

# Replaceable parts

## Introduction

The display and r.f. units consist of sub-assemblies which are allocated designations shown under Index to Units.

The complete reference of a part consists of the sub-assembly designation followed by its circuit reference, e.g., AA6bC7, AG2TR3, etc., and this should always be stated on any order, letter, etc. For convenience in the text and on the circuit diagrams, the circuit reference is abbreviated by dropping the sub-assembly prefix.

The following abbreviations are used :

C	: capacitor
Carb	: carbon
Cer	: ceramic
CSR	: thyristor
D	: diode
Elec	: electrolytic
FS	: fuse
IC	: integrated circuit
L	: inductor
LP	: lamp
Met	: metal
PL	: plug
Plas	: plastic
R	: resistor
S	: switch
SKT	: socket
T	: transformer
Tant	: tantalum
TR	: transistor
V	: valve
Var	: variable
VM	: voltage multiplier
W	: watts at 70°C
WW	: wire wound
X	: ferrite bead
XL	: crystal
XM	: balanced mixer
†	: value selected during test; nominal value shown

## Ordering

When ordering replacement or spare parts, address the order to our Service Division at the address given on the rear cover, or to your nearest Marconi Instruments representative. Please specify the following information for each part required :

- (1) Type \* and serial number of instrument
- (2) Complete circuit reference
- (3) Description
- (4) MI code

\* as given on the serial number label at the rear of the instrument; if this is superseded by a model number label, quote the model number instead of the type number.

One or more of the parts fitted to the instrument may differ from those listed in this chapter for any of the following reasons :

- (a) Components indicated by '†' have their value selected during test to achieve particular performance limits.
- (b) Owing to supply difficulties components may be substituted by others of different type or value provided that the overall performance of the instrument is maintained.
- (c) As part of a policy of continuous development, components may be changed in value or type to obtain detail improvements in performance.

Whenever there is such difference between the component fitted and the one listed always use as a replacement the same type and value as found in the instrument.

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>Programmable input attenuator—AH1</b>			SD	Microswitch UHF	23483-131
When ordering, prefix with AH1			SE	Microswitch UHF	23483-131
PLM	Bulkhead receptacle 50Ω	23444-382	SF	Microswitch UHF	23483-131
PLL	Bulkhead receptacle 50Ω	23444-382	SH	Microswitch UHF	23483-131
			SJ	Microswitch UHF	23483-131
			SK	Microswitch UHF	23483-131
			SL	Microswitch UHF	23483-131
R1	Met film 96.3Ω 1% ¼W	24762-582	<b>Sweep shaper and local regulator—AA1</b>		
R2	Met film 71.2Ω 1% ¼W	24762-572	When ordering, prefix with AA1		
R3	Met film 96.3Ω 1% ¼W	24762-582		Complete board	44843-608
R4	Met film 61.1Ω 1% ¼W	24762-571	C1	Plas 0.1μF 10% 250V	26512-228
R5	Met film 247Ω 1% ¼W	24762-631	C2	Plas 100pF ±2pF 350V	26516-243
R6	Met film 61.1Ω 1% ¼W	24762-571	C3	Elec 4.7μF -20+100% 63V	26415-801
R7	Met film 53.3Ω 1% ¼W	24762-557	C4	Elec 100μF -20+100% 25V	26415-813
R8	Met film 790Ω 1% ¼W	24762-646	C5	Plas 0.1μF 10% 100V	26582-211
R9	Met film 53.3Ω 1% ¼W	24762-557	C6	Elec 22μF -20+100% 25V	26415-805
R10	Met film 53.3Ω 1% ¼W	24762-557	C7	Plas 0.1μF 10% 100V	26582-211
R11	Met film 790Ω 1% ¼W	24762-646	C8	Elec 4.7μF -20+100% 63V	26415-801
R12	Met film 53.3Ω 1% ¼W	24762-557	C9	Plas 0.1μF 10% 100V	26582-211
R13	Met film 53.3Ω 1% ¼W	24762-557	C10	Plas 0.001μF 2% 350V	26516-484
R14	Met film 790Ω 1% ¼W	24762-646	C11	Elec 4.7μF -20+100% 63V	26415-801
R15	Met film 53.3Ω 1% ¼W	24762-557	C12	Plas 0.1μF 10% 100V	26582-211
SA	Microswitch UHF	23483-131	C13	Plas 0.1μF 10% 100V	26582-211
SB	Microswitch UHF	23483-131	C14	Plas 0.022μF 10% 400V	26582-234
SC	Microswitch UHF	23483-131	C15	Elec 2.2μF 20% 20V	26486-540
			C16	Cer 0.01μF -20+80% 100V	26383-055
			C17	Elec 4.7μF -20+100% 63V	26415-801
			C18	Plas 0.1μF 10% 100V	26582-211

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C19	Plas 0.1 $\mu$ F 10% 100V	26582-211	R4	Met film 27k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-307
C20	Plas 0.068 $\mu$ F 10% 250V	26582-207	R5	Met film 11k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-298
C21	Elec 100 $\mu$ F -20+100% 25V	26415-813	R6	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
C22	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R7	Met film 3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-284
C23	Plas 0.01 $\mu$ F 10% 100V	26582-211	R8	Met film 3.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-286
C24	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R9	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R10	Var cermet 1k $\Omega$ $\pm$ 10% $\frac{1}{2}$ W	25711-544
			R11	Met film 4.3k $\Omega$ +2% $\frac{1}{4}$ W	24773-288
			R12	Met film 10 $\Omega$ +2% $\frac{1}{4}$ W	24773-225
D1	Zener ZR 823/50	28371-490	R13	Met film 100 $\Omega$ +2% $\frac{1}{4}$ W	24773-249
D2	Zener Z5B 5.1	28371-403	R14	Met film 18k $\Omega$ +2% $\frac{1}{4}$ W	24773-303
D3 to D28	1N4148	28336-676	R15	Met film 12k $\Omega$ +2% $\frac{1}{4}$ W	24773-299
			R16	Met film 7.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-294
			R17	Met film 10 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-225
D29	Zener 10.6V	44529-102	R18	Met film 100 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-249
D30	1N4148	28336-676	R19	Met film 330 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-261
D31	Zener Z5B11	28372-033	R20	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
D32	1N4148	28336-676	R21	Met film 130k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-324
			R22	Var cermet 47k $\Omega$ $\pm$ 10% $\frac{1}{2}$ W	25711-549
			R23	Met film 36k $\Omega$ 2% $\frac{1}{4}$ W	24773-310
			R24	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225
IC1	$\mu$ A 723C	28461-701	R25	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
IC2	$\mu$ A 739C	28461-312	R26	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
IC3	$\mu$ A 739C	28461-312	R27	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
IC4	$\mu$ A 739C	28461-312	R28	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253
IC5	$\mu$ A 739C	28461-312	R29	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299
			R30	Met film 3.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-286
			R31	Met film 150k $\Omega$ 2% $\frac{1}{4}$ W	24773-325
			R32	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
			R33	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
R1	Met film 20 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-232	R34	Met film 6.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-293
R2	Met film 7.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-294	R35	Met film 9.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-296
R3	Met film 3.3 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-213	R36	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R37	Met film 13 k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-300	R70	Met film 10k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-297
R38	Met film 9.1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-296	R71	Met film 10 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-225
R39	Met film 11k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-298	R72	Met film 27k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-307
R40	Met film 3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-284	R73	Met film 9.1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-296
R41	† Met film 7.5k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-294	R74	Met film 3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-284
R42	Var cermet 47k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-549	R75	Met film 11k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-298
R43	† Met film 91 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-248	R76	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309
R44	† Met film 36k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-310	R77	Met film 270 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-259
R45	† Met film 110 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-250	R78	Met film 36k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-310
R46	† Met film 15k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-301	R79	Met film 270 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-259
R47	Var cermet 47k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-549	R80	Met film 39k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-311
R48	† Met film 150 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-253	R81	Met film 300 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-260
R49	† Met film 43k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-312	R82	Met film 43k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-312
R50	† Met film 2.4k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-282	R83	Met film 300 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-260
R51	† Met film 20k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-304	R84	Met film 47k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-313
R52	Var cermet 47k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-549	R85	Met film 220 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-257
R53	† Met film 270 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-259	R86	Met film 51 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-314
R54	† Met film 51k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-314	R87	Met film 220 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-257
R55	† Met film 330 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-261	R88	Met film 56k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-315
R56	† Met film 3.6k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-286	R89	Met film 200 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-256
R57	Var cermet 1k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-544	R90	Met film 62k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-316
R58	Met film 22k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-305	R91	Met film 160 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-254
R59	Var cermet 10k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-543	R92	Met film 60k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-317
R60	Met film 3.6k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-286	R93	Met film 160 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-254
R61	Met film 10 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-225	R94	Met film 75k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-318
R62	Met film 27k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-307	R95	Met film 180 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-255
R63	Met film 10k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-297	R96	Met film 82k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-319
R64	Met film 100 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-249	R97	Met film 200 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-256
R65	Met film 30k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-308	R98	Met film 91k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-320
R66	Met film 30k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-308	R99	Met film 160 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-256
R67	Met film 12k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-299	R100	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
R68	Carb 2.2M $\Omega$ $\pm 10\%$ 1/8W	24321-877	R101	Met film 240 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-258
R69	Carb 820k $\Omega$ $\pm 5\%$ 1/8W	24311-943	R102	Met film 10k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-297

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R103	Met film 30k $\Omega$ 2% $\frac{1}{4}$ W	24773-308	TR9	BC308B	28433-455
R104	Var cermet 10k $\Omega$ 10% $\frac{1}{2}$ W	25711-543	TR10	BC238B	28452-781
R105	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225	TR11	BC308B	28433-455
R106	Met film 3.9k $\Omega$ 2% $\frac{1}{4}$ W	24773-287	TR12	BC308B	28433-455
R107	Var cermet 2.2k $\Omega$ 10% $\frac{1}{2}$ W	25711-547	TR13	BC238B	28452-781
R108	Met film 27k $\Omega$ 2% $\frac{1}{4}$ W	24773-307			
R109	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290			
R110	Met film 160k $\Omega$ 2% $\frac{1}{4}$ W	24773-326			
R111	Carb 1M $\Omega$ 5% 1/8W	24311-945	<b>Frequency divider and pulse generator--AA2</b>		
R112	Met film 200k $\Omega$ 2% $\frac{1}{4}$ W	24773-328	<i>When ordering, prefix with AA2</i>		
R113	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321			
R114	Met film 18k $\Omega$ 2% $\frac{1}{4}$ W	24773-303			
R115	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257		Complete board	44823-014
R116	Carb 470k $\Omega$ 5% 1/8W	24311-937	C1	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R117	Carb 560k $\Omega$ 5% $\frac{1}{4}$ W	24311-939	C2	Elec 4.7 $\mu$ F -20+100% 63V	26415-801
R118	Met film 110k $\Omega$ 2% $\frac{1}{4}$ W	24773-322	C3	Elec 4.7 $\mu$ F -20+100% 63V	26415-801
R119	Met film 20 $\Omega$ 2% $\frac{1}{4}$ W	24773-232	C4	Elec 4.7 $\mu$ F -20+100% 63V	26415-801
			C5	Plas 0.001 $\mu$ F 2% 350V	26516-484
			C6	Plas 200pF 2% 500V	26516-320
			C7	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C8	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
RL1	Relay Miniature	23486-132			
			IC1	7490	28464-002
			IC2	7400	28466-321
TR1	2N2219	28453-847	IC3	7490	28464-002
TR2	BC238B	28452-781			
TR3	BC308B	28433-455			
TR4	2N2905	28434-879			
TR5	BC308B	28433-455			
TR6	BC238B	28452-781	L1	Inductor	44290-124
TR7	BC308B	28433-455	L2	Inductor	44290-124
TR8	BC308B	28433-455	L3	Inductor	44290-121

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R2	Met film 43Ω ±2% ¼W	24773-240	<b>4.8 MHz interpolating oscillator board—AA3a</b>		
R3	Met film 3.3kΩ ±2% ¼W	24773-285	<i>When ordering, prefix with AA3a</i>		
R4	Met film 2kΩ ±2% ¼W	24773-280			
R5	Met film 1kΩ ±2% ¼W	24773-273			
R6	Met film 3.3kΩ ±2% ¼W	24773-285		Complete board	44823-745
R7	Met film 4.7kΩ ±2% ¼W	24773-289	C1	Cer 0.01μF -20+80% 100V	26383-055
R8	Met film 510Ω ±2% ¼W	24773-266	C2	Cer 0.01μF -20+80% 100V	26383-055
R9	Met film 47kΩ ±2% ¼W	24773-313	C3	Cer 0.01μF -20+80% 100V	26383-055
			C4	Cer 0.01μF -20+80% 100V	26383-055
			C5	Cer 0.01μF -20+80% 100V	26383-055
T1	Transformer	43590-012	C6	Plas 27pF ±2pF 350V	26516-109
			C7	Cer 0.01μF -20+80% 100V	26383-055
TR1	BSX20	28452-197	C8	Cer 0.01μF -20+80% 100V	26383-055
TR2	BSX20	28452-197	C9	Cer 0.01μF -20+80% 100V	26383-055
TR3	BSX20	28452-197	C10	Cer 0.01μF -20+80% 100V	26383-055
			C11	Cer 0.01μF -20+80% 100V	26383-055
			C12	Plas 47pF ±2pF 350V	26516-167
			C13	Cer 0.01μF -20+80% 100V	26383-055
			C14	Cer 0.01μF -20+80% 100V	26383-055
			C15	Cer 0.01μF -20+80% 100V	26383-055
			C16	Cer 0.01μF -20+80% 100V	26383-055
			C17	Cer 0.01μF -20+80% 100V	26383-055
			C18	Cer 0.001μF -20+80% 500V	26383-242
			C19	Cer 0.01μF -20+80% 100V	26383-055
			C20	Cer 0.01μF -20+80% 100V	26383-055
			C21	Plas 0.001μF 2% 350V	26516-484
			C22	Plas 560pF 2% 500V	26516-430
			C23	Plas 300pF 2% 125V	26516-358
			C24	Cer 0.01μF -20+80% 100V	26383-055
			C25	Plas 0.47μF 10% 100V	26582-215
			C26	Plas 0.47μF 10% 100V	26582-215
			C27	Cer 0.01μF -20+80% 100V	26383-055
L1	Inductor	44290-116	C28	Cer 0.01μF -20+80% 100V	26383-055

#### 4.8 MHz interpolating oscillator assembly—AA3

*When ordering, prefix with AA3*

*For symbols and abbreviations see introduction to this chapter*

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C29	Plas 0.1 $\mu$ F 10% 100V	26582-211	R3	Met film 680 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-269
C30	Plas 0.47 $\mu$ F 10% 100V	26582-215	R4	Met film 1.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-276
C31	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R5	Met film 560 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-267
C32	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R6	Met film 1.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-275
C33	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R7	Met film 270 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-259
			R8	Met film 3.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-286
			R9	Met film 330 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-261
			R10	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
			R11	Met film 3.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-286
D1	1N4148	28336-676	R12	Met film 1.8k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-279
D2	1N4148	28336-676	R13	Met film 3.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-286
D3	1N4148	28336-676	R14	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291
D4	1N4148	28336-676	R15	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
			R16	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
			R17	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
			R18	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
			R19	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281
IC1	MC1496G	28461-911	R20	Met film 100 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-249
IC2	MC1496G	28461-911	R21	Met film 4.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-288
IC3	CA3039	28461-906	R22	Met film 2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-280
IC4	N5556V	28461-311	R23	Met film 270 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-259
IC5	$\mu$ A741C	28461-304	R24	Met film 560 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-267
IC6	$\mu$ A741C	28461-304	R25	Met film 360 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-262
			R26	Met film 1.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-275
			R27	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R28	Met film 15k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-301
L1	10 $\mu$ H	23642-555	R29	Met film 3.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-285
L2	10 $\mu$ H	23642-555	R30	Met film 3.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-285
			R31	Met film 3.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-285
			R32	Met film 3.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-285
			R33	Met film 390 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-263
			R34	Met film 13k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-300
			R35	Met film 6.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-292
R1	Met film 43 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-240	R36	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313
R2	Met film 150 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-253	R37	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R38	Met film 22k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-305	TR6	BCY72	28433-487
R39	Met film 22k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-305	TR7	BC239C	28452-771
R40	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281			
R41	Met film 5.1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-290			
R42	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313			
R43	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313			
R44	Met film 13k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-300			
R45	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309			
R46	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297			
R47	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297		Complete board	44823-749
R48	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297	C1	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R49	Met film 27k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-307	C2	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R50	Met film 1.1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-274			
R52	Met film 36k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-310			
R53	Met film 91k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-320	D1	1N4148	28336-676
R54	Met film 130k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-324	D2	BB105	28381-096
R55	Met film 6.8k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-293	D3	BB105	28381-096
R56	Met film 1.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-277	D4	BB105	28381-096
R57	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281			
R58	Met film 12k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-299			
R59	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281			
R60	Met film 3.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-285	R1	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313
R61	Met film 18 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-231	R2	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313
R62	Met film 100 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-249	R3	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281
R63	Met film 560 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-267	R4	Met film 39k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-311
R64	Met film 300 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-260	R5	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
			R6	Met film 1.1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-274
			R7	Met film 47 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-241
			R8	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
			R9	Met film 270 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-259
TR1	BSX20	28452-197			
TR2	BSX20	28452-197			
TR3	BSX20	28452-197			
TR4	BSX20	28452-197	TR1	BF244B	28459-011
TR5	BSX20	28452-197	TR2	BSX20	28452-197

