K49
R106	Resistor 562K 1% 0.25W Axial	51/1010/562K
R107	Resistor 75K 1% 0.25W Axial	51/1010/075K
R108	Resistor 10K 5% 0.25W Axial	51/1040/010K
R109	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R110	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R111	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R112	Resistor 10K 5% 0.25W Axial	51/1040/010K
R113	Resistor 390 5% 0.25W Axial	51/1040/0390
R114	Resistor 10K 5% 0.25W Axial	51/1040/010K
R115	Resistor 39 5% 0.25W Axial	51/1040/0039
R116	Resistor 220 5% 0.25W Axial	51/1040/0220
R117	Resistor 10 5% 0.25W Axial	51/1040/0010
R118	Resistor 2R2 5% 0.25W Axial	51/1040/02R2
R119	Resistor 10K 5% 0.25W Axial	51/1040/010K
R120	Resistor 330 5% 0.25W Axial	51/1040/0330
R121	Resistor 33K 5% 0.25W Axial	51/1040/033K
R122	Resistor 270 5% 0.25W Axial	51/1040/0270
R123	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R124	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R125	Resistor 680 5% 0.25W Axial	51/1040/0680
R126	Resistor 680 5% 0.25W Axial	51/1040/0680
R127	Resistor 680 5% 0.25W Axial	51/1040/0680
R128	Resistor 1K 5% 0.25W Axial	51/1040/01K0
R129	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R130	Resistor 680 5% 0.25W Axial	51/1040/0680
R131	Resistor 10K 5% 0.25W Axial	51/1040/010K
R132	Resistor 51K1 1% 0.25W Axial	51/1010/51K1
R133	Resistor 274K 1% 0.25W Axial	51/1010/274K
R134	Resistor 10K 5% 0.25W Axial	51/1040/010K
R135	Resistor 10K 5% 0.25W Axial	51/1040/010K
R137	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R138	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R139	Resistor 47 5% 0.25W Axial	51/1040/0047
R140	Resistor 680 5% 0.25W Axial	51/1040/0680
R141	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R142	Resistor 10M 5% 0.25W Axial	51/1040/010M
R143	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R144	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R145	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R146	Resistor 10M 5% 0.25W Axial	51/1040/010M
R147	Resistor 10K 5% 0.25W Axial	51/1040/010K
R148	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R149	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R150	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R151	Resistor 680 5% 0.25W Axial	51/1040/0680
R152	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R153	Resistor 100K 5% 0.25W Axial	51/1040/100K
R154	Resistor 64K9 1% 0.25W Axial	51/1010/64K9

Ref.	Description	Part Number
R155	Resistor 680 5% 0.25W Axial	51/1040/0680
R156	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R157	Resistor 10K 5% 0.25W Axial	51/1040/010K
R160	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R161	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R162	Resistor 270 5% 0.25W SM1206	51/3380/0270
R163	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R164	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R166	Resistor 27R 5% 0.25W SM1206	51/3380/0027
R168	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R169	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R170	Resistor 270 5% 0.25W SM1206	51/3380/0270
R171	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R172	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R177	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R178	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R179	Resistor 680 5% 0.25W Axial	51/1040/0680
R180	Resistor 470K 5% 0.25W Axial	51/1040/470K
R181	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R182	Resistor 100 5% 0.25W Axial	51/1040/0100
R183	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R184	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R185	Resistor 470K 5% 0.25W SM1206	51/3380/470K
R186	Resistor 10 5% 0.25W Axial	51/1040/0010
R187	Resistor 100K 5% 0.25W Axial	51/1040/100K
R188	Resistor 10K 5% 0.25W Axial	51/1040/010K
RN1	Resistor Pack 100K X8 DIP16	52/2002/100K
RN2	Resistor Pack 10K SIP10	52/2002/010K
RV1	Trimpot 10K 1 Turn Vertical	53/1020/010K
RV3	Trimpot 10K Multiturn Horizontal	53/2060/010K
RV4	Trimpot 10K Multiturn Horizontal	53/2060/010K
RV5	Trimpot 10K Multiturn Horizontal	53/2060/010K
T1	Transformer Line 600 Ohm	37/2040/5065
U1	IC Mixer RX NE612N	25/2050/612N
U2	IC Dual OP Amplifier MC3458	25/2050/3458
U3	IC IF Amplifier LIM Disc NE614A	25/2020/614A
U4	IC Frequency SYN MB1501 SO16SP	26/2000/1501
U5	IC Audio Amplifier TDA2003	25/2070/2003
U6	IC Volt Regulator LM7805	25/2040/7805
U7	IC Quad Nand 74C00 DIP14	26/2031/4C00
U11	IC 3 State BUF 74HC244N	26/2030/244N
U12	IC EPROM 27C256	26/2090/C256
U13	IC 8 Bit Latch 74HC573N	26/2030/C573
U14	IC Micro Super MC34064P-5	26/2000/064P
U15	IC Micro 68HC11A1P	26/2000/HC11
U16	IC RS232 Inter Max232C	26/2001/232C
U17	IC Analogue Gate MC14066B	26/2040/4066
U22	IC Dual OP Amplifier MC1458B	25/2050/1458
U24	IC Hex IN Vertical CD4049	26/2040/4049
U26	IC Quad OP Amplifier TLC274	25/2050/274C
U27	IC Quad OP Amplifier TLC274	25/2050/274C
U28	IC Quad OP Amplifier TLC274	25/2050/274C
X01*	TCXO, 12.8 MHz, 1ppm	32/3031/12.8
XF1	Crystal Filter 21.4 25 KHz	33/2000/214W
XF2	Crystal Filter 21.4 25 KHz	33/2000/214W
Y1	Crystal, 21.855 HC-45/U	32/2045/21M855
Y2	Crystal 4.0MHz	32/2049/04M0
Y3	Crystal 8.0MHz	32/2049/08M0

