

TECHNICAL DESCRIPTION

PCB 629 P.A. FILTERS, Continuous Coverage

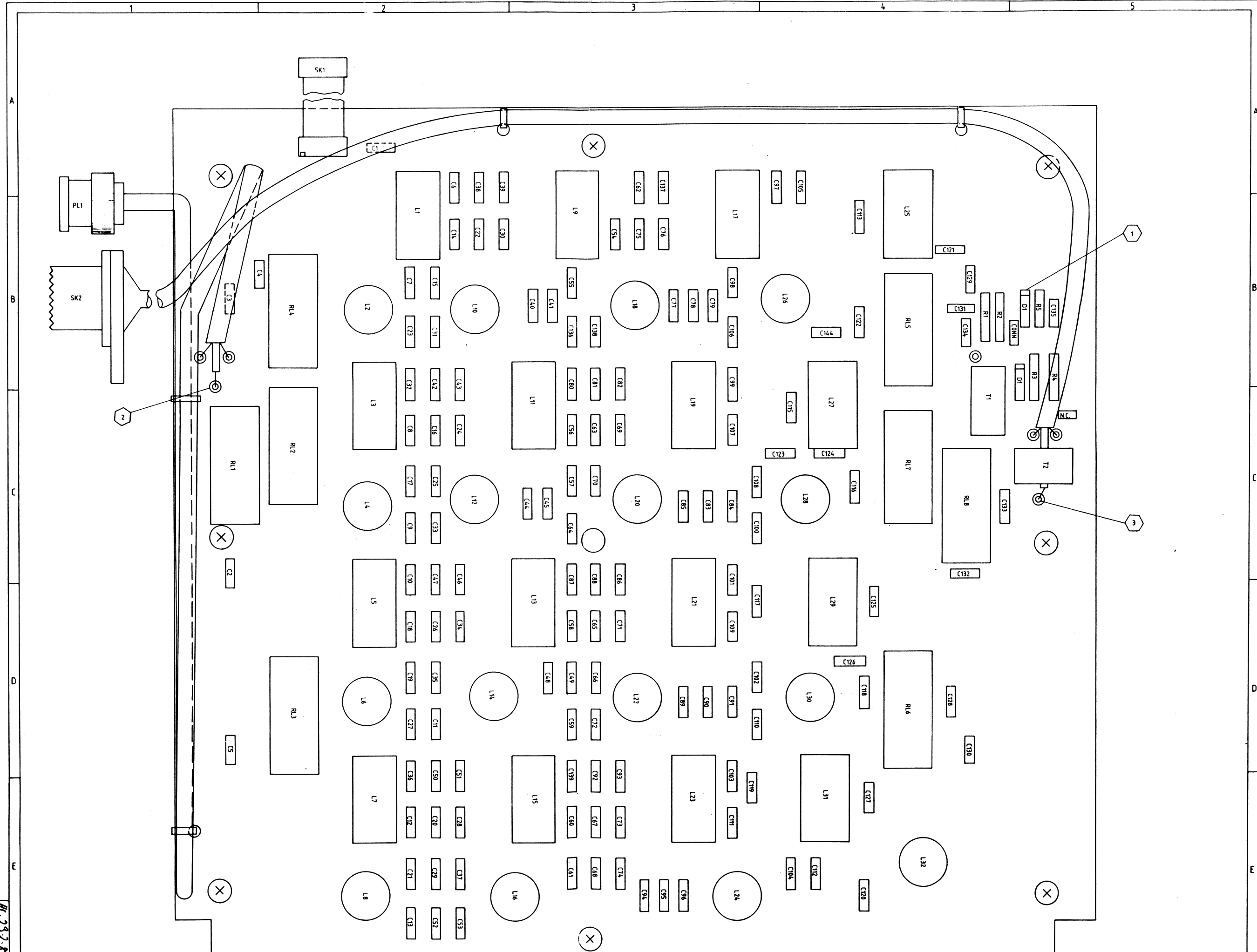
The filter bank contains 8 lowpass filters covering the frequency range 1.6-30.0 MHz, as shown in the table below.