#### 4.8 MHz interpolating oscillator board—AA3b

When ordering, prefix with AA3b

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>3.6 MHz master second local oscillator assembly – AA4</b>			C16	Elec 22 $\mu$ F -20+100% 25V	26415-805
			C17	Plas 0.1 $\mu$ F 10% 100V	26582-211
<i>When ordering, prefix with AA4</i>					
C6	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	IC1	MC1496G	28461-911
C7	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	IC2	MC1496G	28461-911
C8	Cer 12pF 20% 500V	26333-151			
C9	Cer 12pF 20% 500V	26333-151			
C10	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665			
L1	Inductor	44290-117	R1	Met film 43 $\Omega$ 2% $\frac{1}{4}$ W	24773-240
			R2	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253
			R3	Met film 680 $\Omega$ 2% $\frac{1}{4}$ W	24773-269
			R4	Met film 1.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-276
			R5	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309
			R6	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241
			R7	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
			R8	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
			R9	Met film 3k $\Omega$ 2% $\frac{1}{4}$ W	24773-284
	Complete board	44823-751	R10	Met film 330 $\Omega$ 2% $\frac{1}{4}$ W	24773-261
C1	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R11	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C2	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R12	Met film 1.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-276
C3	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R13	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C4	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R14	Met film 3.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-286
C5	Plas 27pF $\pm$ 2pF 350V	26516-109	R15	Met film 5.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-291
C6	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R16	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C7	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R17	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C8	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R18	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C9	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R19	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C10	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R20	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C11	Plas 47pF $\pm$ 2pF 350V	26516-167	R21	Met film 4.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-288
C12	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R22	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280
C13	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R23	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
C14	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R24	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
C15	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R25	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R26	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285	R1	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321
R27	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285	R2	Met film 1.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-279
R28	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285	R3	Met film 39k $\Omega$ 2% $\frac{1}{4}$ W	24773-311
R29	Met film 390 $\Omega$ 2% $\frac{1}{4}$ W	24773-263	R4	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
R30	Met film 13k $\Omega$ 2% $\frac{1}{4}$ W	24773-300	R5	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
R31	Met film 6.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-292	R6	Met film 13k $\Omega$ 2% $\frac{1}{4}$ W	24773-300
R32	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313	R7	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
R33	Met film 1.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-278	R8	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241
TR1	BSX20	28452-197	R9	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305
TR2	BSX20	28452-197	R10	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305
TR3	BSX20	28452-197	TR1	BF244B	28459-011
X1	Ferrite bead	23635-812	TR2	BSX20	28452-197

### 3.6 MHz master second local oscillator board— AA4b

When ordering, prefix with AA4b

	Complete board	44823-750
C1	Cer 56pF 5% 500V	26343-064
C2	Mica 162pF $\pm$ 2pF 350V	26257-014
C3	Mica 47pF $\pm$ 1pF 350V	26257-005
C4	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
C5	Plas 18pF $\pm$ 2pF 350V	26516-029
D1	1N4148	28336-676
D2	BB405B	28381-102
D3	BB405B	28381-102
D4	BB405B	28381-102

### 200 to 310 MHz slave first local oscillator unit— AA5

When ordering, prefix with AA5

C1	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
C2	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
C3	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
C4	Cer 200pF 20% 500V	26333-568
C5	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
C6	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
C7	Cer 0.001 $\mu$ F -20+80% 500V	26373-714
C8	Cer 0.001 $\mu$ F -20+80% 500V	26373-714
C9	Cer 200pF 20% 500V	26333-568
C10	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
C11	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
C12	Cer 15pF 5% 50V	26343-493
C13	Cer 15pF 5% 50V	26343-493

For symbols and abbreviations see introduction to this chapter

<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
C14	Cer 270pF 2% 63V	26343-436	C49	Cer 200pF 20% 500V	26333-568
C15	Cer 270pF 2% 63V	26343-436	C50	Cer 200pF 20% 500V	26333-568
C16	Cer 270pF 2% 63V	26343-436	C51	Plas 0.1μF 10% 100V	26582-211
C17	Cer 2.2pF 5% 50V	26343-491	C52	Plas 0.47μF 10% 100V	26582-215
C18	Cer 15pF ±0.25pF 750V	26324-712			
C19	Cer 0.0047μF -20+80% 500V	26373-665			
C21	Cer 33pF 5% 500V	26343-062			
C22	Cer 0.0047μF -20+80% 500V	26373-665	D1	Matched pair	44529-010
C23	Cer 0.0047μF -20+80% 500V	26373-665	D2	1N5390	28349-005
C24	Plas 68pF ±2pF 350V	26516-202	D3	1N5390	28349-005
C25	Cer 15pF ±0.25pF 750V	26324-712			
C26	Cer 0.0047μF -20+80% 500V	26373-665			
			L1	Choke 10μH	23642-555
			L2	Choke 10μH	23642-555
C29	Cer 33pF 5% 500V	26343-062			
C30	Cer 0.0047μF -20+80% 500V	26373-665	L5	Choke 10μH	23642-555
C31	Plas 100pF ±2pF 350V	26516-243	L6	Inductor	44290-120
C32	Plas 68pF ±2pF 350V	26516-202	L7	Choke 10μH	23642-555
C33	Cer 15pF ±0.25pF 750V	26324-712	L8	Inductor	34900-147
C34	Cer 0.0047μF -20+80% 500V	26373-665	L9	Inductor	44290-120
C35	Cer 0.0047μF -20+80% 500V	26373-665	L10	Choke 10μH	23642-555
			L11	Choke 10μH	23642-555
C37	Cer 33pF 5% 500V	26343-062	L12	Choke 0.33μH	23642-546
C38	Cer 0.0047μF -20+80% 500V	26373-665	L13	Choke 0.33μH	23642-546
C39	Cer 0.0047μF -20+80% 500V	26373-665	L14	Choke 0.33μH	23642-546
C40	Plas 100pF ±2pF 350V	26516-243	L15	Choke 0.33μH	23642-546
C41	Plas 68pF ±2pF 350V	26516-202	L16	Choke 0.33μH	23642-546
C42	Cer 15pF ±0.25pF 750V	26324-712			
C43	Cer 0.0047μF -20+80% 500V	26373-665			
C44	Cer 0.0047μF -20+80% 500V	26373-665			
C46	Cer 33pF 5% 500V	26343-062	R3	Met film 47kΩ 2% ¼W	24773-313
C47	Cer 0.0047μF -20+80% 500V	26373-665	R4	Met film 47kΩ 2% ¼W	24773-313
C48	Plas 100pF ±2pF 350V	26516-243	R5	Met film 820Ω 2% ¼W	24773-271

*For symbols and abbreviations see introduction to this chapter*

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R6	Met film 470Ω 2% ¼W	24773-265	TR8	BFY90	28452-157
R7	Met film 4.7Ω 2% ¼W	24773-217	TR9	BFY90	28452-157
R8	Met film 330Ω 2% ¼W	24773-261			
R9	Met film 75Ω 2% ¼W	24773-246			
R10	Met film 91Ω 2% ¼W	24773-248	X1	Bead FX1115	23635-833
R11	Met film 470Ω 2% ¼W	24773-265	X2	Bead FX1115	23635-833
R12	Met film 4.7Ω 2% ¼W	24773-217	X3	Bead FX1115	23635-833
R13	Met film 330Ω 2% ¼W	24773-261	X4	Bead FX1115	23635-833
R14	Met film 75Ω 2% ¼W	24773-246	X5	Bead FX1115	23635-833
R15	Met film 91Ω 2% ¼W	24773-248	X6	Bead FX1115	23635-833
R16	Met film 470Ω 2% ¼W	24773-265	X7	Bead FX1115	23635-833
R17	Met film 4.7Ω 2% ¼W	24773-217	X8	Bead FX1115	23635-833
R18	Met film 330Ω 2% ¼W	24773-261			
R19	Met film 75Ω 2% ¼W	24773-246			
R20	Met film 270Ω 2% ¼W	24773-259			
R21	Met film 470Ω 2% ¼W	24773-265			
R22	Met film 4.7Ω 2% ¼W	24773-217			
R23	Met film 330Ω 2% ¼W	24773-261			
R24	Met film 75Ω 2% ¼W	24773-246			
			<b>200 to 310 MHz slave first local oscillator board</b>		
			<b>—AA5a</b>		
			<i>When ordering, prefix with AA5a</i>		
R26	Met film 10kΩ 2% ¼W	24773-297		Complete board	44823-746
R27	Met film 160Ω 2% ¼W	24773-254	C1	Plas 0.47μF 10% 100V	26582-215
R28	Met film 51Ω 2% ¼W	24773-242	C2	Plas 0.47μF 10% 100V	26582-215
R29	Met film 2kΩ 2% ¼W	24773-280	C3	Cer 0.01μF -20+80% 100V	26383-055
			C4	Cer 0.01μF -20+80% 100V	26383-055
TR1	U310	28459-026	D1	1N4148	28336-676
TR2	BFY90	28452-157	D2	1N4148	28336-676
TR3	BFY90	28452-157	D3	1N4148	28336-676
TR4	BFY90	28452-157	D4	1N4148	28336-676
TR5	BFY90	28452-157			
TR6	BFY90	28452-157			
TR7	BFY90	28452-157	IC1	μA741C	28461-304

*For symbols and abbreviations see introduction to this chapter*

<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
L1	Choke 350 $\mu$ H	23642-564	C6	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C7	Cer 0.001 $\mu$ F -20+80% 500V	26373-714
			C8	Cer 0.001 $\mu$ F -20+80% 500V	26373-714
R1	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313	C9	Cer 200pF 20% 500V	26333-568
R2	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	C10	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R3	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289	C11	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R4	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283	C12	Cer 15pF 5% 50V	26343-493
R5	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281	C13	Cer 15pF 5% 50V	26343-493
R6	Met film 3.9k $\Omega$ 2% $\frac{1}{4}$ W	24773-284	C14	Cer 270pF 2% 63V	26343-436
R7	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	C15	Cer 270pF 2% 63V	26343-436
R8	Met film 11k $\Omega$ 2% $\frac{1}{4}$ W	24773-298	C16	Cer 270pF 2% 63V	26343-436
R9	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281	C17	Cer 2.2pF 5% 50V	26343-491
R10	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290	C18	Cer 15pF $\pm$ 0.25pF 750V	26324-712
R11	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313	C19	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R12	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313			
R13	Met film 7.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-294			
			C21	Cer 33pF 5% 500V	26343-062
			C22	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C23	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
TR1	BC237A	28455-421	C24	Plas 68pF $\pm$ 2pF 350V	26516-202
TR2	BC307A	28435-227	C25	Cer 15pF $\pm$ 0.25pF 750V	26324-712
TR3	BC307A	28435-227	C26	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C27	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C29	Cer 33pF 5% 500V	26343-062
			C30	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C31	Plas 100pF $\pm$ 2pF 350V	26516-243
			C32	Plas 68pF $\pm$ 2pF 350V	26516-202
			C33	Cer 15pF $\pm$ 0.25pF 750V	26324-712
			C34	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C37	Cer 33pF 5% 500V	26343-062
			C38	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665

**205 to 315 MHz master first local oscillator unit  
--AA6**

*When ordering, prefix with AA6*

*For symbols and abbreviations see introduction to this chapter*

<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
C39	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	L18	Choke 10 $\mu$ H	23642-555
C40	Plas 100pF $\pm$ 2pF 350V	26516-243	L19	Choke 100 $\mu$ H	23642-561
C41	Cer 56pF 20% 500V	26373-855	L20	Choke 100 $\mu$ H	23642-561
C42	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665			
C43	Cer 0.001 $\mu$ F -20+80% 500V	26373-714			
C44	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665			
C45	Plas 0.47 $\mu$ F 10% 63V	26582-402			
C52	Plas 0.47 $\mu$ F 10% 63V	26582-410			
			R1	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
			R3	Met film 75k $\Omega$ 2% $\frac{1}{4}$ W	24773-318
D1	Matched pair	44529-010	R4	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
D2	1N5390	28349-005	R5	Met film 820 $\Omega$ 2% $\frac{1}{4}$ W	24773-271
D3	1N5390	28349-005	R6	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
			R7	Met film 4.7 $\Omega$ 2% $\frac{1}{4}$ W	24773-217
			R8	Met film 330 $\Omega$ 2% $\frac{1}{4}$ W	24773-261
L1	Choke 10 $\mu$ H	23642-555	R9	Met film 75 $\Omega$ 2% $\frac{1}{4}$ W	24773-246
L2	Choke 10 $\mu$ H	23642-555	R10	Met film 91 $\Omega$ 2% $\frac{1}{4}$ W	24773-248
			R11	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
			R12	Met film 4.7 $\Omega$ 2% $\frac{1}{4}$ W	24773-217
L4	Choke 10 $\mu$ H	23642-555	R13	Met film 330 $\Omega$ 2% $\frac{1}{4}$ W	24773-261
L5	Choke 10 $\mu$ H	23642-555	R14	Met film 75 $\Omega$ 2% $\frac{1}{4}$ W	24773-246
L6	Inductor	44290-120	R15	Met film 680 $\Omega$ 2% $\frac{1}{4}$ W	24773-269
L7	Choke 10 $\mu$ H	23642-555	R16	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
L8	Inductor	34900-146	R17	Met film 4.7 $\Omega$ 2% $\frac{1}{4}$ W	24773-217
L9	Inductor	44290-120	R18	Met film 330 $\Omega$ 2% $\frac{1}{4}$ W	24773-261
L10	Choke 10 $\mu$ H	23642-555	R19	Met film 75 $\Omega$ 2% $\frac{1}{4}$ W	24773-246
L11	Choke 10 $\mu$ H	23642-555			
L12	Choke 0.33 $\mu$ H	23642-546			
L13	Choke 0.33 $\mu$ H	23642-546			
L14	Choke 0.33 $\mu$ H	23642-546	R25	Var cermet 100 $\Omega$ 10% $\frac{1}{2}$ W	25711-545
L16	Choke 10 $\mu$ H	23642-555	R28	Met film 51 $\Omega$ 2% $\frac{1}{4}$ W	24773-242
L17	Choke 1 $\mu$ H	23642-549	R29	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280

*For symbols and abbreviations see introduction to this chapter*

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
TR1	U310	28459-026	C13	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
TR2	BFY90	28452-157	C14	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
TR3	BFY90	28452-157	C15	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR4	BFY90	28452-157			
TR5	BFY90	28452-157			
TR6	BFY90	28452-157	D1	1N4148	28336-676
TR7	BFY90	28452-157	D2	1N4148	28336-676
X1	Ferrite bead	23635-833	IC1	N5556	28461-311
X2	Ferrite bead	23635-833	IC2	CA3039	28461-906
X3	Ferrite bead	23635-833	IC3	N5556	28461-311
X4	Ferrite bead	23635-833	IC4	$\mu$ A741C	28461-304
X5	Ferrite bead	23635-833			
X6	Ferrite bead	23635-812			
			L1	Inductor	44290-141
			L2	Inductor	44290-141

### 205 to 315 MHz master first local oscillator board—AA6a

When ordering, prefix with AA6a

			R1	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
			R2	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
	Complete board	44823-747	R3	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305
C1	Plas 15pF $\pm$ 1.5pF 350V	26516-019	R4	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305
C2	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R5	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C3	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R6	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290
C4	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R7	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305
C5	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R8	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305
C6	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R9	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225
C7	Plas 680pF 2% 160V	26516-444	R10	Met film 200 $\Omega$ 2% $\frac{1}{4}$ W	24773-256
C8	Plas 300pF 2% 500V	26516-364	R11	Met film 56 $\Omega$ 2% $\frac{1}{4}$ W	24773-243
C9	Plas 0.0011 $\mu$ F 2% 125V	26516-494			
C10	Plas 0.001 $\mu$ F 2% 350V	26516-484	T1	Transformer	43590-013
C11	Plas 0.47 $\mu$ F 10% 100V	26582-215			
C12	Plas 0.47 $\mu$ F 10% 100V	26582-215	TR1	BSX20	28452-197