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
*Optional parts for 5ppm Oscillator.		
C181	Capacitor TRIM 2-18P HI-TMP FLM	49/3001/018P
C182	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C183	Capacitor 220P 5% 50V COG Rad.1	46/2003/220P
C184	Capacitor 220P 5% 50V COG Rad.1	46/2003/220P
Q25	Transistor GP NPN 2N3904 TO92	27/2020/3904
R173	Resistor 10K 5% 0.25W Axial	51/1040/010K
R174	Resistor 10K 5% 0.25W Axial	51/1040/010K
R175	Resistor 15 5% 0.25W Axial	51/1040/0015
R176	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
Y4	Crystal, 12.8MHZ HC-49U	32/2049/12M8
R71W 25 KHz Channels		
CF1	Filter Ceramic CFR455D	34/2000/CFRad
R15	Resistor 10 5% 0.25W Axial	51/1040/0010
R24	Resistor 22K 5% 0.25W Axial	51/1040/022K
R71N 12.5 KHz Channels		
CF1	Filter Ceramic CFS455G	34/2000/CFSG
R15	Resistor 470 5% 0.25W Axial	51/1040/0470
R24	Resistor 33K 5% 0.25W Axial	51/1040/033K

B - R70/R71 and R150 Parts List**R150 common parts (for PCB 30/9132/xxxx)**

Ref.	Description	Part Number
C1	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C2	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C3	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C4	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C5	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C7	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C8	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C9	Capacitor 68P 5% 63V NPO SM1206	46/3300/068P
C10	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C11	Capacitor 47P 2% 100V NPO Rad.1	45/2680/047P
C12	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C13	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C14	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C15	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C16	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C17	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C18	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C19	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C20	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C21	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C22	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C23	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C24	Capacitor 22P 2% 100V NPO Rad.1	45/2680/022P
C25	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C26	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C27	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C28	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C29	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C30	Capacitor 10U 35V Rad Electro	41/2001/010U
C31	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C32	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C33	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C34	Capacitor 100P 2% 100V NPO Rad.1	45/2680/100P
C35	Capacitor 470N 20% 50V Z5U Rad.2	46/2001/470N
C36	Capacitor 47U 25V RB Electro	41/2001/047U
C37	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C38	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C39	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C40	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C41	Capacitor 10U 35V Rad Electro	41/2001/010U
C42	Capacitor 33P 2% 100V NPO Rad.1	45/2680/033P
C43	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C44	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C45	Capacitor 15P 5% 63V NPO SM1206	46/3300/015P
C46	Capacitor 15P 5% 63V NPO SM1206	46/3300/015P
C47	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C48	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C49	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C50	Capacitor 56P 5% 63V NPO SM1206	46/3300/056P
C53	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C54	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C55	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C56	Capacitor 15P 5% 63V NPO SM1206	46/3300/015P
C57	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C59	Capacitor 10U 35V Rad Electro	41/2001/010U
C60	Capacitor 33P 5% 63V NPO SM1206	46/3300/033P
C62	Capacitor 100P 5% 63V NPO 1206	46/3300/100P