Filter no.	Passband MHz	Stopband MHz	Relays			
			A	B	C	D
1	1.60- 2.31	3.19	0	1	0	0
2	2.31- 3.33	4.61	1	1	1	0
3	3.33- 4.80	6.64	1	0	0	1
4	4.80- 6.93	9.58	1	0	0	0
5	6.93-10.00	13.85	1	1	0	0
6	10.00-14.42	19.95	0	1	1	0
7	14.42-20.80	28.80	0	0	0	1
8	20.80-30.00	41.00	0	0	0	0

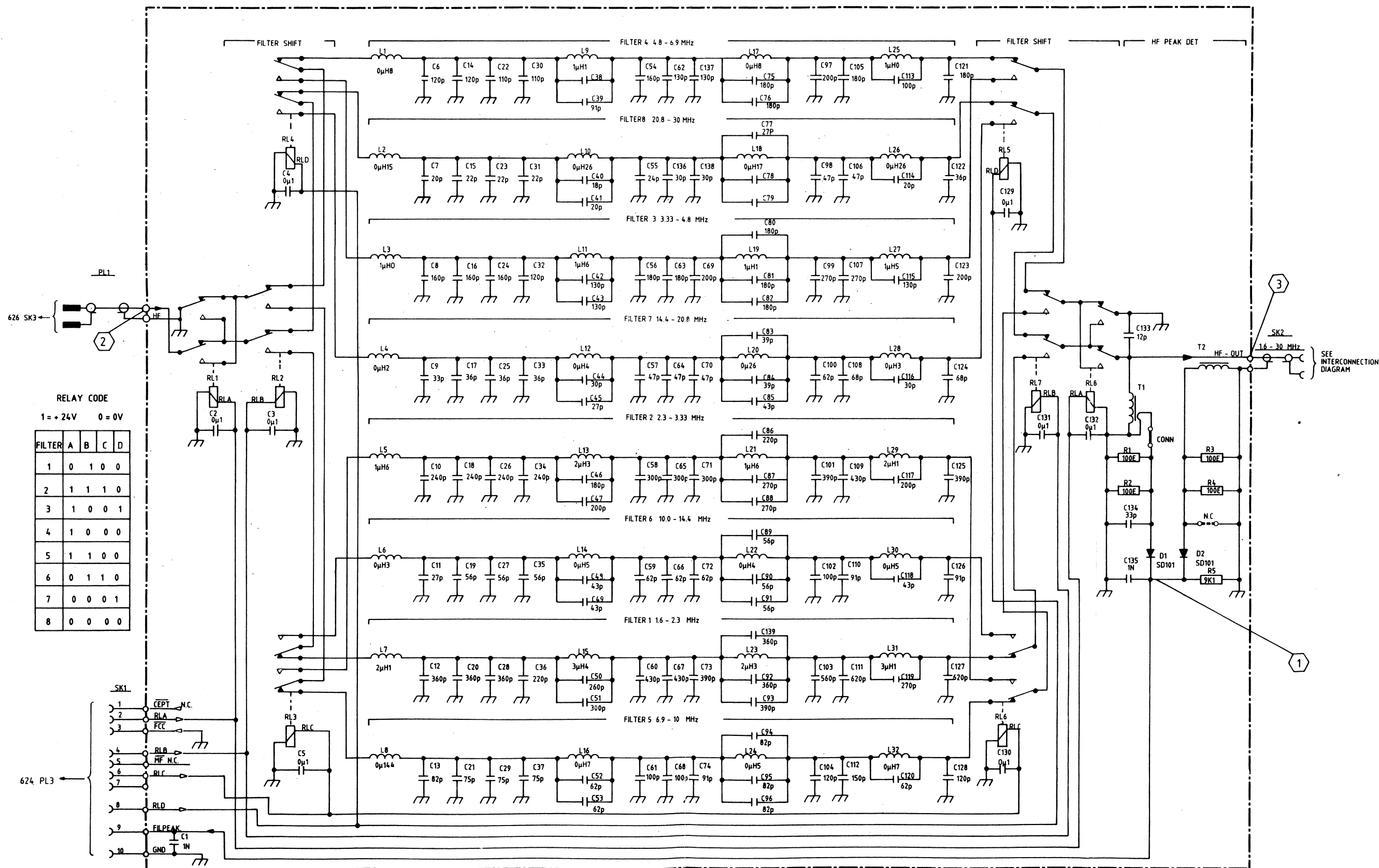
0 = off

1 = on

All filters are 7th order elliptic LP-filters (cauer-filters) with a series coil giving an inductive input impedance on the harmonics. When loaded with 50 ohms the input SWR is less than 1:1.12 and the insertion loss less than 0.25 dB in the passbands. In the stopbands the attenuation is better than 47 dB. The filters are inserted by a system of dual pole dual throw relays controlled from the Transceiver Control Board 624 as shown in the table. Type-code information is given via 4 lines of the connector cable. The DC voltage from the output peak-detector, which monitors voltage and current in the load, is connected to the ALC-circuit on the Transceiver Control Board 624. This voltage is used for automatic adjustment of output power and should be 9.0 V for an output of 250 W into 50 ohms.