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>205 to 315 MHz master first local oscillator board—AA6b</b>					
<i>When ordering, prefix with AA6b</i>					
	Complete board	44827-109	R3	Met film 680Ω 2% ¼W	24773-269
C1	Plas 47pF ±2pF 350V	26516-167	R4	Met film 51Ω 2% ¼W	24773-242
C2	Cer 0.01μF -20+80% 100V	26383-055	R5	Met film 47kΩ 2% ¼W	24773-313
C3	Cer 0.01μF -20+80% 100V	26383-055	R6	Met film 47kΩ 2% ¼W	24773-313
C4	Cer 33pF 5% 50V	26343-471	R7	Met film 100Ω 2% ¼W	24773-249
C5	Plas 100pF ±2pF 350V	26516-243	T1	Transformer	43590-011
C6	Cer 0.01μF -20+80% 100V	26383-055	TR1	MPS3640	28431-766
C7	Plas 220pF 2% 350V	26516-329	<b>236 MHz slave second local oscillator unit—AA7</b>		
C8	Plas 220pF 2% 350V	26516-329	<i>When ordering, prefix with AA7</i>		
C9	Plas 68pF ±2pF 125V	26516-201	C1	Cer 0.0047μF -20+80% 500V	26373-665
C10	Plas 15pF ±1.5pF 350V	26516-019	C2	Cer 0.0047μF -20+80% 500V	26373-665
C11	Cer 0.047μF -20+80% 25V	26383-017	C4	Cer 200pF 20% 500V	26333-568
C12	Cer 0.047μF -20+80% 25V	26383-017	C5	Cer 0.0047μF -20+80% 500V	26373-665
C13	Plas 100pF ±2pF 350V	26516-243	C6	Cer 0.0047μF -20+80% 500V	26373-665
D1	HP 5082-0180	28383-998	C7	Cer 0.001μF -20+80% 500V	26373-714
D2	1N5390	28349-005	C8	Cer 0.001μF -20+80% 500V	26373-714
D3	1N 5390	28349-005	C9	Cer 200pF 20% 500V	26333-568
D4	1N 5390	28349-005	C10	Cer 0.0047μF -20+80% 500V	26373-665
D5	1N 5390	28349-005	C11	Cer 0.0047μF -20+80% 500V	26373-665
IC1	N5556	28461-311	C12	Cer 15pF 5% 50V	26343-493
L1	Inductor	34900-152	C13	Cer 15pF 5% 50V	26343-493
R1	Met film 750Ω 2% ¼W	24773-270	C14	Cer 270pF 2% 63V	26343-436
R2	Met film 51Ω 2% ¼W	24773-242	C15	Cer 270pF 2% 63V	26343-436
			C16	Cer 270pF 2% 63V	26343-436

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C17	Cer 2.2pF 5% 50V.	26343-491	C53	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
C18	Cer 15pF $\pm$ 0.25pF 750V	26324-712	C54	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
C19	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	C55	Cer 5.6pF 5% 50V	26343-486
			C56	Cer 3.3pF 5% 50V	26343-495
C21	Cer 33pF 5% 500V	26343-062	C57	Cer 6.8pF 5% 50V	26343-487
C22	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665			
C23	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	D1	BB105	28381-096
C24	Plas 68pF $\pm$ 2pF 350V	26516-202	D2	1N5390	28349-005
C25	Cer 15pF $\pm$ 0.25pF 750V	26324-712	D3	1N 5390	28349-005
C26	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665			
C29	Cer 33pF 5% 500V	26343-062	L1	Choke 10 $\mu$ H	23642-555
C30	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	L2	Choke 10 $\mu$ H	23642-555
C31	Plas 100pF $\pm$ 2pF 350V	26516-243			
C32	Plas 68pF $\pm$ 2pF 350V	26516-202	L5	Choke 10 $\mu$ H	23642-555
C33	Cer 15pF $\pm$ 0.25pF 750V	26324-712	L6	Inductor	44290-120
C34	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	L7	Choke 10 $\mu$ H	23642-555
C35	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	L8	Inductor	34900-147
			L9	Inductor	44290-120
C37	Cer 33pF 5% 500V	26343-062	L10	Choke 10 $\mu$ H	23642-555
C38	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	L11	Choke 10 $\mu$ H	23642-555
C39	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	L12	Choke 0.33 $\mu$ H	23642-546
C40	Plas 100pF $\pm$ 2pF 350V	26516-243	L13	Choke 0.33 $\mu$ H	23642-546
C41	Plas 68pF $\pm$ 2pF 350V	26516-202			
C42	Cer 15pF $\pm$ 0.25pF 750V	26324-712	L15	Choke 0.33 $\mu$ H	23642-546
C43	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	L16	Choke 0.33 $\mu$ H	23642-546
			L17	Inductor	34900-148
C46	Cer 44pF 5% 500V	26343-062			
C47	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R1	Met film 110k $\Omega$ 2% $\frac{1}{4}$ W	24773-322
C48	Plas 100pF $\pm$ 2pF 350V	26516-243	R2	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
C49	Cer 200pF 20% 500V	26333-568	R3	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
C50	Cer 200pF 20% 500V	26333-568	R4	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
C51	Plas 0.1 $\mu$ F 10% 100V	26582-211	R5	Met film 820 $\Omega$ 2% $\frac{1}{4}$ W	24773-271
C52	Plas 0.47 $\mu$ F 10% 63 V	26582-402			

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R6	Met film 470Ω 2% ¼W	24773-265	TR7	BFY90	28452-157
R7	Met film 4.7Ω 2% ¼W	24773-217	TR8	BFY90	28452-157
R8	Met film 330Ω 2% ¼W	24773-261	TR9	BFY90	28452-157
R9	Met film 75Ω 2% ¼W	24773-246	TR10	BFY90	28452-157
R10	Met film 91Ω 2% ¼W	24773-248			
R11	Met film 470Ω 2% ¼W	24773-265			
R12	Met film 4.7Ω 2% ¼W	24773-217			
R13	Met film 330Ω 2% ¼W	24773-261	X1	Ferrite Bead FX1115	23642-546
R14	Met film 75Ω 2% ¼W	24773-246	X2	Ferrite Bead FX1115	23642-546
R15	Met film 91Ω 2% ¼W	24773-248	X3	Ferrite Bead FX1115	23642-546
R16	Met film 470Ω 2% ¼W	24773-265	X4	Ferrite Bead FX1115	23642-546
R17	Met film 4.7Ω 2% ¼W	24773-217	X5	Ferrite Bead FX1115	23642-546
R18	Met film 330Ω 2% ¼W	24773-261	X6	Ferrite Bead FX1115	23642-546
R19	Met film 75Ω 2% ¼W	24773-246	X7	Ferrite Bead FX1115	23642-546
R20	Met film 270Ω 2% ¼W	24773-259	X8	Ferrite Bead FX1115	23642-546
R21	Met film 470Ω 2% ¼W	24773-265	X9	Ferrite Bead FX1115	23642-546
R22	Met film 4.7Ω 2% ¼W	24773-217			
R23	Met film 330Ω 2% ¼W	24773-261			
R24	Met film 75Ω 2% ¼W	24773-246			
			<b>236 MHz slave second local oscillator board—</b>		
			<b>AA7a</b>		
			<i>When ordering, prefix with AA7a</i>		
R26	Met film 10kΩ 2% ¼W	24773-297			
R27	Met film 160Ω 2% ¼W	24773-254			
R28	Met film 51Ω 2% ¼W	24773-242			
R29	Met film 100Ω 2% ¼W	24773-249		Complete board	44823-748
R30	Met film 1kΩ 2% ¼W	24773-273			
			C1	Plas 0.47μF 10% 100V	26582-215
			C2	Plas 0.47μF 10% 100V	26582-215
			C3	Cer 0.01μF -20+80% 100V	26383-055
			C4	Cer 0.01μF -20+80% 100V	26383-055
TR1	U310	28459-026			
TR2	BFY90	28452-157			
TR3	BFY90	28452-157	D1	1N4148	28336-676
TR4	BFY90	28452-157	D2	1N4148	28336-676
TR5	BFY90	28452-157	D3	1N4148	28336-676
TR6	BFY90	28452-157	D4	1N4148	28336-676

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
IC1	$\mu$ A741C	28461-304	C5	Cer 68pF 5% 500V	26343-069
			C6	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
L1	Choke 350 $\mu$ H	23642-564	C7	Plas 100pF $\pm$ 2pF 350V	26516-243
			C8	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C9	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C10	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R1	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313	C11	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R2	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-272	C12	Plas 100pF $\pm$ 2pF 350V	26516-243
R3	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289	C13	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R4	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283	C14	Plas 33pF $\pm$ 2pF 350V	26516-129
R5	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281	C15	Plas 56pF $\pm$ 2pF 350V	26516-182
R6	Met film 3k $\Omega$ 2% $\frac{1}{4}$ W	24773-284	C16	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R7	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	C17	Cer 10pF $\pm$ 0.25pF 750V	26324-709
R8	Met film 11k $\Omega$ 2% $\frac{1}{4}$ W	24773-298	C18	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R9	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281	C19	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R10	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290	C20	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R11	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313	C21	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R12	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313	C22	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R13	Met film 7.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-294	C23	Plas 0.47 $\mu$ F 10% 63V	26582-410
R14	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
			D1	BB105	28381-096
			D2	1N4148	28336-676
TR1	BC237A	28455-421	D3	1N4148	28336-676
TR2	BC307A	28435-227	D4	1N4148	28336-676
TR3	BC307A	28435-227			

### 36.4 MHz crystal oscillator AB1

When ordering, prefix with AB1

			IC1	CA3039	28461-906
			IC2	$\mu$ A741C	28461-304
	Complete board	44825-226			
C1	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	L1	Inductor	44290-002
C2	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	L2	Inductor	44290-003
C3	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	L3	Inductor	44290-004
C4	Elec 10 $\mu$ F -20+100% 63V	26415-802			

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R1	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297	T1	Transformer	43557-506
R2	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265	T2	Transformer	43557-506
R3	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285	T3	Transformer	43590-016
R4	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313			
R5	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281			
R6	Met film 82k $\Omega$ 2% $\frac{1}{4}$ W	24773-319			
R7	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281	TR1	BSX20	28452-197
R8	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313	TR2	BSX20	28452-197
R9	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	TR3	BSX20	28452-197
R10	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265	TR4	BSX20	28452-197
R11	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301	TR5	BSX20	28452-197
R12	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285			
R13	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265			
R14	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R15	Met film 15 $\Omega$ 2% $\frac{1}{4}$ W	24773-229			
R16	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285	XL1	36.4 MHz	28311-973
R17	Met film 1.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-276			
R18	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257			
R19	Met film 56 $\Omega$ 2% $\frac{1}{4}$ W	24773-243			
R20	Var carb 100 $\Omega$ 20% $\frac{1}{4}$ W	25611-066			
R21	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R22	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253			
R23	Var carb 470 $\Omega$ 20% $\frac{1}{4}$ W	25611-070			
R24	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253			
R25	Carb 1M $\Omega$ 5% $\frac{1}{4}$ W	24311-945			
R26	Met film 51 $\Omega$ 2% $\frac{1}{4}$ W	24773-242			
R27	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R28	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241			
R29	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321			
R30	Var carb 10k $\Omega$ 20% $\frac{1}{4}$ W	25611-078			
R31	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289			
R32	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285			
R33	Met film 180k $\Omega$ 2% $\frac{1}{4}$ W	24773-327			
R34	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R35	Met film 68 $\Omega$ 2% $\frac{1}{4}$ W	24773-245			
			<b>Fixed oscillator divider chain—AB2</b>		
			<i>When ordering, prefix with AB2</i>		
				Complete board	44825-616
			C1	Elec 10 $\mu$ F -20+100% 63V	26415-802
			C2	Elec 10 $\mu$ F -20+100% 63V	26415-802
			C3	Elec 10 $\mu$ F -20+100% 63V	26415-802
			C5	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C6	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
			C7	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C8	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C9	Elec 47 $\mu$ F -20+100% 10V	26415-809
			C10	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C11	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C12	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C13	Cer 0.1 $\mu$ F -25+50% 30V	26383-031

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C14	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R16	Met film 180 $\Omega$ 2% $\frac{1}{4}$ W	24773-255
C15	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R17	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280
C16	Plas 0.47 $\mu$ F 10% 63V	26582-410	R18	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C17	Plas 2.2 $\mu$ F 10% 63V	26582-418	R19	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241
C18	Plas 0.47 $\mu$ F 10% 63V	26582-410	R20	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C19	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R21	Met film 56 $\Omega$ 2% $\frac{1}{4}$ W	24773-243
C20	Plas 150pF 2% 350V	26516-289	R22	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253
			R23	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
			R24	Met film 1.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-279
D1	1N4148	28336-676	R25	Met film 1.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-279
			TR1	BSX20	28452-197
IC1	MC10138	28464-019	TR2	BSX20	28452-197
IC2	74LS93	28464-117	TR3	BSX20	28452-197
IC3	74LS90	28464-014	TR4	BSX20	28452-197
IC4	74LS00	28466-345			

### 80 MHz crystal oscillator—AB3

When ordering, prefix with AB3

R1	Met film 1.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-274		Complete board	44825-617
R2	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289			
R4	Met film 3.3 $\Omega$ 2% $\frac{1}{4}$ W	24773-213			
R5	Met film 330 $\Omega$ 2% $\frac{1}{4}$ W	24773-261	C1	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R6	Met film 68k $\Omega$ 2% $\frac{1}{4}$ W	24773-317	C2	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R7	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281	C3	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R8	Met film 56 $\Omega$ 2% $\frac{1}{4}$ W	24773-243	C4	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R10	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253	C5	Plas 100pF $\pm$ 2pF 350V	26516-243
R11	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241	C6	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
			C7	Plas 10pF $\pm$ 1pF 350V	26516-010
R12	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	C8	Plas 15pF $\pm$ 1.5pF 350V	26516-019
R13	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241	C9	Plas 10pF $\pm$ 1pF 350V	26516-010
R14	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C10	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R15	Met film 15 $\Omega$ 2% $\frac{1}{4}$ W	24773-229	C11	Cer 0.001 $\mu$ F -20+80% 500V	26383-242

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C12	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R1	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C13	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R2	Met film 82k $\Omega$ 2% $\frac{1}{4}$ W	24773-319
C14	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R3	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
C15	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R4	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C16	Cer 22pF 0.25pF 750V	26324-715	R5	Met film 680 $\Omega$ 2% $\frac{1}{4}$ W	24773-269
C17	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R6	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280
C18	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R7	Met film 200 $\Omega$ 2% $\frac{1}{4}$ W	24773-256
C19	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R8	Met film 910 $\Omega$ 2% $\frac{1}{4}$ W	24773-272
C20	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R9	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C21	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R10	Met film 3.9k $\Omega$ 2% $\frac{1}{4}$ W	24773-287
C22	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R11	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241
C23	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R12	Met film 1.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-277
C24	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R13	Met film 1.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-274
C25	Plas 47pF $\pm$ 2pF 160V	26516-165	R14	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289
C26	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R15	Met film 6.2 $\Omega$ 2% $\frac{1}{4}$ W	24773-220
C27	Cer 33pF 5% 750V	26324-822	R16	Met film 160 $\Omega$ 2% $\frac{1}{4}$ W	24773-254
C28	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R17	Met film 22 $\Omega$ 2% $\frac{1}{4}$ W	24773-233
			R18	Met film 1.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-275
			R19	Met film 1.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-274
			R20	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225
			R21	Met film 51 $\Omega$ 2% $\frac{1}{4}$ W	24773-242
D1	BB105	28381-096	R22	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225
D2	BB105	28381-096	R23	Met film 27 $\Omega$ 2% $\frac{1}{4}$ W	24773-235
			R24	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
			R25	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
			R26	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
			R27	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289
IC1	MC10131	28462-605	R29	Met film 1.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-279
L1	Inductor	44290-001			
L2	Inductor	44232-205	TR1	BFY90 (screen lead removed)	28452-157
L3	Inductor	44232-205	TR2	BSX20	28452-197

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
TR3	BFY90	28452-157	C27 †	Cer 15pF 5% 63V	26343-493
TR4	BSX20	28452-197	IC1	MC1032P	28462-016
TR5	BSX20	28452-197	IC2	CA3039	28461-906
TR6	BSX20	28452-197			
TR7	BFY90	28452-157	R1	Met film 300Ω 2% ¼W	24773-260
			R2	Met film 470Ω 2% ¼W	24773-265
XL1	80 MHz	28311-974	R3	Met film 3.3kΩ 2% ¼W	24773-285