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
C63	Capacitor 100P 5% 63V NPO 1206	46/3300/100P
C64	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C65	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C66	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C67	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C68	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C69	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C70	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C71	Capacitor 47P 2% 100V NPO Rad.1	45/2680/047P
C72	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C73	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C74	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C75	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C76	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C77	Capacitor 10U 35V Rad Electro	41/2001/010U
C78	Capacitor 4N7 10% COG Rad.2	46/2000/04N7
C79	Capacitor 47N 20% 50V X7R Rad.2	46/2001/047N
C80	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C81	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C82	Capacitor 47N 20% 50V X7R Rad.2	46/2001/047N
C83	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C84	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C85	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C86	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C87	Capacitor 8P2 5% 63V NPO SM1206	46/3300/08P2
C88	Capacitor 100N 10% 63V X7R 1206	46/3310/100N
C89	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C90	Capacitor 1N2 5% NPO Rad.2	46/2000/01N2
C91	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C92	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C93	Capacitor 22N 10% 63V MKT Rad.2	47/2007/022N
C94	Capacitor 1N2 5% NPO Rad.2	46/2000/01N2
C95	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C96	Capacitor 22N 10% 63V MKT Rad.2	47/2007/022N
C97	Capacitor 47U 25V RB Electro	41/2001/047U
C98	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C99	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C100	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C101	Capacitor 4N7 10% COG Rad.2	46/2000/04N7
C102	Capacitor 27P 2% 100V NPO Rad.1	45/2680/027P
C103	Capacitor 1N5 10% 50V COG Rad.2	46/2000/01N5
C104	Capacitor 100N 5% 50V MKT Rad.2	47/2007/100N
C105	Capacitor 470U 25V RB Electro	41/2001/470U
C106	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C107	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C108	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C109	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C110	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C111	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C112	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C113	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C114	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C115	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C116	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C117	Capacitor 10N 1% 63V KP7.5	47/2007/010N
C118	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C119	Capacitor 47U 25V RB Electro	41/2001/047U
C120	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C121	Capacitor 2N2 5% 400V MKT Rad.2	47/2040/02N2
C122	Capacitor 15N 5% 400V MKT Rad.2	47/2040/015N
C123	Capacitor 33N 5% 400V MKT Rad.2	47/2040/033N
C124	Capacitor 6N8 10% 400V MKT Rad.2	47/2040/06N8

Ref.	Description	Part Number
C125	Capacitor 10N 10% 400V MKT Rad.2	47/2040/010N
C126	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C127	Capacitor 470U 25V RB Electro	41/2001/470U
C128	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C129	Capacitor 47U 25V RB Electro	41/2001/047U
C130	Capacitor 470U 25V RB Electro	41/2001/470U
C131	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C132	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C133	Capacitor 1UO 10% 50V MKT	47/2007/01U0
C134	Capacitor 2U2 10% 100V MKT Rad.2	47/2010/02U2
C135	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C136	Capacitor 470U 25V RB Electro	41/2001/470U
C137	Capacitor 10U 35V Rad Electro	41/2001/010U
C138	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C139	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C140	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C141	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C142	Capacitor 10U 35V Rad Electro	41/2001/010U
C143	Capacitor 10U 35V Rad Electro	41/2001/010U
C144	Capacitor 10U 35V Rad Electro	41/2001/010U
C145	Capacitor 10U 35V Rad Electro	41/2001/010U
C146	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C147	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C148	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C149	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C150	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C151	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C152	Capacitor 470U 25V RB Electro	41/2001/470U
C153	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C154	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C155	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C156	Capacitor 1N0 5% 100V NPO Rad.2	46/2000/01N0
C157	Capacitor 18P 2% 100V NPO Rad.1	45/2680/018P
C158	Capacitor 18P 2% 100V NPO Rad.1	45/2680/018P
C159	Capacitor 10U 35V Rad Electro	41/2001/010U
C160	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C161	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C162	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C163	Capacitor 10U 35V Rad Electro	41/2001/010U
C164	Capacitor 10U 35V Rad Electro	41/2001/010U
C166	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C167	Capacitor 10U 35V Rad Electro	41/2001/010U
C169	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C170	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C171	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C172	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C175	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C176	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C177	Capacitor 47P 5% 63V NPO SM1206	46/3300/047P
C179	Capacitor 22P 5% 63V NPO SM1206	46/3300/022P
C180	Capacitor 1N0 5% 63V NPO SM1206	46/3300/01N0
C185	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
C186	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C187	Capacitor 100N 10% 50V X7R Rad.2	46/2001/100N
C188	Capacitor 10N 10% 50V X7R Rad.2	46/2001/010N
CF2	Filter Ceramic CFU455B	34/2000/CFUB
D1	Diode Zen 5V1 BZX84C5V1 S OT	21/3040/C5V1
D2	Diode Band SW BA682 SOD80	21/3050/0682
D3	Diode Schottkey BAT17 SOT23	21/3030/0017
D4	DiodeVCapacitor MMBV432L SOT23	1/3060/V432
D5	Diode Silicon IN4148	21/1010/4148
D6	Diode Silicon IN4148	21/1010/4148