11.237.89



PCB 629 637 P.A. FILTERS BOARD CONTINUOUS COVERAGE
VERSION 1A MAIN DIAGRAM

TEST POINTS FOR PCB 629 P.A. FILTERS.

Self test #	1	2	3
33	9VDC	~320Vpp	~320Vpp
34	—	—	—
35	—	—	—
36	—	—	—
37	—	—	—
38	—	—	—
39	—	—	—

PARTS LIST FOR P.A.FILTER CONTINUOUS COVERAGE. BOARD 629 VERSION 1A.

PARTS LIST FOR P.A.FILTER CONTINUOUS COVERAGE. BOARD 629 VERSION 1A

Printed Circuit Board Complete 629				107 562 91
D1,2	SD101C			830 010 10
RL1-8				780 000 32
RL-4	100 ohm	1%	MF	512 210 00
R5	9.09kohm	1%	MF	511 390 90
C1,135	1 nF	10%	Cer.	602 310 02
C2-5,129-132	0.1 uF	10%	63V	622 510 00
C6,14,32 104,128	120 pF	2%	500V	645 212 00
C7,41,114	20 pF	+1/2pF	500V	645 120 00
C8,16,24,54	160 pF	2%	500V	645 216 01
C9	33 pF	2%	500V	645 133 00
C10,18,26,34	240 pF	2%	500V	645 224 02
C11,45,77-79	27 pF	2%	500V	645 127 00
C12,20,28,92,139	360 pF	2%	500V	645 236 01
C13,94-96,	82 pF	2%	500V	645 182 00
C15,23,31	22 pF	+1/2pF	500V	645 122 00
C17,25,33,122	36 pF	2%	500V	645 136 00
C19,27,37,89-91	56 pF	2%	500V	645 156 01
C21,29,37	75 pF	2%	500V	645 175 00
C22,30	110 pF	2%	500V	645 211 01
C36,86	220 pF	2%	500V	645 222 02
C38,61,68,113,102	100 pF	2%	500V	645 210 01
C39,74,110,126	91 pF	2%	500V	645 191 00
C40,	18 pF	+1/2pF	500V	645 118 00
C42,43,115,62,137	130 pF	2%	500V	645 213 01
C44,116,136,138	30 pF	2%	500V	645 130 00
C46,56,63,75,76, 80-82,105,121	180 pF	2%	500V	645 218 02
C47,69,97,117,123	200 pF	2%	500V	645 220 01
C48,49,85,118	43 pF	2%	500V	645 143 00
C50	260 pF	2%	500V	645 226 00
C51,58,65,71	300 pF	2%	500V	645 230 01
C52,53,59,66,72 100,120	62 pF	2%	500V	645 162 00
C55	24 pF	+1/2pF	500V	645 124 00
C57,64,70,98,106	47 pF	2%	500V	645 147 00
C60,67,109	430 pF	2%	500V	645 243 00
C73,93,101,125	390 pF	2%	500V	645 239 01
C83,84	39 pF	2%	500V	645 139 00
C87,88,99,107,119	270 pF	2%	500V	645 227 02
C103	560 pF	2%	300V	644 256 01
C108,124	68 pF	2%	500V	645 168 00

C111,127	620 pF	2%	300V	M1	644 262 01
C112	150 pF	2%	500V	M1	645 215 00
C134	33 pF	2%	63V	Cer.	602 133 02
C133	12 pF	+ -1/2pF	500V	M1	645 112 02
L1,17	0.8 uH				373 572 0X
L2	0.15 uH				103 575 31
L3,25	1.0 uH				373 572 1X
L4	0.2 uH				103 575 41
L5,21	1.6 uH				373 572 7X
L6	0.3 uH				103 575 81
L7,29	2.1 uH				373 573 0X
L8,12,22	0.4 uH				103 576 01
L9	1.1 uH				373 572 3X
L10,20,26	0.26 uH				103 575 71
L11	1.6 uH				373 572 8X
L13	2.3 uH				373 573 1X
L14,24,30	0.5 uH				103 576 11
L15	3.4 uH				373 573 4X
L16,32	0.7 uH				103 576 31
L18	0.18 uH				103 575 61
L19	1.1 uH				373 572 4X
L23	2.3 uH				373 573 2X
L27	1.5 uH				373 572 5X
L28	0.3 uH				103 575 91
L31	3.1 uH				373 573 3X
T1					103 576 51
T2					103 576 61
PL1	COAXCABLE				373 613 4X
SK1	RIBBON CABLE 10 POL.				373 602 71
SK2	S0239				750 000 29