### 10 MHz reference crystal oscillator—AB4

When ordering, prefix with AB4

	Complete board	44825-618	R4	Met film 4.7kΩ 2% ¼W	24773-289
C1	Cer 0.01μF -20+80% 100V	26383-055	R5	Met film 62kΩ 2% ¼W	24773-316
C2	Cer 0.01μF -20+80% 100V	26383-055	R6	Met film 51Ω 2% ¼W	24773-242
C3	Cer 0.01μF -20+80% 100V	26383-055	R7	Met film 100Ω 2% ¼W	24773-249
C4	Cer 0.01μF -20+80% 100V	26383-055	R8	Met film 47Ω 2% ¼W	24773-241
C5	Cer 0.01μF -20+80% 100V	26383-055	R9	Met film 11kΩ 2% ¼W	24773-298
C6	Var Cer 4pF-20pF	26847-243	R10	Met film 62Ω 2% ¼W	24773-244
C7	Cer 68pF 5% 500V	26343-069	R11	Met film 62Ω 2% ¼W	24773-244
C8	Cer 0.01μF -20+80% 100V	26383-055	R12	Met film 3.6kΩ 2% ¼W	24773-286
C9	Cer 0.01μF -20+80% 100V	26383-055	R13	Met film 1.3kΩ 2% ¼W	24773-276
C10	Cer 0.01μF -20+80% 100V	26383-055	R14	Met film 22Ω 2% ¼W	24773-233
C11	Cer 0.01μF -20+80% 100V	26383-055	R15	Met film 22Ω 2% ¼W	24773-233
C12	Cer 0.01μF -20+80% 100V	26383-055	R16	Met film 470Ω 2% ¼W	24773-265
C13	Cer 0.01μF -20+80% 100V	26383-055	R17	Met film 47Ω 2% ¼W	24773-241
C14	Cer 0.01μF -20+80% 100V	26383-055	R18	Met film 2.4kΩ 2% ¼W	24773-282
C15	Cer 0.01μF -20+80% 100V	26383-055	R19	Met film 2.2kΩ 2% ¼W	24773-281
C16	Cer 0.01μF -20+80% 100V	26383-055	R20	Met film 39Ω 2% ¼W	24773-239
C17	Cer 0.01μF -20+80% 100V	26383-055	R21	Met film 150Ω 2% ¼W	24773-253
C18	Cer 0.01μF -20+80% 100V	26383-055	R22	Met film 22Ω 2% ¼W	24773-233
C19	Cer 0.01μF -20+80% 100V	26383-055	R23	Met film 1kΩ 2% ¼W	24773-273
C20	Cer 0.01μF -20+80% 100V	26383-055	R24	Met film 22Ω 2% ¼W	24773-233
C21	Cer 0.01μF -20+80% 100V	26383-055	R25	Met film 100Ω 2% ¼W	24773-249
C22	Cer 0.01μF -20+80% 100V	26383-055	R26	Met film 22Ω 2% ¼W	24773-233
C23	Cer 0.001μF -20+80% 500V	26383-242	R27	Met film 47Ω 2% ¼W	24773-241
C24	Cer 0.01μF -20+80% 100V	26383-055	R28	Met film 51Ω 2% ¼W	24773-242
C25	Cer 0.01μF -20+80% 100V	26383-055	R29	Met film 39Ω 2% ¼W	24773-239
C26	Cer 0.01μF -20+80% 100V	26383-055	R30	Var carb 100Ω 20% ¼W	25611-066
			R31	Met film 820Ω 2% ¼W	24773-271
			R32	Met film 47Ω 2% ¼W	24773-241

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R33	Met film 470Ω 2% ¼W	24773-265	TR9	BCY71	28435-235
R34	Met film 82Ω 2% ¼W	24773-247	TR10	BCY71	28435-235
R35	Met film 820Ω 2% ¼W	24773-271	TR11	BSX20	28452-197
R36	Met film 47Ω 2% ¼W	24773-241	TR12	BSX20	28452-197
R37	Met film 470Ω 2% ¼W	24773-265			
R38	Met film 43Ω 2% ¼W	24773-240	XL1	10 MHz	28313-862
R39	Met film 820Ω 2% ¼W	24773-271			
R40	Met film 12kΩ 2% ¼W	24773-299			
R41	Met film 12kΩ 2% ¼W	24773-299			
R42	Var carb 47kΩ 20% ¼W	25611-082			
R43	Met film 22kΩ 2% ¼W	24773-305			
R44	Met film 150Ω 2% ¼W	24773-253			
R45	Met film 51Ω 2% ¼W	24773-242			
R46	Met film 1kΩ 2% ¼W	24773-273			
R47	Met film 51Ω 2% ¼W	24773-242			
R48	Met film 1kΩ 2% ¼W	24773-273			
R49	Met film 3.3kΩ 2% ¼W	24773-285			
R50	Met film 4.7kΩ 2% ¼W	24773-289			
R51	Met film 51Ω 2% ¼W	24773-242			
R52	Met film 11kΩ 2% ¼W	24773-298			
T1	Transformer	43557-506			
T2	Transformer	43557-506			
T3	Transformer	43590-016			
				<b>Line cleaners—AB5</b>	
				<i>When ordering, prefix with AB5</i>	
				Complete board	44821-280
			C1	Plas 0.47μF 10% 100V	26582-215
			C2	Plas 1μF 10% 100V	26582-217
			C3	Elec 100μF -20+100% 25V	26415-813
			C4	Plas 0.47μF 10% 100V	26582-215
			C5	Plas 1μF 10% 100V	26582-217
			C6	Elec 100μF -20+100% 25V	26415-813
			C7	Plas 0.47μF 10% 100V	26582-215
			C8	Plas 1μF 10% 100V	26582-217
			C9	Elec 100μF -20+100% 25V	26415-813
			C10	Plas 0.47μF 10% 100V	26582-215
			C11	Plas 1μF 10% 100V	26582-217
			C12	Elec 100μF -20+100% 25V	26415-813
			D1	1N4148	28336-676
			D2	Zener 8.2V	28371-680
			D3	Zener 8.2V	28371-680
			D4	1N4148	28336-676
			D5	Zener 8.2V	28371-680
			D6	Zener 8.2V	28371-680
TR1	BC308B	28433-455			
TR2	BSX20	28452-197			
TR3	BSX20	28452-197			
TR4	BSX20	28452-197			
TR5	BSX20	28452-197			
TR6	BSX20	28452-197			
TR7	BSX20	28452-197	IC1	μA741C	28461-304
TR8	BSX20	28452-197	IC2	μA741C	28461-304

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
IC3	$\mu$ A741C	28461-304	R26	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299
IC4	$\mu$ A741C	28461-304	R27	Met film 2.2 $\Omega$ 2% $\frac{1}{4}$ W	24773-209
			R28	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201
			R29	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241
L1	Inductor	44290-141	R30	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225
L2	Inductor	44290-141	R31	Met film 120k $\Omega$ 2% $\frac{1}{4}$ W	24773-323
L3	Inductor	44290-141	R32	Met film 300k $\Omega$ 2% $\frac{1}{4}$ W	24773-332
L4	Inductor	44290-141	R33	Carb 6.8M $\Omega$ 10% 1/8W	24321-883
			R34	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
			R35	Carb 6.8M $\Omega$ 10% 1/8W	24321-883
			R36	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299
R1	Met film 270k $\Omega$ 2% $\frac{1}{4}$ W	24773-331	R37	Met film 12 $\Omega$ 2% $\frac{1}{4}$ W	24773-227
R2	Met film 150k $\Omega$ 2% $\frac{1}{4}$ W	24773-325	R38	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289
R3	Carb 6.8M $\Omega$ 10% 1/8W	24321-883	R39	Met film 300 $\Omega$ 2% $\frac{1}{4}$ W	24773-260
R4	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289	R40	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225
R5	Carb 3.3M $\Omega$ 10% 1/8W	24321-879	R41	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
R6	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297	R42	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
R7	Met film 12 $\Omega$ 2% $\frac{1}{4}$ W	24773-227			
R8	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289	TR1	2N2483	28455-787
R9	Met film 300 $\Omega$ 2% $\frac{1}{4}$ W	24773-260	TR2	BC307A	28435-227
R10	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225	TR3	2N2483	28455-787
R11	Met film 270k $\Omega$ 2% $\frac{1}{4}$ W	24773-331	TR4	BC307A	28435-227
R12	Met film 150k $\Omega$ 2% $\frac{1}{4}$ W	24773-325	TR5	2N2483	28455-787
R13	Carb 6.8M $\Omega$ 10% 1/8W	24321-883	TR6	BC239C	28452-771
R14	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289	TR7	2N2483	28455-787
R15	Carb 3.3M $\Omega$ 10% 1/8W	24321-879	TR8	BC239C	28452-771
R16	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297			
R17	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201			
R18	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201			
R19	Met film 47 $\Omega$ 2% $\frac{1}{4}$ W	24773-241			
R20	Met film 10 $\Omega$ 2% $\frac{1}{4}$ W	24773-225			
R21	Met film 120k $\Omega$ 2% $\frac{1}{4}$ W	24773-323			
R22	Met film 300k $\Omega$ 2% $\frac{1}{4}$ W	24773-332			
R23	Carb 6.8M $\Omega$ 10% 1/8W	24321-883			
R24	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281			
R25	Carb 6.8M $\Omega$ 10% 1/8W	24321-883			
			<b>400 kHz i.f. signal amplifier--AB6</b>		
			<i>When ordering, prefix with AB6</i>		
				Complete board	44825-611
			C1	Plas 0.22 $\mu$ F 10% 63V	26582-406
			C2	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C3	Cer 0.1 $\mu$ F -25+50% 30V	26383-031

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C4	Plas 0.0068 $\mu$ F 2% 125V	26516-684	R5	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C5	Plas 0.0012 $\mu$ F 2% 500V	26516-511	R6	Met film 2.4k $\Omega$ 2% $\frac{1}{4}$ W	24773-282
C6	Plas 700pF 2% 125V	26516-448	R7	Met film 39 $\Omega$ 2% $\frac{1}{4}$ W	24773-239
C7	Plas 0.22 $\mu$ F 10% 63V	26582-406	R8	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C8	Plas 0.0223 $\mu$ F 1% 125V	26516-798	R9	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C9 †	Plas 3.3nF 2% 160V	26516-609	R10	Met film 360 $\Omega$ 2% $\frac{1}{4}$ W	24773-262
C10	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R11	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265
C11	Plas 0.0039 $\mu$ F 2% 125V	26516-628	R12	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C12	Plas 0.22 $\mu$ F 10% 63V	26582-406	R13	Met film 39 $\Omega$ 2% $\frac{1}{4}$ W	24773-239
C13	Plas 0.0047 $\mu$ F 2% 125V	26516-646	R14	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C14	Plas 0.0013 $\mu$ F 2% 125V	26516-515	R15	Met film 390 $\Omega$ 2% $\frac{1}{4}$ W	24773-263
C15	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R16	Var WW 470 $\Omega$ 10% 1W	25811-017
C16	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R17	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253
C17	Cer 0.1 $\mu$ F -25+50% 30V	26383-031			
C18	Plas 270pF 2% 350V	26516-351			
C19	Plas 0.001 $\mu$ F 2% 350V	26516-484	T1	Transformer	43567-513
C20	Plas 0.001 $\mu$ F 2% 350V	26516-484	T2	Transformer	43557-506
			T3	Transformer	43557-506
IC1	CA3039	28461-906			
			TR1	BC109	28452-777
			TR2	BC109	28452-777
L1	Inductor	44264-701	TR3	BC109	28452-777
L2	Inductor	44264-701			
L3	Inductor	44257-407			
L4	Inductor	44257-407			
L5	Inductor	44264-701			
L6	Inductor	44264-702			
L7	Choke 10 $\mu$ H	23642-555			
R1	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289			
R2	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R3	Met film 2.4k $\Omega$ 2% $\frac{1}{4}$ W	24773-282			
R4	Met film 39 $\Omega$ 2% $\frac{1}{4}$ W	24773-239			
				<b>3.6 MHz i.f. signal amplifier—AB7</b>	
				<i>When ordering, prefix with AB7</i>	
				Complete board	44825-612
			C1	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C2	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C3	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C4	Plas 560pF 2% 125V	26516-423
			C5	Plas 22pF $\pm$ 2pF 350V	26516-090
			C6	Plas 560pF 2% 500V	26516-430

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C7	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R12 †	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C8	Plas 560pF 2% 500V	26516-430	R13	Met film 39 $\Omega$ 2% $\frac{1}{4}$ W	24773-239
C9	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R14	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
C10	Plas 15pF $\pm$ 1pF 350V	26516-021	R15	Met film 270 $\Omega$ 2% $\frac{1}{4}$ W	24773-259
C11	Plas 560pF 2% 500V	26516-430	R16	Var WW 330 $\Omega$ 10% 1W	25811-016
C12	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R17	Met film 68 $\Omega$ 2% $\frac{1}{4}$ W	24773-245
C13	Plas 0.004 $\mu$ F 2% 500V	26516-631			
C14	Plas 0.0013 $\mu$ F 2% 125V	26516-515			
C15	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	T1	Transformer	43565-504
C16	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	T2	Transformer	43557-506
C17	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	T3	Transformer	43557-506
IC1	CA3039	28461-906	TR1	BC109	28452-777
			TR2	BC109	28452-777
			TR3	BC109	28452-777
L1	Inductor	44233-408			
L2	Inductor	44233-408			
L3	Inductor	44233-408			
L4	Inductor	44233-408			
L5	Inductor	44227-407			
				Complete board	44825-613
R1	Met film 820 $\Omega$ 2% $\frac{1}{4}$ W	24773-271	C1	Cer 6.8pF $\pm$ 0.25pF 750V	26324-706
R2	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C2	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R3	Met film 39 $\Omega$ 2% $\frac{1}{4}$ W	24773-239	C3	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R4 †	Met film 3.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-286	C4	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R5	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257	C5	Plas 82pF $\pm$ 2pF 350V	26516-225
R6 †	Met film 3.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-286	C6	Cer 1.5pF $\pm$ 0.25pF 750V	26324-008
R7	Met film 39 $\Omega$ 2% $\frac{1}{4}$ W	24773-239	C7	Plas 100pF $\pm$ 2pF 350V	26516-243
R8 †	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281	C8	Plas 390pF 2% 350V	26516-389
R9	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257	C9	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R10	Met film 680 $\Omega$ 2% $\frac{1}{4}$ W	24773-269	C10	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
R11	Met film 120 $\Omega$ 2% $\frac{1}{4}$ W	24773-251	C11	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C12	Plas 390pF 2% 350V	26516-389
			C13	Plas 100pF $\pm$ 2pF 350V	26516-243

**36.4 MHz i.f. signal amplifier—AB8**  
When ordering, prefix with AB8

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C14	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R13	Met film 390 $\Omega$ 2% $\frac{1}{4}$ W	24773-263
C15	Plas 300pF 2% 500V	26516-364	R14	Met film 180 $\Omega$ 2% $\frac{1}{4}$ W	24773-255
C16	Plas 110pF 2% 350V	26516-255			
C17	Cer 22pF $\pm$ 0.25pF 750V	26324-715			
C18	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	T1	Transformer	43590-003
C19	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	T2	Transformer	43557-506
C20	Cer 2.2pF $\pm$ 0.25pF 750V	26324-011	T3	Transformer	43557-506
IC1	CA3039	28461-906			
			TR1	BFY90	28452-157
			TR2	BFY90	28452-157
			TR3	BFY90	28452-157
L1	Inductor	44290-017			
L2	Choke 1 $\mu$ H	23642-549			
L3	Inductor	44290-018			
L4	Choke 1 $\mu$ H	23642-549			
L5	Inductor	44290-017			
L6	Choke 1 $\mu$ H	23642-549			
L7	Inductor	44290-018			
L8	Inductor	44290-019			
				<b>200.2 MHz i.f. signal amplifier—AB9</b>	
				<i>When ordering, prefix with AB9</i>	
R1	Met film 180 $\Omega$ 2% $\frac{1}{4}$ W	24773-255	C1	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R2	Met film 270 $\Omega$ 2% $\frac{1}{4}$ W	24773-259	C2	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R3	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C3	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R4	Met film 5.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-291	C4	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R5	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C5	Cer 12pF 20% 500V	26333-151
R6	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C6	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R7	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253	C7	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R8	Met film 560 $\Omega$ 2% $\frac{1}{4}$ W	24773-267	C8	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R9	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257	C9	Cer 12pF 20% 500V	26333-151
R10	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C10	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R11	Met film 82 $\Omega$ 2% $\frac{1}{4}$ W	24773-247	C11	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R12	Var WW 68 $\Omega$ 10% 1W	25811-012	C12	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C13	Cer 12pF 20% 500V	26333-151
			C14	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C15	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
			C16	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>30 Hz to 110 MHz input signal amplifier board—AB10a</b>			R19	Var carb 100Ω 20% 0.21W	25541-308
When ordering, prefix with AB10a			R20	Met film 82Ω 1% ¼W	24762-569
	Complete board	44827-097	R21	Met film 620Ω 2% ¼W	24773-268
C9	Elec 10μF -20+100% 63V	26423-215	R22	Met film 620Ω 2% ¼W	24773-268
C10	Elec 10μF -20+100% 63V	26423-215	R23	Met film 51Ω 2% ¼W	24773-242
C12	Cer 0.01μF -20+80% 100V	26383-055	R24	Met film 82Ω 1% ¼W	24762-569
C13	Cer 0.01μF -20+80% 100V	26383-055	R25	Met film 51Ω 2% ¼W	24773-242
C14	Var cer 3.5pF-13pF	26847-112	R26	Met film 510Ω 2% ¼W	24773-266
C15	Cer 0.01μF -20+80% 100V	26383-055	TR1 to TR6	BFY90	28452-157
C16 †	Cer 4.7pF 5% 50V	26343-485	X1	Ferrite bead Mullard FX1115	23635-833
D1	1N4148	28336-676	X2	Ferrite bead Mullard FX1115	23635-833
D2	1N4148	28336-676	<b>30 Hz to 110 MHz input signal amplifier board—AB10b</b>		
			When ordering, prefix with AB10b		
R2	Met film 82Ω 1% ¼W	24762-569		Complete board	44827-189
R3	Met film 51Ω 2% ¼W	24773-242	C1	Plas 0.1μF 10% 100V	26582-211
R4	Met film 2.7kΩ 2% ¼W	24773-283	C2	Plas 100pF ±2pF 350V	26516-243
R5	Met film 2.7kΩ 2% ¼W	24773-283	C3	Plas 0.1μF 10% 100V	26582-211
R6	Met film 200Ω 2% ¼W	24773-256	C4	Plas 100pF ±2pF 350V	26516-243
R7	Met film 1kΩ 2% ¼W	24773-273	D1	Z5B 6.2V	28371-483
R8	Met film 510Ω 2% ¼W	24773-266	D2	1N4148	28336-676
R11	Met film 1.8kΩ 2% ¼W	24773-279	D3	1N4148	28336-676
R12	Met film 470kΩ 2% ¼W	24773-265	IC1	μA723C	28461-701
R13	Met film 470Ω 2% ¼W	24773-265	IC2	μA723C	28461-701
R14	Met film 1.2kΩ 2% ¼W	24773-275			
R15	Met film 1.2kΩ 2% ¼W	24773-275			
R16	Met film 3.0kΩ 2% ¼W	24773-284			
R17	Met film 3.0kΩ 2% ¼W	24773-284			
R18	Met film 82Ω 1% ¼W	24762-569			