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
D7	Diode LED Yellow RT ANG MTG	21/1010/LEDY
D8	Diode Zen 1N4751 30V 1W AXI	21/1040/4751
D9	Diode 3Amplicifier 1KV Rectifier	21/1080/5408
D10	Diode 8V2 Zener	21/1040/B8V2
D11	Diode LED Red RT ANG MTG	21/1010/LEDR
D12	Diode LED Green RT ANG MTG	21/1010/LEDG
D13	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D14	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D15	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D16	DiodeVCapacitor MMBV432L SOT23	21/3060/V432
D17	Diode Silicon IN4148	21/1010/4148
H1	Hybrid CTCSS	13/9150/0002
ISO1	IC Opto-Isolator 4N33	25/1010/4N33
JP1	Connector 3Way Header	35/2501/0003
JP2	Connector 3Way Header	35/2501/0003
JP3	Connector 3Way Header	35/2501/0003
JP4	Connector 3Way Header	35/2501/0003
JP6	Connector 3Way Header	35/2501/0003
JP7	Connector 3Way Header	35/2501/0003
JP8	Connector 2Way Header	35/2501/0002
JP9	Connector 3Way Header	35/2501/0003
JP11	Connector 3Way Header	35/2501/0003
JP12	Connector 2Way Header	35/2501/0002
L1	Inductor 220N 10% Choke SM1008	37/3320/220N
L2	Inductor 220N 10% Choke SM1008	37/3320/220N
L3	Inductor 220N 10% Choke SM1008	37/3320/220N
L4	Inductor 1uH Axial	37/2021/001U
L5	Inductor 680N 10mm	37/2021/680N
L6	Inductor 680N 10mm	37/2021/680N
L7	Inductor 680N 10mm	37/2021/680N
L8	Inductor 680N 10mm	37/2021/680N
L9	Inductor 1.5u 10mm	37/2021/1.5U
L10	Inductor VAR 455KHz 10mm	37/2031/97HM
L11	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L12	Inductor 1uH Axial	37/2021/001U
L13	Inductor 39N 10% Choke SM1008	37/3320/039N
L14	Inductor 220N 10% Choke SM1008	37/3320/220N
L15	Inductor 18N 10% Choke SM1008	37/3320/018N
L16	Inductor 220N 10% Choke SM1008	37/3320/220N
L17	Ferrite Bead SMD	37/3321/LM31
L18	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L19	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L20	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L21	Ferrite Bead SMD	37/3321/LM31
L22	Ferrite Bead SMD	37/3321/LM31
L23	Inductor 150mH 10RBH	37/2021/1RBH
L24	Inductor 6 Hole Ferrite RFC	37/1021/0001
L25	Ferrite Bead SMD	37/3321/LM31
L26	Inductor 1uH Axial	37/2021/001U
L27	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L30	Inductor 680N 10% Choke SM1008	37/3320/680N
L33	Inductor 3U3 10% Choke SM1008	37/3320/03U3
L37	Inductor 680N 10% Choke SM1008	37/3320/680N
L40	Inductor 1uH Axial	37/2021/001U
L41	Inductor 220N 10% Choke SM1008	37/3320/220N
L42	Inductor 220N 10% Choke SM1008	37/3320/220N
MA1	Amplifier MMIC MWA311 SOT143	24/3010/0311
MA2	Amplifier MMIC VAM-6	24/3010/VAM6
MA3	Amplifier MMIC MWA311 SOT143	24/3010/0311
MA4	Amplifier MMIC MWA311 SOT143	24/3010/0311
MX1	Mixer RFMX 1-13	37/2070/0113