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
L1	Inductor	44290-142	C13	Cer 12pF 20% 500V	26333-151
L2	Inductor	44290-142	C14	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
			C15	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
			C16	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R1	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283	C17	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R2	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-217	C18	Cer 0.001 $\mu$ F -20+80% 500V	26383-242
R3	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289	C19	Cer 6.8pF 5% 50V	26343-487
R4	Met film 7.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-294	C23	Cer 3.3pF 5% 50V	26343-495
R5	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285	C24	Cer 3.3pF 5% 50V	26343-495
R6	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285	C25	Cer 3.3pF 5% 50V	26343-495
R7	Met film 6.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-285			
R8	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285			
R9	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281			
R10	Met film 5.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-219	L1	Inductor	44290-072
			L2	Choke 0.22 $\mu$ H	23642-545
			L3	Inductor	44290-072
			L4	Choke 0.22 $\mu$ H	23642-545
TR1	2N2905	28434-879	L5	Inductor	44290-072
			L6	Choke 0.22 $\mu$ H	23642-545

### 200.2 MHz i.f. amplifier for tracking generator signal AC1

When ordering, prefix with AC1

			R1	Met film 130 $\Omega$ 2% $\frac{1}{4}$ W	24773-252
			R2	Met film 820 $\Omega$ 2% $\frac{1}{4}$ W	24773-271
C1	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R3	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C2	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R4	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
C3	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R5	Met film 680 $\Omega$ 2% $\frac{1}{4}$ W	24773-269
C4	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R6	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
C5	Cer 12pF 20% 500V	36333-151	R7	Met film 560 $\Omega$ 2% $\frac{1}{4}$ W	24773-267
C6	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R8	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
C7	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R9	Met film 560 $\Omega$ 2% $\frac{1}{4}$ W	24773-267
C8	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R10	Met film 51 $\Omega$ 2% $\frac{1}{4}$ W	24773-242
C9	Cer 12pF 20% 500V	26333-151	R11	Met film 300 $\Omega$ 2% $\frac{1}{4}$ W	24773-260
C10	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R12	Met film 300 $\Omega$ 2% $\frac{1}{4}$ W	24773-259
C11	Cer 0.001 $\mu$ F -20+80% 500V	26383-242	R13	Carb 13 $\Omega$ 5% $\frac{1}{8}$ W	24331-995
C12	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R14	Met film 180 $\Omega$ 2% $\frac{1}{4}$ W	24773-255

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
TR1	BFY90	28452-157	<b>30 Hz to 110 MHz output amplifier for tracking generator signal board—AC2a</b>		
TR2	BFY90	28452-157	<i>When ordering, prefix with AC2a</i>		
TR3	BFY90	28452-157			
TR4	BFY90	28452-157		Complete board	44827-096
TR5	BFY90	28452-157	C8 †	Cer 3.3pF 5% 50V	26343-495
			C9	Elec 10 $\mu$ F -20+100% 63V	26423-215
X1	Ferrite bead Mullard FX1115	23635-833	C10	Elec 10 $\mu$ F -20+100% 63V	26423-215
X2	Ferrite bead Mullard FX1115	23635-833	C11	Var Cer 4.5pF-20pF	26847-114
X3	Ferrite bead Mullard FX1115	23635-833	C12	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
X4	Ferrite bead Mullard FX1115	23635-833	C13	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
X5	Ferrite bead Mullard FX 1115	23635-833	C14	Var Cer 3.5pF-13pF	26847-112
			C15 †	Cer 4.7pF 5% 50V	26343-485
			C16	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
<b>30 Hz to 110 MHz output amplifier for tracking generator signal unit—AC2</b>					
<i>When ordering, prefix with AC2</i>					
			L1	Choke 0.47 $\mu$ H	23642-492
			L2	Choke 0.47 $\mu$ H	23642-492
C1	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665			
C2	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R2	Met film 22 $\Omega$ 2% $\frac{1}{4}$ W	24773-233
C3	Cer 12pF 5% 50V	26343-497	R3	Met film 75 $\Omega$ 2% $\frac{1}{4}$ W	24773-246
C4	Cer 12pF 5% 50V	26343-497	R4	Met film 3.9k $\Omega$ 2% $\frac{1}{4}$ W	24773-287
C5	Cer 12pF 5% 50V	26343-497	R5	Met film 3.9k $\Omega$ 2% $\frac{1}{4}$ W	24773-287
C6	Cer 12pF 5% 50V	26343-497	R6	Met film 82 $\Omega$ 1% $\frac{1}{4}$ W	24762-569
C17	Cer 2.2pF 5% 50V	26343-491	R7	Met film 1.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-277
L1	Inductor	44290-123	R8	Met film 1.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-277
L2	Inductor	44290-122	R9	Met film 22 $\Omega$ 2% $\frac{1}{4}$ W	24773-233
L3	Inductor	44290-123	R10	Met film 22 $\Omega$ 2% $\frac{1}{4}$ W	24773-233
L4	Inductor	44290-123	R11	Met film 2.4k $\Omega$ 2% $\frac{1}{4}$ W	24773-282
L5	Inductor	44290-122	R12	Met film 510 $\Omega$ 2% $\frac{1}{4}$ W	24773-266
L6	Inductor	44290-123	R13	Met film 510 $\Omega$ 2% $\frac{1}{4}$ W	24773-266
			R14	Met film 1.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-278
			R15	Met film 1.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-278
			R16	Met film 3.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-284
R1	Met film 51 $\Omega$ 2% $\frac{1}{4}$ W	24773-242	R17	Met film 3.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-284

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R18	Met film 82Ω 1% ¼W	24762-569	C11	Cer 0.1μF -25+50% 30V	26383-031
R19	Var carb 100Ω 20% 0.21W	25541-308	C12	Plas 100pF ±2pF 350V	26516-243
R20	Met film 82Ω 1% ¼W	24762-569	C13	Cer 0.1μF -25+50% 30V	26383-031
R21	Met film 1.0kΩ 2% ¼W	24773-273	C14	Cer 0.1μF -25+50% 30V	26383-031
R22	Met film 1.0kΩ 2% ¼W	24773-273	C15	Cer 0.1μF -25+50% 30V	26383-031
R23	Met film 1.5kΩ 2% ¼W	24773-277	C16	Plas 620pF 2% 500V	26516-435
R24	Met film 56Ω 2% ¼W	24773-243	C17 †	Plas 33pF ±2pF 350V	26516-129
R25	Met film 1.5kΩ 2% ¼W	24773-277	C18	Var Air 4-34pF	26812-319
R26	Met film 51Ω 2% ¼W	24773-242	C19 †	Plas 33pF ±2pF 350V	26516-129
R27	Met film 22Ω 2% ¼W	24773-233	C20	Var Air 4-34pF	26812-319
			C21	Cer 0.1μF -25+50% 30V	26383-031
			C22	Plas 100pF ±2pF 350V	26516-243
			C23	Cer 0.1μF -25+50% 30V	26383-031
TR1 } TR2 }	BFY90 (matched pair)	44529-055	C24	Plas 1.0μF 10% 100V	26582-217
TR3 } TR4 }	BFY90 (matched pair)	44529-055	C25	Plas 1.0μF 10% 100V	26582-217
TR5 } TR6 }	BFY90 (matched pair)	44529-055	D1	1N4148	28336-676
			D2	1N4148	28336-676
			D3	1N4148	28336-676
			D4	1N4148	28336-676
			D5	1N4148	28336-676
			D6	1N4148	28336-676
			D7	1N4148	28336-676
<b>5 Hz bandwidth, 100 kHz filter—AC3</b>					
<i>When ordering, prefix with AC3</i>					
	Complete board	44823-291			
C1	Cer 0.1μF -25+50% 30V	26383-031	R1	Met film 10kΩ 2% ¼W	24773-297
C2	Cer 0.1μF -25+50% 30V	26383-031	R2	Met film 4.7kΩ 2% ¼W	24773-289
C3	Cer 0.1μF -25+50% 30V	26383-031	R3	Met film 2.2kΩ 2% ¼W	24773-281
C4	Cer 0.1μF -25+50% 30V	26383-031	R4	Met film 2.2kΩ 2% ¼W	24773-281
C5	Cer 0.1μF -25+50% 30V	26383-031	R5	Met film 15kΩ 2% ¼W	24773-301
C6	Plas 620pF 2% 500V	26516-435	R6	Met film 15kΩ 2% ¼W	24773-301
C7 †	Plas 33pF ±2pF 350V	26516-129	R7	Met film 130kΩ 2% ¼W	24773-324
C8	Var Air 4-34pF	26812-319	R8	Met film 1.0kΩ 2% ¼W	24773-273
C9 †	Plas 33pF ±2pF 350V	26516-129	R9	Var WW 33Ω 10% 1W	25811-010
C10	Var Air 4-34pF	26812-319			

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R10	Met film 2.4k $\Omega$ 2% $\frac{1}{4}$ W	24773-282	XL3	100kHz	28311-346
R11	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	XLA	100kHz	28311-346
R12	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309			
R13	Met film 3k $\Omega$ 2% $\frac{1}{4}$ W	24773-284			
R14	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309			
R15	Met film 3.9k $\Omega$ 2% $\frac{1}{4}$ W	24773-287			
R16	Met film 1.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-279			
R17	Met film 270 $\Omega$ 2% $\frac{1}{4}$ W	24773-259		Complete board	44823-292
R18	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301	C1	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R19	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257	C2	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R20	Var WW 33 $\Omega$ 10% 1W	25811-010	C3	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R21	Met film 2.4k $\Omega$ 2% $\frac{1}{4}$ W	24773-282	C4	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R22	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	C5	Plas 39pF $\pm$ 2pF 125V	26516-145
R23	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309	C6	Plas 150pF 2% 160V	26516-287
R24	Met film 3k $\Omega$ 2% $\frac{1}{4}$ W	24773-284	C7	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R25	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309	C8	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R26	Met film 16k $\Omega$ 2% $\frac{1}{4}$ W	24773-302	C9	Plas 39pF $\pm$ 2pF 125V	26516-145
R27	Met film 3.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-284	C10	Plas 150pF 2% 160V	26516-287
R28	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265	C11	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R29	Var WW 1k $\Omega$ 10% 1W	25811-019	C12	Plas 100pF $\pm$ 2pF 350V	26516-243
R30	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301	C13	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R31	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C14	Plas 1 $\mu$ F 10% 100V	26582-217
R32	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C15	Plas 1 $\mu$ F 10% 100V	26582-217
TR1	BC239C	28452-771	D1	1N4148	28336-676
TR2	BC239C	28452-771	D2	1N4148	28336-676
TR3	BC239C	28452-771	D3	1N4148	28336-676
TR4	BC239C	28452-771	D4	1N4148	28336-676
TR5	BC239C	28452-771	D5	1N4148	28336-676
TR6	BC239C	28452-771	D6	1N4148	28336-676
XL1	100kHz	28311-346	R1	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
XL2	100kHz	28311-346	R2	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281

**50 Hz bandwidth, 100 kHz filter—AC4**  
When ordering, prefix with AC4

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R3	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301	X1	100 025Hz	28311-348
R4	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301	X2	99 975Hz	28311-347
R5	Met film 130k $\Omega$ 2% $\frac{1}{4}$ W	24773-324	X3	100 025Hz	28311-348
R6	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	X4	99 975Hz	28311-347
R7	Met film 560 $\Omega$ 2% $\frac{1}{4}$ W	24773-267			
R8	Var WW 2.2k $\Omega$ 10% 1W	25811-021			
R9	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273			
R10	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309			
R11	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R12	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297			
R13	Met film 30k $\Omega$ 2% $\frac{1}{4}$ W	24773-308			
R14	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309			
R15	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273			
R16	Met film 560 $\Omega$ 2% $\frac{1}{4}$ W	24773-267			
R17	Var WW 2.2k $\Omega$ 10% 1W	25811-021			
R18	Met film 1.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-273			
R19	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309			
R20	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R21	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297			
R22	Met film 30k $\Omega$ 2% $\frac{1}{4}$ W	24773-308			
R23	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309			
R24	Met film 16k $\Omega$ 2% $\frac{1}{4}$ W	24773-302			
R25	Met film 3.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-284			
R26	Met film 910 $\Omega$ 2% $\frac{1}{4}$ W	24773-272			
R27	Var WW 680 $\Omega$ 10% 1W	25811-018			
R28	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301			
R29	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
R30	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249			
TR1	BC239C	28452-771			
TR2	BC239C	28452-771			
TR3	BC239C	28452-771			
TR4	BC239C	28452-771			
TR5	BC239C	28452-771			
				Complete board	44827-319
			C1	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C2	Plas 0.0013 $\mu$ F 2% 125V	26516-515
			C3	Cer 330pF 5% 50V	26343-483
			C4	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C5	Cer 330pF 5% 50V	26343-483
			C6	Plas 100pF $\pm$ 2pF 350V	26516-243
			C7	Plas 240pF 2% 350V	26516-337
			C8	Elec 47 $\mu$ F -20+100% 10V	26415-809
			C9	Cer 0.01 $\mu$ F -20+80% 100V	26383-055
			C10	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C11	Elec 4.7 $\mu$ F -20+100% 63V	26415-801
			C12	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C13	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C14	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C15	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C16	Plas 390pF 2% 350V	26516-389
			C17	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C18	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C19	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C20	Plas 0.22 $\mu$ F 10% 100V	26582-226
			C21	Plas 0.001 $\mu$ F 2% 350V	26516-484
			C22	Plas 0.005 $\mu$ F 2% 125V	26516-652
			C23	Plas 39pF $\pm$ 2pF 350V	26516-146
			C24	Cer 0.1 $\mu$ F -25+50% 30V	26383-031