Ref.	Description	Part Number
P1	Filter D RT AGL 25W M 1NF	35/5011/025M
P3	Filter D RT AGL 9W F Ferrite	35/5012/009F
PROG.	IC EPROM 27C256	26/2090/C256
Q1	Transistor NPN MRF9511 SOT143	27/3020/9511
Q2	FET NJ J309 TO92M	27/2030/J309
Q3	FET NJ J309 TO92M	27/2030/J309
Q4	FET NJ 2N5484 TO92M	27/2030/5484
Q5	Transistor RF NPN MRF5812 SO8	27/3020/5812
Q6	FET NJ MMBFJ309 SOT23	27/3030/J309
Q7	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q8	Transistor GP NPN MPS2369 TO92	27/2010/2369
Q9	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q10	Transistor GP PNP 2N3906 TO92	27/2010/3906
Q11	Transistor GP PNP MPS3640	27/2010/3640
Q12	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q13	Transistor GP PNP MPS3640	27/2010/3640
Q14	Transistor GP NPN MPS2369 TO92	27/2010/2369
Q15	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q16	Transistor GP PNP 2N3906 TO92	27/2010/3906
Q17	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q18	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q19	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q20	Transistor PNP MJF6107 TO22O	27/2010/6107
Q21	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q22	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q23	FET NJ 2N5459 TO92M	27/2030/5459
Q24	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q26	Transistor GP NPN 2N3904 TO92	27/2020/3904
Q27	Transistor GP NPN 2N3904 TO92	27/2020/3904
R1	Resistor 220 5% 0.25W SM1206	51/3380/0220
R2	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R3	Resistor 680 5% 0.25W SM1206	51/3380/0680
R4	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R5	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R6	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R7	Resistor 4R7 5% 0.25W SM1206	51/3380/04R7
R8	Resistor 150 5% 0.25W Axial	51/1040/0150
R9	Resistor 150 5% 0.25W Axial	51/1040/0150
R10	Resistor 150 5% 0.25W Axial	51/1040/0150
R11	Resistor 5K6 5% 0.25W Axial	51/1040/05K6
R12	Resistor 150 5% 0.25W Axial	51/1040/0150
R13	Resistor 12K 5% 0.25W Axial	51/1040/012K
R14	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R16	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R17	Resistor 68K 5% 0.25W Axial	51/1040/068K
R18	Resistor 1M 5% 0.25W Axial	51/1040/01M0
R19	Resistor 10K 5% 0.25W Axial	51/1040/010K
R20	Resistor 10K 5% 0.25W Axial	51/1040/010K
R21	Resistor 470 5% 0.25W Axial	51/1040/0470
R22	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R23	Resistor 680 5% 0.25W Axial	51/1040/0680
R25	Resistor 100K 5% 0.25W Axial	51/1040/100K
R26	Resistor 270 5% 0.25W SM1206	51/3380/0270
R27	Resistor 270 5% 0.25W SM1206	51/3380/0270
R28	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R29	Resistor 39R 5% 0.25W SM1206	51/3380/0039
R30	Resistor 39R 5% 0.25W SM1206	51/3380/0039
R31	Resistor 180 5% 0.25W SM1206	51/3380/0180
R32	Resistor 390 5% 0.25W SM1206	51/3380/0390
R33	Resistor 270 5% 0.25W SM1206	51/3380/0270
R34	Resistor 10K 5% 0.25W SM1206	51/3380/010K

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
R35	Resistor 10K 5% 0.25W SM1206	51/3380/010K
R36	Resistor 10R 5% 0.25W SM1206	51/3380/0010
R37	Resistor 2K2 5% 0.25W SM1206	51/3380/02K2
R38	Resistor 1K0 5% 0.25W SM1206	51/3380/01K0
R39	Resistor 100 5% 0.25W SM1206	51/3380/0100
R40	Resistor 100 5% 0.25W SM1206	51/3380/0100
R41	Resistor 100 5% 0.25W SM1206	51/3380/0100
R42	Resistor 100 5% 0.25W SM1206	51/3380/0100
R43	Resistor 220 5% 0.25W Axial	51/1040/0220
R44	Resistor 47R 5% 0.25W SM1206	51/3380/0047
R45	Resistor 15R 5% 0.25W SM1206	51/3380/0015
R46	Resistor 22 5% 0.25W Axial	51/1040/0022
R47	Resistor 560 5% 0.25W Axial	51/1040/0560
R48	Resistor 680 5% 0.25W Axial	51/1040/0680
R49	Resistor 680 5% 0.25W Axial	51/1040/0680
R50	Resistor 100 5% 0.25W Axial	51/1040/0100
R51	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R52	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R53	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R54	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R55	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R56	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R57	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R58	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R59	Resistor 560 5% 0.25W Axial	51/1040/0560
R60	Resistor 10K 5% 0.25W Axial	51/1040/010K
R61	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R62	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R63	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R64	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R65	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R66	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R67	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R68	Resistor 180 5% 0.25W SM1206	51/3380/0180
R69	Resistor 18R 5% 0.25W SM1206	51/3380/0018
R70	Resistor 4R7 5% 0.25W SM1206	51/3380/04R7
R71	Resistor 220K 5% 0.25W Axial	51/1040/220K
R72	Resistor 47K 5% 0.25W Axial	51/1040/047K
R73	Resistor 51K 5% 0.25W Axial	51/1040/051K
R74	Resistor 51K 5% 0.25W Axial	51/1040/051K
R75	Resistor 51K 5% 0.25W Axial	51/1040/051K
R76	Resistor 47K 5% 0.25W Axial	51/1040/047K
R77	Resistor 47K 5% 0.25W Axial	51/1040/047K
R78	Resistor 47K 5% 0.25W Axial	51/1040/047K
R79	Resistor 10K 5% 0.25W Axial	51/1040/010K
R80	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R81	Resistor 10K 5% 0.25W Axial	51/1040/010K
R82	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R83	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R84	Resistor 270K 5% 0.25W Axial	51/1040/270K
R85	Resistor 22K 5% 0.25W Axial	51/1040/022K
R86	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R87	Resistor 220K 5% 0.25W Axial	51/1040/220K
R88	Resistor 5K6 5% 0.25W Axial	51/1040/05K6
R89	Resistor 100K 5% 0.25W Axial	51/1040/100K
R90	Resistor 150K 5% 0.25W Axial	51/1040/150K
R91	Resistor 560K 5% 0.25W Axial	51/1040/560K
R92	Resistor 10K 5% 0.25W Axial	51/1040/010K
R93	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R94	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R95	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R96	Resistor 64K9 1% 0.25W Axial	51/1010/64K9