**Detector and external reference signal amplifier  
— AC5**

*When ordering, prefix with AC5*

*For symbols and abbreviations see introduction to this chapter*

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C25	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R10	Met film 910 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-272
C26	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R11	Met film 1.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-277
C27	Elec 22 $\mu$ F -20+100% 25V	26415-805	R12	Met film 1.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-278
C28	Elec 47 $\mu$ F -20+100% 10V	26415-809	R13	Met film 1.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-275
C29	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R14	Met film 1.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
			R15	Met film 470 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-265
			R16	Met film 200 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-256
			R17	Met film 1.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
D1	1N4148	28336-676	R18	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
D2	1N4148	28336-676	R22	Met film 1.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
D3	1N4148	28336-676	R23	Met film 75k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-318
D4	1N4148	28336-676	R24	Met film 100k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-321
D5	1N4148	28336-676	R25	Met film 8.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-295
D6	1N4148	28336-676	R26	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
			R27	Met film 470 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-265
			R28	Met film 12k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-299
IC1	$\mu$ A741C	28461-304	R29	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291
IC2	$\mu$ A741C	28461-304	R30	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
			R31	Met film 39k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-311
			R33	Met film 3.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-284
L1	Inductor	44290-165	R34	Met film 7.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-294
L2	Inductor	44290-166	R35	Met film 160k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-326
L3	Inductor	44290-141	R36	Met film 13k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-300
L4	Inductor	44290-141	R37	Met film 3.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-286
			R38	Met film 2.4k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-282
			R39	Met film 2.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-283
			R40	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
R1	Met film 22k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-305	R41	Met film 1.8k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-279
R2	Met film 18k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-303	R42	Met film 18k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-303
R3	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291	R43	Met film 56k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-315
R4	Met film 620 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-268	R44	Met film 100k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-321
R5	Met film 8.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-295	R45	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
R6	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297	R46	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
R7	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291	R47	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
R8	Met film 1.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-277	R48	Met film 620 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-268
R9	Met film 1.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-277	R49	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R50	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273	C4	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R51	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C5	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R53	Met film 1.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-278	C6	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R56	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249	C7	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R57	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297	C8	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R58	Met film 360 $\Omega$ 2% $\frac{1}{4}$ W	24773-262	C9	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R59	Met film 110 $\Omega$ 2% $\frac{1}{4}$ W	24773-250	C10	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R60	Met film 91 $\Omega$ 2% $\frac{1}{4}$ W	24773-248	C11	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C12	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C13	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C14	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR1	BSX20	28452-197	C15	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR2	BSX20	28452-197	C16	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR3	BSX20	28452-197	C17	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR4	BSX20	28452-197	C18	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR5	BSX20	28452-197	C19	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR6	BSX20	28452-197	C20	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR7	BSX20	28452-197	C21	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR8	BC308B	28433-455	C22	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR10	BC308B	28433-455	C23	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR11	BC239C	28452-771	C24	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR12	BSX20	28452-197	C25	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
TR13	BSX20	28452-197	C26	Plas 1.0pF 10% 100V	26582-217
TR14	BSX20	28452-197			
TR15	BSX20	28452-197			
TR16	BSX20	28452-197			
TR17	BSX20	28452-197	D1		
			to	1N4148	28336-676
			D15		

### Switched gain amplifier AC6

When ordering, prefix with AC6

	Complete board	44827-106	R1	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
C1	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R2	Met film 24k $\Omega$ 2% $\frac{1}{4}$ W	24773-306
C2	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R3	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
C3	Plas 100pF $\pm$ 2pF 350V	26516-243	R4	Met film 51k $\Omega$ 2% $\frac{1}{4}$ W	24773-314

For symbols and abbreviations see introduction to this chapter

<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
R5	Met film 2.7kΩ 2% ¼W	24773-283	R40	Met film 4.7kΩ 2% ¼W	24773-289
R6	Met film 220Ω 2% ¼W	24773-257	R41	Met film 910Ω 2% ¼W	24773-272
R7	Met film 3.3kΩ 2% ¼W	24773-285	R42	Var carb 680Ω 20% ¼W	25611-071
R8	Met film 2.7kΩ 2% ¼W	24773-283	R43	Met film 1.5kΩ 2% ¼W	24773-277
R9	Met film 4.7kΩ 2% ¼W	24773-289	R44	Var carb 1.5kΩ 20% ¼W	25611-073
R10	Met film 100kΩ 2% ¼W	24773-321	R45	Met film 100kΩ 2% ¼W	24773-321
R11	Met film 33kΩ 2% ¼W	24773-309	R46	Met film 6.8kΩ 2% ¼W	24773-293
R12	Met film 10kΩ 2% ¼W	24773-297	R47	Met film 33kΩ 2% ¼W	24773-309
R13	Met film 15kΩ 2% ¼W	24773-301	R48	Met film 27kΩ 2% ¼W	24773-307
R14	Met film 2.7kΩ 2% ¼W	24773-283	R49	Met film 27kΩ 2% ¼W	24773-307
R15	Met film 220Ω 2% ¼W	24773-257	R50	Met film 2.7kΩ 2% ¼W	24773-283
R16	Met film 4.3kΩ 2% ¼W	24773-288	R51	Met film 3.0kΩ 2% ¼W	24773-284
R17	Met film 680Ω 2% ¼W	24773-269	R52	Met film 4.3kΩ 2% ¼W	24773-288
R18	Var carb 470Ω 20% ¼W	25611-070	R53	Met film 680Ω 2% ¼W	24773-269
R19	Met film 2.2kΩ 2% ¼W	24773-281	R54	Var carb 470Ω 20% ¼W	25611-070
R20	Var carb 1.5kΩ 20% ¼W	25611-073	R55	Met film 2.2kΩ 2% ¼W	24773-281
R21	Met film 100kΩ 2% ¼W	24773-321	R56	Var carb 1.5kΩ 20% ¼W	25611-073
R22	Met film 6.8kΩ 2% ¼W	24773-293	R57	Met film 6.8kΩ 2% ¼W	24773-293
R23	Met film 33kΩ 2% ¼W	24773-309	R58	Met film 100Ω 2% ¼W	24773-249
R24	Met film 6.8kΩ 2% ¼W	24773-293	R60	Met film 300kΩ 2% ¼W	24773-332
R25	Met film 10kΩ 2% ¼W	24773-297	R61	Met film 300kΩ 2% ¼W	24773-332
R26	Met film 2.7kΩ 2% ¼W	24773-283	R62	Met film 300kΩ 2% ¼W	24773-332
R27	Met film 220Ω 2% ¼W	24773-257			
R28	Met film 4.7kΩ 2% ¼W	24773-289			
R29	Met film 680Ω 2% ¼W	24773-269			
R30	Var carb 470Ω 20% ¼W	25611-070			
R31	Met film 2.2kΩ 2% ¼W	24773-281	T1	Transformer	43590-010
R32	Var carb 1.5kΩ 20% ¼W	25611-073			
R33	Met film 100kΩ 2% ¼W	24773-321			
R34	Met film 6.8kΩ 2% ¼W	24773-293			
R35	Met film 33kΩ 2% ¼W	24773-309	TR1	BC239C	28452-771
R36	Met film 6.8kΩ 2% ¼W	24773-293	TR2	BC239C	28452-771
R37	Met film 10kΩ 2% ¼W	24773-297	TR3	BC239C	28452-771
R38	Met film 2.7kΩ 2% ¼W	24773-283	TR4	BC239C	28452-771
R39	Met film 220Ω 2% ¼W	24773-257	TR5	BC239C	28452-771

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>Low-pass filter—AC7</b>			R7	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289
When ordering, prefix with AC7			R8	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
Complete board			R9	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
C1	Cer 0.1 $\mu$ F -25+50% 30V	26383-031			
C2	Cer 0.1 $\mu$ F -25+50% 30V	26383-031			
C3	Cer 0.1 $\mu$ F -25+50% 30V	26383-031			
C4	Plas 390pF 2% 350V	26516-389	T1	Transformer	44290-108
C5	Plas 6pF $\pm$ 1pF 350V	26516-907			
C6	Plas 820pF 2% 500V	26516-464	TR1	BC239C	28452-771
C7	Plas 12pF $\pm$ 1pF 350V	26516-015			
C8	Plas 390pF 2% 350V	26516-389			
C9	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	<b>500 Hz and 5 kHz bandwidth, 100 kHz filters—</b>		
C10	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	<b>AC8</b>		
C11	Plas 1 $\mu$ F 10% 100V	26582-217	When ordering, prefix with AC8		
C12	Plas 1 $\mu$ F 10% 100V	26582-217	Complete board		
					44823-294
D1	1N4148	28336-676	C1	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
D2	1N4148	28336-676	C2	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
D3	1N4148	28336-676	C3	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
D4	1N4148	28336-676	C4	Mica 680pF 2% 350V	26257-049
L1	Inductor	44290-106	C5	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
L2	Inductor	44290-106	C6	Plas 300pF 2% 500V	26516-364
L3	Inductor	44190-015	C7	Mica 680pF 2% 350V	26257-049
L4	Inductor	44190-015	C8	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R1	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-257	C9	Mica 680pF 2% 350V	26257-049
R2	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-257	C10	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R3	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301	C11	Plas 30pF $\pm$ 2pF 500V	26516-119
R4	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301	C12	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
R5	Met film 130k $\Omega$ 2% $\frac{1}{4}$ W	24773-324	C13	Mica 680pF 2% 350V	26257-049
R6	Met film 360 $\Omega$ 2% $\frac{1}{4}$ W	24773-262	C14	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C15	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C16	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C17	Cer 0.1 $\mu$ F -25+50% 30V	26383-031
			C18	Plas 680pF 2% 500V	26516-447
			C19	Plas 0.014 $\mu$ F 2% 125V	26516-742

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C20	Plas 0.001 $\mu$ F 2% 350V	26516-484	R11	Met film 4.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-289
C21	Plas 0.002 $\mu$ F 2% 125V	26516-556	R12	Var WW 4.7k $\Omega$ 10% 1W	25811-023
C22	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R13	Met film 16k $\Omega$ 2% $\frac{1}{4}$ W	24773-302
C23	Cer 0.1 $\mu$ F -25+50% 30V	26383-031	R14	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
C24	Plas 680pF 2% 500V	26516-447	R17	Met film 3.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-284
C25	Plas 0.014 $\mu$ F 2% 125V	26516-742	R18	Met film 1.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-277
C26	Plas 0.001 $\mu$ F 2% 350V	26516-484	R19	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C27	Plas 0.002 $\mu$ F 2% 125V	26516-556	R20	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
D1			R21	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
to	1N4148	28336-676	R22	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
D11			R23	Met film 130k $\Omega$ 2% $\frac{1}{4}$ W	24773-324
			R24	Met film 1.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-277
			R25	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295
			R26	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
			R27	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
			R28	Met film 6.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-293
L1	Inductor	44290-109	R29	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257
L2	Inductor	44290-109	R30	Met film 620 $\Omega$ 2% $\frac{1}{4}$ W	24773-268
L3	Inductor	44290-110	R31	Var WW 1k $\Omega$ 10% 1W	25811-019
L4	Inductor	44290-110	R32	Met film 5.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-291
L5	Inductor	44290-111	R33	Met film 39k $\Omega$ 2% $\frac{1}{4}$ W	24773-311
L6	Inductor	44290-112	R34	Met film 13k $\Omega$ 2% $\frac{1}{4}$ W	24773-300
L7	Inductor	44290-111	R35	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
L8	Inductor	44290-112	R36	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
			R37	Met film 27k $\Omega$ 2% $\frac{1}{4}$ W	24773-307
			R38	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321
			R39	Carb 1M $\Omega$ 5% 1/8W	24311-945
R1	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281			
R2	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281			
R3	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301			
R4	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301			
R5	Met film 130k $\Omega$ 2% $\frac{1}{4}$ W	24773-324			
R6	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283	TR1		
R7	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299	to	BC239C	28452-771
R8	Met film 220 $\Omega$ 2% $\frac{1}{4}$ W	24773-257	TR5		

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>Logarithmic amplifier—AD1</b>			D1		
When ordering, prefix with AD1			to	1N4148	28336-676
	Complete board	44846-234	D22		
C1	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C2	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	IC1	CA3046	28461-901
C3	Plas 18pF $\pm$ 2pF 350V	26516-029	IC2	CA3046	28461-901
C4	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	IC3	CA3046	28461-901
C5	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C6	Plas 18pF $\pm$ 2pF 350V	26516-029			
C7	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C8	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	R1	Met film 3.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-286
C9	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R2	Met film 11k $\Omega$ 2% $\frac{1}{4}$ W	24773-298
C10	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R3	Met film 91k $\Omega$ 2% $\frac{1}{4}$ W	24773-320
C11	Plas 18pF $\pm$ 2pF 350V	26516-029	R4	Met film 82k $\Omega$ 2% $\frac{1}{4}$ W	24773-319
C12	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R5	Met film 91k $\Omega$ 2% $\frac{1}{4}$ W	24773-320
C13	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R6	Met film 24k $\Omega$ 2% $\frac{1}{4}$ W	24773-306
C14	Plas 18pF $\pm$ 2pF 350V	26516-029	R7	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299
C15	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R8	Met film 68k $\Omega$ 2% $\frac{1}{4}$ W	24773-317
C16	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	R9	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321
C17	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R10	Met film 68k $\Omega$ 2% $\frac{1}{4}$ W	24773-317
C18	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R11	Met film 3k $\Omega$ 2% $\frac{1}{4}$ W	24773-284
C19	Plas 18pF $\pm$ 2pF 350V	26516-029	R12	Met film 36k $\Omega$ 2% $\frac{1}{4}$ W	24773-321
C20	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R13	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
C21	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R14	Met film 82k $\Omega$ 2% $\frac{1}{4}$ W	24773-319
C22	Plas 18pF $\pm$ 2pF 350V	26516-029	R15	Met film 91k $\Omega$ 2% $\frac{1}{4}$ W	24773-320
C23	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R16	Met film 36k $\Omega$ 2% $\frac{1}{4}$ W	24773-310
C24	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	R17	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299
C25	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R18	Met film 68k $\Omega$ 2% $\frac{1}{4}$ W	24773-317
C26	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R19	Met film 36k $\Omega$ 2% $\frac{1}{4}$ W	24773-310
C27	Plas 18pF $\pm$ 2pF 350V	26516-029	R20	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253
C28	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R21	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297
C29	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R22	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
C30	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R23	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
C31	Plas 18pF $\pm$ 2pF 350V	26516-029	R24	Met film 75k $\Omega$ 2% $\frac{1}{4}$ W	24773-318
C32	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R25	Var ccrmet 10k $\Omega$ 10% 0.3W	25748-507
C33	Elec 10 $\mu$ F -20+100% 63V	26415-802	R26	Met film 6.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-293

For symbols and abbreviations see introduction to this chapter



<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
C10	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	D7	1N4148	28336-676
C11	Plas 18pF $\pm$ 2pF 350V	26516-029	D8	1N4148	28336-676
C12	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	D9	1N4148	28336-676
C13	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	D10	1N4148	28336-676
C14	Plas 18pF $\pm$ 2pF 350V	26516-029	D11	1N4148	28336-676
C15	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	D12	1N4148	28336-676
C16	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	D13	1N4148	28336-676
C17	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	D14	1N4148	28336-676
C18	Plas 18pF $\pm$ 2pF 350V	26516-029			
C19	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C20	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	IC1	CA3046	28461-901
C21	Plas 18pF $\pm$ 2pF 350V	26516-029	IC2	CA3046	28461-901
C22	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	IC3	CA3046	28461-901
C23	Plas 82pF $\pm$ 2pF 350V	26516-225	IC4	CA3046	28461-901
C25	Plas 100pF $\pm$ 2pF 350V	26516-243	IC5	N5556V	28461-311
C26	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C27	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C28	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C29	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	L1	Inductor	44290-164
C30	Cer 0.01 $\mu$ F -20+80% 100V	26383-055			
C31	Cer 0.001 $\mu$ F -20+80% 500V	26383-242			
C32	Elec 10 $\mu$ F -20+100% 63V	26415-802	R1	Met film 7.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-294
C33	Plas 0.1 $\mu$ F 10% 250V	26512-228	R2	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295
C34	Cer 0.01 $\mu$ F -20+80% 100V	26383-055	R3	Met film 3.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-286
C35	Elec 2.2 $\mu$ F 20% 40V	26458-001	R4	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313
C36	Plas 47pF $\pm$ 2pF 350V	26516-167	R5	Met film 2.4k $\Omega$ 2% $\frac{1}{4}$ W	24773-282
C37	Elec 10 $\mu$ F -20+100% 63V	26415-802	R6	Met film 82k $\Omega$ 2% $\frac{1}{4}$ W	24773-319
			R7	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299
			R8	Met film 3.3k $\Omega$ 2% $\frac{1}{4}$ W	24773-285
D1	1N4148	28336-676	R9	Met film 27k $\Omega$ 2% $\frac{1}{4}$ W	24773-307
D2	1N4148	28336-676	R10	Met film 51k $\Omega$ 2% $\frac{1}{4}$ W	24773-314
D3	1N4148	28336-676	R11	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290
D4	1N4148	28336-676	R12	Met film 7.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-294
D5	1N4148	28336-676	R13	Met film 27k $\Omega$ 2% $\frac{1}{4}$ W	24773-307
D6	1N4148	28336-676	R14	Met film 47k $\Omega$ 2% $\frac{1}{4}$ W	24773-313

*For symbols and abbreviations see introduction to this chapter*

<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
R15	Met film 82kΩ 2% ¼W	24773-319	R51	Met film 3.3kΩ 2% ¼W	24773-285
R16	Met film 12kΩ 2% ¼W	24773-299	R52	Met film 20 kΩ 2% ¼W	24773-304
R17	Met film 15kΩ 2% ¼W	24773-301			
R18	Met film 3.3kΩ 2% ¼W	24773-285	R54	Met film 68kΩ 2% ¼W	24773-317
R19	Met film 5.1kΩ 2% ¼W	24773-290	R55	Met film 1.6kΩ 2% ¼W	24773-278
R20	Met film 7.5kΩ 2% ¼W	24773-294	R56	Var cermet 1kΩ 10% 0.3W	25748-504
R21	Met film 47kΩ 2% ¼W	24773-313	R57	Met film 47kΩ 2% ¼W	24773-313
R22	Met film 82kΩ 2% ¼W	24773-319	R58	Met film 2.7kΩ 2% ¼W	24773-283
R23	Met film 12kΩ 2% ¼W	24773-299	R59	Met film 2.2kΩ 2% ¼W	24773-281
R25	Met film 3.3kΩ 2% ¼W	24773-285	R62	Met film 1.8kΩ 2% ¼W	24773-279
R26	Met film 27kΩ 2% ¼W	24773-307	R63	Met film 56kΩ 2% ¼W	24773-315
R27	Met film 51kΩ 2% ¼W	24773-314	R64	Var cermet 2kΩ 10% 0.3W	25748-505
R28	Met film 5.1kΩ 2% ¼W	24773-290	R65	Met film 7.5kΩ 2% ¼W	24773-294
R29	Met film 7.5kΩ 2% ¼W	24773-294	R66	Met film 100kΩ 2% ¼W	24773-321
R30	Met film 27kΩ 2% ¼W	24773-307	R67	Carb 330kΩ 5% 1/8W	24311-933
R31	Met film 47kΩ 2% ¼W	24773-313	R68	Met film 7.5kΩ 2% ¼W	24773-294
R32	Met film 82kΩ 2% ¼W	24773-319	R69	Met film 4.7kΩ 2% ¼W	24773-321
R33	Met film 12kΩ 2% ¼W	24773-299	R70	Met film 8.2kΩ 2% ¼W	24773-295
R34	Met film 15kΩ 2% ¼W	24773-301	R71	Met film 100kΩ 2% ¼W	24773-321
R35	Met film 3.3kΩ 2% ¼W	24773-285	R72	Carb 1MΩ 5% 1/8W	24311-945
R36	Met film 10kΩ 2% ¼W	24773-297	R73	Met film 51kΩ 2% ¼W	24773-314
R37	Met film 2.7kΩ 2% ¼W	24773-283	R74	Met film 22kΩ 2% ¼W	24773-305
R38	Met film 47kΩ 2% ¼W	24773-313	R75	Var cermet 5kΩ 10% 0.3W	25748-506
R39	Met film 82kΩ 2% ¼W	24773-319	R76	Var cermet 5kΩ 10% 0.3W	25748-506
R40	Met film 12kΩ 2% ¼W	24773-299	R77	Var cermet 5kΩ 10% 0.3W	25748-506
R41	Met film 3.3kΩ 2% ¼W	24773-285	R78	Met film 750Ω 2% ¼W	24773-270
R42	Met film 51kΩ 2% ¼W	24773-314	R79	Met film 6.2kΩ 2% ¼W	24773-292
R43	Met film 100kΩ 2% ¼W	24773-321	R80	Met film 47Ω 2% ¼W	24773-241
R44	Met film 10kΩ 2% ¼W	24773-297			
R45	Met film 2.7kΩ 2% ¼W	24773-283			
R46	Met film 68kΩ 2% ¼W	24773-317			
R47	Met film 47kΩ 2% ¼W	24773-313			
R48	Met film 82kΩ 2% ¼W	24773-319	TR1	BC238B	28452-781
R49	Met film 12kΩ 2% ¼W	24773-299	TR2	MPS3640	28431-766
R50	Met film 36kΩ 2% ¼W	24773-310	TR3	MPS3640	28431-766

*For symbols and abbreviations see introduction to this chapter*

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>Peak detector and analogue to digital converter</b>			D5	1N4148	28336-676
<b>—AE1 (A)</b>			D6	Zener 12.0V 5% 4W	28372-143
<i>When ordering, prefix with AE1 (A)</i>			D7	Zener 5.1V 5% 4W	28371-403
	Complete board	44828-110	D8	1N4148	28336-676
C1	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	D9	1N4148	28336-676
C2	Plas 300pF 2% 63V	26538-618	IC1	$\mu$ A741C	28461-304
C3	Plas 0.001 $\mu$ F 2% 63V	26538-690	IC2	710	28461-699
C4	Plas 0.047 $\mu$ F $\pm$ 20% 250V	26582-206	IC3	74LS00	28466-321
C5	Plas 0.01 $\mu$ F 10% 400V	26582-232	IC4	74LS00	28466-321
C6	Plas. 0.001 $\mu$ F 2% 63V	26538-690	IC5	74LS123	28468-309
C7	Plas 0.047 $\mu$ F $\pm$ 20% 250V	26582-206	IC6	7472	28462-003
C8	Plas 150pF 2% 63V	26538-571	IC7	74121	28468-402
C9	Plas 0.01 $\mu$ F 10% 400V	26582-232	IC8	74LS93	28464-117
C10	Plas 0.001 $\mu$ F 2% 63V	26538-690	IC9	74LS93	28464-117
C11	Plas 0.1 $\mu$ F 10% 100V	26582-211	IC10	74LS30	28466-348
C12	Plas 0.1 $\mu$ F 10% 100V	26582-211			
C13	Plas 0.1 $\mu$ F 10% 100V	26582-211			
C14	Plas 0.1 $\mu$ F 10% 100V	26582-211			
C15	Plas 0.0047 $\mu$ F 2% 500V	26516-631	L1	Inductor	44290-115
C16	Plas 0.001 $\mu$ F 2% 350V	26516-484			
C17	Plas 0.01 $\mu$ F 10% 400V	26582-232			
C18	Plas 0.047 $\mu$ F 20% 250V	26582-206			
C19	Plas 0.1 $\mu$ F 10% 100V	26582-211	R1	Met film 7.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-294
C20	Plas 0.01 $\mu$ F 10% 400V	26582-232	R2	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305
C21	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	R3	Met film 30k $\Omega$ 2% $\frac{1}{4}$ W	24773-308
C22	Plas 0.1 $\mu$ F 10% 100V	26582-211	R4	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
C23	Plas 0.1 $\mu$ F 10% 100V	26582-211	R5	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C24	Elec 47 $\mu$ F -20+100% 10V	26415-809	R6	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295
C25	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	R7	Met film 1k $\Omega$ 2% $\frac{1}{4}$ W	24773-273
			R8	Met film 6.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-292
D1	1N4148	28336-676	R9	Met film 3.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-284
D2	1N4148	28336-676	R10	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
D3	1N3595	28337-556	R11	Met film 30k $\Omega$ 2% $\frac{1}{4}$ W	24773-308
D4	1N3595	28337-556	R12	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280
			R13	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R14	Met film 30k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-308	TR2b	BCY89	28454-747
R15	Met film 820 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-271	TR3	BC308B	28433-455
R16	Met film 2.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-281	TR4	BC238B	28452-781
R17	Met film 8.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-295	TR5	BC238B	28452-781
R18	Met film 2.4k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-282	TR6a	BCY89	28454-747
R19	Met film 6.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-292	TR6b	BCY89	28454-747
R20	Met film 3.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-284	TR7	BC308B	28433-455
R21	Met film 100 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-249	TR8	BC308B	28433-455
R22	Met film 39k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-311	TR9	BC238B	28452-781
R23	Carb 470k $\Omega$ $\pm 5\%$ $\frac{1}{8}$ W	24311-937	TR10	2N4119	28459-022
R24	Met film 470 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-265	TR11	BC238B	28452-781
R25	Met film 30k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-308	TR12	BSX20	28452-197
R26	Met film 2.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	TR13	BC308B	28433-455
R27	Met film 150k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-325			
R28	Met film 30k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-308			
R29	Met film 1.3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-276			
R30	Met film 3.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-284			
R31	Met film 2.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-281			
R32	Met film 27k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-307			
R33	Met film 200 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-256			
R34	Met film 200 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-256			
R35	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309			
R36	Met film 15k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-301			
R37	Met film 10k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-297			
R38	Met film 5.1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-290			
R39	Met film 3.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-284			
R40	Var cermet 1k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-544			
R41	Met film 1.5k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-277			
R42	Met film 2.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280			
R43	Met film 10 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-225			
R44	Met film 10 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-225			
				<b>Shift register store—AE2(A)</b>	
				When ordering, prefix with AE2 (A)	
				Complete board	44828-111
			C1	Plas 6.2pF $\pm 1$ pF 350V	26516-932
			C2	Plas 6.2pF $\pm 1$ pF 350V	26516-932
			C3	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26482-211
			C4	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26582-211
			C5	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26582-211
			C6	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26582-211
			C7	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26582-211
			C8	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26582-211
			C9	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26582-211
			C10	Plas 0.1 $\mu$ F $\pm 10\%$ 100V	26582-211
			C11	Plas 0.1 $\mu$ F $\pm 100\%$ 100V	26582-211
			IC1	7472	28462-003
			IC2	74LS123	28468-309
TR1	BC238B	28452-781	IC3	7440	28466-337
TR2a	BCY89	28454-747	IC4	NH0009C	28469-355

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
IC5	74LS85	28469-371	<b>Read-out waveforms generator—AE3(A)</b>		
IC6	74LS85	28469-371	<i>When ordering, prefix with AE3 (A)</i>		
IC7	74LS50	28466-454		Complete board	44828-112
IC8	74LS50	28466-454	C1	Plas 0.001 $\mu$ F 2% 350V	26516-484
IC9	74LS50	28466-454	C2	Plas 0.001 $\mu$ F 2% 350V	26516-484
IC10	74LS50	28466-454	C3	Plas 0.001 $\mu$ F 2% 350V	26516-484
IC11 $\triangle$	1403	28467-503	C4	Plas 680pF $\pm$ 2% 350V	26516-446
IC12 $\triangle$	1403	28467-503	C5 †	Plas 560pF $\pm$ 2% 350V	26516-428
IC13 $\triangle$	1403	28467-503	C6	Plas 10pF $\pm$ 1pF 350V	26516-010
IC14 $\triangle$	1403	28467-503	C7	Plas 82pF $\pm$ 2pF 350V	26516-225
IC15	74LS75	28462-408	C8	Plas 100pF $\pm$ 2pF 350V	26516-243
IC16	74LS75	28462-408	C9	Plas 220pF 2% 350V	26516-329
			C10	Plas 100pF $\pm$ 2pF 350V	26516-243
			C11	Plas 100pF $\pm$ 2pF 350V	26516-243
L1	22 $\mu$ H Choke	23642-557	C12	Elec 47 $\mu$ F -20+100% 10V	26415-809
			C13	Plas 510pF 2% 350V	26516-417
			C14	Elec 47 $\mu$ F -20+100% 10V	26415-809
			C15	Plas 0.1 $\mu$ F 10% 100V	26582-211
R1	Var cermet 10k $\Omega$ 10% $\frac{1}{2}$ W	25711-543	C16	Plas 0.1 $\mu$ F 10% 100V	26582-211
R2	Met film 5.1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-290	C17	Plas 0.1 $\mu$ F 10% 100V	26582-211
R3	Met film 150 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-253	C18	Plas 0.1 $\mu$ F 10% 100V	26582-211
R4	Var cermet 10k $\Omega$ 10% $\frac{1}{2}$ W	25711-543	C19	Plas 0.1 $\mu$ F 10% 100V	26582-211
R5	Met film 5.1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-290	C20	Plas 820pF $\pm$ 2% 160V	26516-462
R6	Met film 150 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-253			
R7 to			IC1	74LS74	28462-611
R22	Met film 3.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-284	IC2	74LS14	28469-176
R23	Met film 11k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-298	IC3	74LS93	28464-117
R24	Met film 3.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-284	IC4	74LS93	28464-117
R25	Met film 22 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-233	IC5	74LS22	28468-404
			IC6	74LS74	28462-611
			IC7	74LS90	28464-014
			IC8	74LS123	28468-309
TR1	BC308B	28433-455	IC9	74LS93	28464-117

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
IC10	7493	28464-101	R15	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295
IC11	7472	28462-003	R16	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280
IC12	74LS93	28464-117	R17	Met film 22 $\Omega$ 2% $\frac{1}{4}$ W	24773-233
IC13	74LS93	28464-117	R18	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290
IC14	74121	28468-402	R19	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290
IC15	74LS93	28464-117	R20	Var cermet 5k $\Omega$ 10% $\frac{1}{2}$ W	25711-542
IC16	74LS93	28464-117	R21	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280
IC17	74LS00	28466-345	R22	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280
IC18	74LS221	28468-404	R23	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295
IC19	74LS75	28462-408	R24	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
IC20	74LS75	28462-408			
IC21	74LS161	28464-118			
IC22	74LS161	28464-118			
IC23	74LS161	28464-118	TR1	BSX20	28452-197
IC24	74LS161	28464-118	TR2	BSX20	28452-197

#### Digital scan generator—AE4 (A)

When ordering, prefix with AE4 (A)

L1	Inductor	44290-115		Complete board	44828-113
R1	Met film 51 $\Omega$ 2% $\frac{1}{4}$ W	24773-242	C1	Plas 3.3 $\mu$ F 5% 63V	26582-419
R2	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305	C2	Plas 5.6 $\mu$ F 5% 63V	26582-422
R3	Met film 9.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-296	C3	Plas 0.1 $\mu$ F 10% 100V	26582-211
R4	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265	C4	Plas 1 $\mu$ F 5% 63V	26582-413
R5	Met film 150 $\Omega$ 2% $\frac{1}{4}$ W	24773-253	C5	Plas 1 $\mu$ F 5% 63V	26582-413
R6	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309	C6	Plas 0.1 $\mu$ F 10% 100V	26582-211
R7	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265	C7	Plas 0.68 $\mu$ F 10% 63V	26582-412
R8	Var cermet 10k $\Omega$ 10% $\frac{1}{2}$ W	25711-543	C8	Plas 510pF 2% 350V	26516-417
R9	Met film 13k $\Omega$ 2% $\frac{1}{4}$ W	24773-300	C9	Plas 510pF 2% 350V	26516-417
R10	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295	C10	Plas 510pF 2% 350V	26516-417
R11	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290	C11	Plas 0.1 $\mu$ F 10% 100V	26582-211
R12	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290	C12	Plas 0.1 $\mu$ F 10% 100V	26582-211
R13	Met film 7.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-294	C13	Plas 0.1 $\mu$ F 10% 100V	26582-211
R14	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280	C14	Plas 0.1 $\mu$ F 10% 100V	26582-211

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
C15	Plas 0.1 $\mu$ F $\pm$ 10% 100V	26582-211	R11	Met film 180k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-327
C16	Plas 0.1 $\mu$ F $\pm$ 10% 100V	26582-211	R12	Met film 13k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-300
C17	Plas 0.1 $\mu$ F $\pm$ 10% 100V	26582-211	R13	Met film 91k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-320
C18	Tant 1.0 $\mu$ F 20% 35V	26486-209	R14	Met film 20k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-304
D1 to D13	1N4148	28336-676	R15	Met film 45.3k $\Omega$ $\pm$ 1% 1/16W	24761-811
IC1	$\mu$ A741C	28461-304	R16	Met film 20k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-304
IC2	N5556V	28461-311	R17	Met film 22.6k $\Omega$ $\pm$ 1% 1/16W	24761-810
IC3	74121	28468-402	R18	Met film 13k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-300
IC4	7405A	28469-157	R19	Met film 11.3k $\Omega$ $\pm$ 0.5% $\frac{1}{4}$ W	24753-505
IC5	74LS00	28466-345	R20	Met film 11k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-298
IC6	74LS04	28469-171	R21	Met film 5.62k $\Omega$ $\pm$ 0.5% $\frac{1}{4}$ W	24753-504
IC7	74LS74	28462-611	R22	Met film 6.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-292
IC8	74LS00	28466-345	R23	Var cermet 50k $\Omega$ $\pm$ 10% $\frac{1}{2}$ W	25711-506
IC9	74LS26	28466-350	R24	Met film 2.8k $\Omega$ $\pm$ 0.5% $\frac{1}{4}$ W	24753-503
IC10	74LS93	28464-117	R25	Met film 270k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-331
IC11	74LS93	28464-117	R26	Met film 3.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-284
IC12	7472	28462-003	R27	Var cermet 50k $\Omega$ $\pm$ 10% $\frac{1}{2}$ W	25711-506
IC13	7405A	28469-157	R28	Met film 1.4k $\Omega$ $\pm$ 0.5% $\frac{1}{4}$ W	24753-502
R1	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281	R29	Met film 120k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-323
R2	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309	R30	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281
R3	Met film 2.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-281	R31	Var cermet 50k $\Omega$ $\pm$ 10% $\frac{1}{2}$ W	25711-506
R4	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297	R32	Met film 698 $\Omega$ $\pm$ 0.5% $\frac{1}{4}$ W	24753-501
R5	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289	R33	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313
R6	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297	R34	Met film 1.21k $\Omega$ 1% $\frac{1}{4}$ W	24761-809
R7	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297	R35	Met film 348 $\Omega$ 1% $\frac{1}{4}$ W	24761-808
R8	Met film 56k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-315	R36	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313
R9	Met film 56k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-315	R37	Met film 47k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-313
R10	Met film 20k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-304	R38	Var cermet 50k $\Omega$ $\pm$ 10% $\frac{1}{2}$ W	25711-504
			R39	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309
			R40	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R41	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R42	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R43	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R44	Carb 1M $\Omega$ $\pm$ 5% 1/8W	24311-945
			R45	Met film 56k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-315