Ref.	Description	Part Number
R97	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R98	Resistor 15K 5% 0.25W Axial	51/1040/015K
R99	Resistor 15K 5% 0.25W Axial	51/1040/015K
R100	Resistor 10M 5% 0.25W Axial	51/1040/010M
R101	Resistor 6K49 1% 0.25W Axial	51/1010/6K49
R102	Resistor 28K7 1% 0.25W Axial	51/1010/28K7
R103	Resistor 562K 1% 0.25W Axial	51/1010/562K
R104	Resistor 28K7 1% 0.25W Axial	51/1010/28K7
R105	Resistor 6K49 1% 0.25W Axial	51/1010/6K49
R106	Resistor 562K 1% 0.25W Axial	51/1010/562K
R107	Resistor 75K 1% 0.25W Axial	51/1010/075K
R108	Resistor 10K 5% 0.25W Axial	51/1040/010K
R109	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R110	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R111	Resistor 3K57 1% 0.25W Axial	51/1010/3K57
R112	Resistor 10K 5% 0.25W Axial	51/1040/010K
R113	Resistor 390 5% 0.25W Axial	51/1040/0390
R114	Resistor 10K 5% 0.25W Axial	51/1040/010K
R115	Resistor 39 5% 0.25W Axial	51/1040/0039
R116	Resistor 220 5% 0.25W Axial	51/1040/0220
R117	Resistor 10 5% 0.25W Axial	51/1040/0010
R118	Resistor 2R2 5% 0.25W Axial	51/1040/02R2
R119	Resistor 10K 5% 0.25W Axial	51/1040/010K
R120	Resistor 330 5% 0.25W Axial	51/1040/0330
R121	Resistor 33K 5% 0.25W Axial	51/1040/033K
R122	Resistor 270 5% 0.25W Axial	51/1040/0270
R123	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R124	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R125	Resistor 680 5% 0.25W Axial	51/1040/0680
R126	Resistor 680 5% 0.25W Axial	51/1040/0680
R127	Resistor 680 5% 0.25W Axial	51/1040/0680
R128	Resistor 1K5 5% 0.25W Axial	51/1040/01K5
R129	Resistor 6K8 5% 0.25W Axial	51/1040/06K8
R130	Resistor 680 5% 0.25W Axial	51/1040/0680
R131	Resistor 10K 5% 0.25W Axial	51/1040/010K
R132	Resistor 51K1 1% 0.25W Axial	51/1010/51K1
R133	Resistor 274K 1% 0.25W Axial	51/1010/274K
R134	Resistor 10K 5% 0.25W Axial	51/1040/010K
R135	Resistor 10K 5% 0.25W Axial	51/1040/010K
R137	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R138	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R139	Resistor 47 5% 0.25W Axial	51/1040/0047
R140	Resistor 680 5% 0.25W Axial	51/1040/0680
R141	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R142	Resistor 10M 5% 0.25W Axial	51/1040/010M
R143	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R144	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R145	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R146	Resistor 10M 5% 0.25W Axial	51/1040/010M
R147	Resistor 10K 5% 0.25W Axial	51/1040/010K
R148	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R149	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R150	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
R151	Resistor 680 5% 0.25W Axial	51/1040/0680
R152	Resistor 5K11 1% 0.25W Axial	51/1010/5K11
R153	Resistor 100K 5% 0.25W Axial	51/1040/100K
R154	Resistor 64K9 1% 0.25W Axial	51/1010/64K9
R155	Resistor 680 5% 0.25W Axial	51/1040/0680
R156	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R157	Resistor 10K 5% 0.25W Axial	51/1040/010K
R160	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R161	Resistor 100K 5% 0.25W SM1206	51/3380/100K

R70/R71 and R150 PARTS LIST

Ref.	Description	Part Number
R162	Resistor 270 5% 0.25W SM1206	51/3380/0270
R163	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R164	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R166	Resistor 15R 5% 0.25W SM1206	51/3380/0015
R168	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R169	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R170	Resistor 270 5% 0.25W SM1206	51/3380/0270
R171	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R172	Resistor 100K 5% 0.25W SM1206	51/3380/100K
R177	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R178	Resistor 1K0 5% 0.25W Axial	51/1040/01K0
R179	Resistor 680 5% 0.25W Axial	51/1040/0680
R180	Resistor 470K 5% 0.25W Axial	51/1040/470K
R181	Resistor 4K7 5% 0.25W Axial	51/1040/04K7
R182	Resistor 100 5% 0.25W Axial	51/1040/0100
R183	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R184	Resistor 3K3 5% 0.25W Axial	51/1040/03K3
R185	Resistor 470K 5% 0.25W SM1206	51/3380/470K
R186	Resistor 10 5% 0.25W Axial	51/1040/0010
R187	Resistor 100K 5% 0.25W Axial	51/1040/100K
R188	Resistor 10K 5% 0.25W Axial	51/1040/010K
RN1	Resistor Pack 100K X8 DIP16	52/2002/100K
RN2	Resistor Pack 10K SIP10	52/2002/010K
RV1	Trimpot 10K 1 Turn Vertical	53/1020/010K
RV3	Trimpot 10K Multiturn Horizontal	53/2060/010K
RV4	Trimpot 10K Multiturn Horizontal	53/2060/010K
RV5	Trimpot 10K Multiturn Horizontal	53/2060/010K
T1	Transformer Line 600 Ohm	37/2040/5065
U1	IC Mixer RX NE612N	25/2050/612N
U2	IC Dual OP Amplifier MC3458	25/2050/3458
U3	IC IF Amplifier LIM Disc NE614A	25/2020/614A
U4	IC Frequency SYN MB1501 SO16SP	26/2000/1501
U5	IC Audio Amplifier TDA2003	25/2070/2003
U6	IC Volt Regulator LM7805	25/2040/7805
U7	IC Quad Nand 74C00 DIP14	26/2031/4C00
U11	IC 3 State BUF 74HC244N	26/2030/244N
U12	IC EPROM 27C256	26/2090/C256
U13	IC 8 Bit Latch 74HC573N	26/2030/C573
U14	IC Micro Super MC34064P-5	26/2000/064P
U15	IC Micro 68HC11A1P	26/2000/HC11
U16	IC RS232 Inter Max232C	26/2001/232C
U17	IC Analogue Gate MC14066B	26/2040/4066
U22	IC Dual OP Amplifier MC1458B	25/2050/1458
U24	IC Hex IN Vertical CD4049	26/2040/4049
U26	IC Quad OP Amplifier TLC274	25/2050/274C
U27	IC Quad OP Amplifier TLC274	25/2050/274C
U28	IC Quad OP Amplifier TLC274	25/2050/274C
X01*	TCXO, 12.8 MHz, 1ppm	32/3031/12.8
XF1	Crystal Filter	33/2000/45MZ
XF2	Crystal Filter	33/2000/45MZ
Y1	Crystal,45.455 HC-45/U	32/2045/M455
Y2	Crystal 4.0MHz	32/2049/04M0
Y3	Crystal 8.0MHz	32/2049/08M0

***Optional parts for 5ppm Oscillator.**

C181	Capacitor TRIM 2-18P HI-TMP FLM	49/3001/018P
C182	Capacitor 10P 2% 100V NPO Rad.1	45/2680/010P
C183	Capacitor 220P 5% 50V COG Rad.1	46/2003/220P
C184	Capacitor 220P 5% 50V COG Rad.1	46/2003/220P
Q25	Transistor GP NPN 2N3904 TO92	27/2020/3904

Ref.	Description	Part Number
R173	Resistor 10K 5% 0.25W Axial	51/1040/010K
R174	Resistor 10K 5% 0.25W Axial	51/1040/010K
R175	Resistor 15 5% 0.25W Axial	51/1040/0015
R176	Resistor 2K2 5% 0.25W Axial	51/1040/02K2
Y4	Crystal, 12.8MHZ HC-49U	32/2049/12M8

Additional Parts for R150A , 136 - 156 MHz

L29	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L28	Inductor 18N 10% Choke SM1008	37/3320/018N
L31	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L32	Inductor 18N 10% Choke SM1008	37/3320/018N
L34	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L35	Inductor 18N 10% Choke SM1008	37/3320/018N
L36	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L38	Coil 10mm 3T Shield Ferrite Core	37/2022/0312
L39	Inductor 18N 10% Choke SM1008	37/3320/018N

Additional Parts for R150B, 154 - 174 MHz

C165	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
C173	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
C174	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
C178	Capacitor 2P7 5% 63V NPO SM1206	46/3300/02P7
L28	Inductor 12N 10% Choke SM1008	37/3320/012N
L29	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L31	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L32	Inductor 12N 10% Choke SM1008	37/3320/012N
L34	Coil 10mm 2T Shield Aluminium Core	37/2021/1043
L35	Inductor 12N 10% Choke SM1008	37/3320/012N
L36	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L38	Coil 10mm 2T Shield Ferrite Core	37/2022/0311
L39	Inductor 12N 10% Choke SM1008	37/3320/012N
L41	Inductor 220N 10% Choke SM1206	37/3320/220N

R150W 25 KHz Channels

CF1	Filter Ceramic CFR455D	34/2000/CFRad
R15	Resistor 10 5% 0.25W Axial	51/1040/0010
R24	Resistor 22K 5% 0.25W Axial	51/1040/022K

R150N 12.5 KHz Channels

CF1	Filter Ceramic CFS455G	34/2000/CFSG
R15	Resistor 470 5% 0.25W Axial	51/1040/0470
R24	Resistor 33K 5% 0.25W Axial	51/1040/033K