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R46	Carb 1M $\Omega$ 5% 1/8W	24311-945	TR2	BC239C	28452-771
R47	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290	TR3	BC239C	28452-771
R48	Carb 510k $\Omega$ $\pm$ 5% $\frac{1}{4}$ W	24573-138	TR4		
R49	Var cermet 10k $\Omega$ 10% 1/3W	25748-507	to	BSX20	28452-197
R50	Met film 22k $\Omega$ 2% $\frac{1}{4}$ W	24773-305	TR18		
R51	Met film 5.6k $\Omega$ 2% $\frac{1}{4}$ W	24773-291	TR19		
R52	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290	to	BF244B	28459-011
R53	Carb 1M $\Omega$ 5% 1/8W	24311-945	TR24		
R54	Carb 1M $\Omega$ 5% 1/8W	24311-945	TR25	BC308B	28433-455
R55	Carb 1M $\Omega$ 5% 1/8W	24311-945	TR26	BC308B	28433-455
R56	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321	TR27	BC308B	28433-455
R57	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297	TR28	BSX20	28452-197
R58	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297			
R59	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321			
R60	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297			
R61	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297			
R62	Met film 100k $\Omega$ 2% $\frac{1}{4}$ W	24773-321			
R63	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297			
R65	Met film 39k $\Omega$ 2% $\frac{1}{4}$ W	24773-311			
R66	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R67	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295			
R68	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R69	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R70	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295			
R71	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R72	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R73	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295			
R74	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R75	Met film 470 $\Omega$ 2% $\frac{1}{4}$ W	24773-265			
R76	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295			
R77	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R78	Met film 2.0k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
TR1	BC239C	28452-771			
			<b>Read-in sequence controller—AE5 (A)</b>		
			<i>When ordering, prefix with AE5 (A)</i>		
				Complete board	44828-114
			C1	Plas 150pF $\pm$ 2% 350V	26516-289
			C2	Plas 0.01 $\mu$ F $\pm$ 10% 400V	26582-232
			C3	Plas 510pF $\pm$ 2% 350V	26516-417
			C4	Plas 510pF $\pm$ 2% 350V	26516-417
			C5	Plas 68pF $\pm$ 2pF 350V	26516-202
			C6	Plas 510pF $\pm$ 2% 350V	26516-417
			C7	Plas 510pF $\pm$ 2% 350V	26516-417
			C8	Plas 0.1 $\mu$ F $\pm$ 10% 100V	26582-211
			C9	Plas 0.1 $\mu$ F $\pm$ 10% 100V	26582-211
			C10	Plas 0.1 $\mu$ F $\pm$ 10% 100V	26582-211
			C11	Plas 0.1 $\mu$ F $\pm$ 10% 100V	26582-211
			C12	Plas 510pF $\pm$ 2% 350V	26582-417
			C13	Plas 0.0015 $\mu$ F $\pm$ 2% 160V	26516-524
			IC1	74LS161	28464-118
			IC2	74LS161	28464-118
			IC3	7472	28462-003

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
IC4	74LS123	28468-309	<b>Frequency graticule generator, and bright-up processing—AE6 (A)</b>		
IC5	74LS90	28464-014	<i>When ordering, prefix with AE6 (A)</i>		
IC6	74LS10	28466-351			
IC7	74LS10	28466-351		Complete board	44828-115
IC8	74LS00	28466-345	C1	Elec 47 $\mu$ F -20+100% 10V	26415-809
IC9	74LS04	28469-171	C2	Plas 0.22pF 10% 100V	26582-252
IC10	74LS75	28462-408	C3	Plas 0.022 $\mu$ F 10% 250V	26582-204
IC11	74LS10	28466-351	C4	Plas 0.1 $\mu$ F 10% 100V	26582-211
IC12	74LS90	28464-014	C5	Plas 0.1 $\mu$ F 10% 100V	26582-211
IC13	74LS90	28464-014	C6	Plas 0.22 $\mu$ F 10% 100V	26582-252
IC14	74LS10	28466-351	C7	Plas 510pF 2% 350V	26516-417
IC15	7472	28462-003	C8	Plas 510pF 2% 350V	26516-417
IC16	74LS93	28464-117	C9	Plas 0.0039 $\mu$ F 2% 125V	26516-628
IC17	74LS93	28464-117	C10	Plas 0.15 $\mu$ F 10% 100V	26582-251
IC18	74LS123	28468-309	C11	Plas 0.022 $\mu$ F 10% 250V	26582-204
IC19	74LS04	28469-171	C12	Plas 100pF $\pm$ 2pF 350V	26516-243
IC20	74LS00	28466-345	C13	Plas 0.001 $\mu$ F 2% 350V	26516-484
IC21	74LS74	28462-611	C14	Plas 0.001 $\mu$ F 2% 350V	26516-484
			C15	Plas 0.1 $\mu$ F 10% 100V	26582-211
			C16	Plas 0.1 $\mu$ F 10% 100V	26582-211
R1	Met film 7.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-294	C17	Plas 0.1 $\mu$ F 10% 100V	26582-211
R2	Met film 10k $\Omega$ 2% $\frac{1}{4}$ W	24773-297	C18	Plas 0.1 $\mu$ F 10% 100V	26582-211
R3	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280	C19	Cer 0.047 $\mu$ F -20+80% 25V	26383-017
R4	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R5	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295			
R7	Met film 30k $\Omega$ 2% $\frac{1}{4}$ W	24773-308	D1	Zener 3.3V 5% 4W	28371-208
R8	Met film 5.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-290	D2	1N4148	28336-676
R12	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280	D3	1N4148	28336-676
R13	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280	D4	1N4148	28336-676
R14	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295	D5	1N4148	28336-676
R15	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R16	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280			
R17	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295			
R18	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280	IC1	74221	28468-403
R19	Met film 2k $\Omega$ 2% $\frac{1}{4}$ W	24773-280	IC2	74LS123	28468-309
R20	Met film 82k $\Omega$ 2% $\frac{1}{4}$ W	24773-295	IC3	74LS04	28469-171

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
IC4	74107	28462-013	R21	Met film 20k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-304
IC5	74LS90	28464-014	R22	Var cermet 10k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-543
IC6	74107	28462-013	R23	Met film 2.4k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-282
IC7	74LS74	28462-611	R24	Met film 68k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-317
IC8	74LS00	28466-345	R25	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289
IC9	74LS10	28466-351	R26	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289
IC10	74LS00	28466-345	R27	Met film 10k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-297
IC11	74LS51	28466-454	R28	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280
IC12	$\mu$ A741C	28461-304	R29	Met film 8.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-295
IC13	74LS04	28469-171	R30	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280
IC14	74LS74	28462-611	R31	Met film 39k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-311
IC15	74121	28468-402	R32	Met film 3.6k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-286
			R33	Met film 680 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-269
			R34	Met film 68k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-317
R1	Met film 22 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-233	R35	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-489
R2	Met film 1.5k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-277	R36	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280
R3	Met film 27k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-307	R37	Met film 510 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-266
R4	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321	R38	Met film 510 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-266
R5	Met film 4.3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-288	R39	Met film 200 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-256
R6	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R40	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-489
R7	Met film 3.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-286	R41	Met film 2.4k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-282
R8	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R42	Met film 7.5k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-294
R9	Met film 24k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-306	R43	Met film 7.5k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-294
R10	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R44	Met film 3.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-284
R11	Met film 8.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-295	R45	Met film 5.6k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-291
R12	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R46	Met film 7.5k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-294
R13	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R47	Met film 3.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-284
R14	Met film 8.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-295	R48	Met film 5.6k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-291
R15	Met film 2.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R49	Met film 6.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-292
R16	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R50	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280
R17	Met film 8.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-295	R51	Met film 8.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-295
R18	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R52	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280
R19	Met film 560 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-267	R53	Met film 2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280
R20	Var cermet 10k $\Omega$ $\pm 10\%$ $\frac{1}{2}$ W	25711-543	R54	Met film 6.8k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-293

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
TR1	BSX20	28452-197	R4	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
TR2	BSX20	28452-197	R5	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
TR3	BC308B	28433-455	R6	Met film 2.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-283
TR4	MPS3640	28431-766	R7	Met film 2.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-283
TR5	BSX20	28452-197	R8	Met film 2.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-283
TR6	BSX20	28452-197	R9	Met film 2.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-283
TR7	BSX20	28452-197	R10	Met film 2.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-283
TR8	BSX20	28452-197	R11	Met film 24k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-306

### System control logic (1) AF1 (D)

When ordering, prefix with AF1 (D)

	Complete board	44828-362	R12	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309
D1	1N4148	28336-676	R13	Met film 24k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-306
D2	1N4148	28336-676	R14	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309
D3	1N4148	28336-676	R15	Met film 24k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-306
D4	1N4148	28336-676	R16	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309
D5	1N4148	28336-676	R17	Met film 24k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-306
IC1	74LS10	28466-351	R18	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309
IC2	74LS12	28466-352	R19	Met film 24k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-306
IC3	74LS20	28466-347	R20	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-309
IC4	74LS20	28466-347	R21	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291
IC5	74LS00	28466-345	R22	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291
IC6	74LS03	28466-346	R23	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291
IC7	74LS12	28466-352	R24	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291
IC8	74LS12	28466-352	R25	Met film 5.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-291
IC9	74LS12	28466-352	R26		
IC10	74LS03	28466-346	to	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
IC11	74LS00	28466-345	R34		
IC12	74LS04	28469-171	R35	Met film 1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
IC13	74LS00	28466-345	R36		
			to	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289
			R41		
			TR1		
			to	BC237A	28455-421
			TR10		

### System control logic (2) AF2 (A)

When ordering, prefix with AF2 (A)

R1	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289	Complete board	44828-117	
R2	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289	C1	Plus 0.1 $\mu$ F $\pm$ 10% 100V	26582-211
R3	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289	C2	Plus 0.1 $\mu$ F $\pm$ 10% 100V	26582-211

For symbols and abbreviations see introduction to this chapter

<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
D1	1N4148	28336-676	R19	Met film 150k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-325
D2	1N4148	28336-676	R20	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309
D3	Zener 12V 5% 4W	28372-143	R21	Met film 150k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-325
D6 to D40	1N4148	28336-676	R22	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309
			R23	Met film 150k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-325
			R24	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309
			R25	Met film 150k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-325
			R26	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309
IC1	74LS00	28466-345	R27	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
IC2	74LS00	28466-345	R28	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
IC3	74LS03	28466-346	R29	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
IC4	74LS04	28469-171	R30	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
IC5	74LS10	28466-351	R31	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
IC6	74LS93	28464-117	R32	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
IC7	74LS76	28462-019	R33	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309
IC8	74LS76	28462-019	R34	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309
			R35	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289
			R36	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289
			R37	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289
R1	Met film 10 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-225	R38	Met film 3.3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-285
R2	Met film 10 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-225	R39	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
R3	Carb 1M $\Omega$ $\pm 5\%$ 1/8W	24311-945	R49	Met film 100k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-321
R4	Carb 1M $\Omega$ $\pm 5\%$ 1/8W	24311-945			
R6	Met film 2.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-281			
R7	Met film 1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-273			
R8	Met film 15k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-301	TR1	BC307A	28435-227
R9	Met film 1.3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-276	TR2	BC307A	28435-227
R10	Met film 1.3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-276	TR3	BC307A	28435-227
R11	Met film 1.3k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-276	TR4	BC307A	28435-227
R12	Met film 680 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-269	TR5	BC307A	28435-227
R13	Met film 1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-273	TR6	BC307A	28435-227
R14	Met film 1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-273	TR7	BC237A	28455-421
R15	Met film 1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-273	TR8	BC237A	28455-421
R16	Met film 510 $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-266	TR9	BC237A	28455-421
R17	Met film 150k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-325	TR10	BC237A	28455-421
R18	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309	TR11	BC237A	28455-421

*For symbols and abbreviations see introduction to this chapter*

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
<b>Counter front end - AG1 (B)</b>			IC12	7403A	28466-322
When ordering, prefix with AG1 (B)			IC13	7403A	28466-322
	Complete board	44828-182	IC14	74LS02	28466-214
C1	Elec 100 $\mu$ F -20+100% 25V	26415-813	IC15	7403A	28466-322
C2	Elec 100 $\mu$ F -20+100% 25V	26415-813	IC16	7403A	28466-322
C3	Elec 22 $\mu$ F -20+100% 25V	26415-805	IC17	7403A	28466-322
C4	Elec 100 $\mu$ F -20+100% 25V	26415-813	R1	Met film 51 $\Omega$ 2% $\frac{1}{4}$ W	24773-242
C5	Elec 10 $\mu$ F -20+100% 63V	26415-802	R2	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C6	Plas 200pF 2% 160V	26516-315	R3	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
C7	Plas 82pF $\pm$ 2pF 350V	26516-225	R4	Met film 330 $\Omega$ 2% $\frac{1}{4}$ W	24773-261
C8	Plas 68pF $\pm$ 2pF 350V	26516-202	R5	Met film 330 $\Omega$ 2% $\frac{1}{4}$ W	24773-261
C9	Plas 0.1 $\mu$ F 100% 100V	26582-211	R6	Met film 510 $\Omega$ 2% $\frac{1}{4}$ W	24773-266
C10	Plas 0.1 $\mu$ F 10% 100V	26582-211	R7	Met film 1.5k $\Omega$ 2% $\frac{1}{4}$ W	24773-277
C11	Plas 0.1 $\mu$ F 10% 100V	26582-211	R8	Var cermet 2.2k $\Omega$ 10% $\frac{1}{2}$ W	25711-508
C12	Plas 0.1 $\mu$ F 10% 100V	26582-211	R9	Met film 1.8k $\Omega$ 2% $\frac{1}{4}$ W	24773-279
C13	Plas 100pF $\pm$ 2pF 350V	26516-243	R10	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-281
C14	Elec 100 $\mu$ F +100-20% 25V	26415-813	R11	Met film 180 $\Omega$ 2% $\frac{1}{4}$ W	24773-255
D1	1N4148	28336-676	R12	Met film 180 $\Omega$ 2% $\frac{1}{4}$ W	24773-255
D2	1N5390	28349-005	R13	Met film 100 $\Omega$ 2% $\frac{1}{4}$ W	24773-249
IC1	MC10131	28462-605	R14	Met film 270 $\Omega$ 2% $\frac{1}{4}$ W	24773-259
IC2	74S112	28462-015	R16	Met film 820 $\Omega$ 2% $\frac{1}{4}$ W	24773-271
IC3	74S112	28462-015	R17	Met film 8.2k $\Omega$ 2% $\frac{1}{4}$ W	24773-295
IC4	74S112	28462-015	R18	Met film 430 $\Omega$ 2% $\frac{1}{4}$ W	24773-264
IC5	74LS123	28468-309	R20	Met film 33 $\Omega$ 2% $\frac{1}{4}$ W	24773-237
IC6	74LS75	28462-408	R22	Met film 3.9k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-287
IC7	74LS75	28462-408	R23	Met film 470 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-265
IC8	7405A	28469-157	R24	Met film 9.1k $\Omega$ 2% $\frac{1}{4}$ W	24773-296
IC9	74S11	28466-007	R25	Met film 430 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-264
IC10	74S22	28466-339	R26	Met film 430 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-264
IC11	74S10	28466-338	R27	Met film 430 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-264

For symbols and abbreviations see introduction to this chapter

<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
R28	Met film 430Ω 2% ¼W	24773-264	D1	1N4148	28336-676
R29	Met film 2.0kΩ 2% ¼W	24773-280	D2	1N5390	28349-005
R30	Met film 2.0kΩ 2% ¼W	24773-280			
R31	Met film 68Ω 2% ¼W	24773-245	IC1	74LS123	28468-309
R32	Met film 2.0kΩ 2% ¼W	24773-280	IC2	74H74N	28462-609
R33	Met film 2.0kΩ 2% ¼W	24773-280	IC3	7490	28464-002
R34	Met film 470Ω 2% ¼W	24773-265	IC4	74LS12	28465-019
R35	Met film 2.0kΩ 2% ¼W	24773-280	IC5	74LS192	28464-128
R36	Met film 2.0kΩ 2% ¼W	24773-280	IC6	74LS75	28462-408
R37	Met film 2.0kΩ 2% ¼W	24773-280	IC7	74LS75	28462-408
R38	Met film 2.0kΩ 2% ¼W	24773-280	IC8	74LS192	28464-128
R39	Met film 1.0kΩ 2% ¼W	24773-273	IC9	74LS75	28462-408
			IC10	74LS75	28462-408
TR1	BFY90	28452-157	IC11	74LS75	28462-408
TR2	BFY90	28452-157	IC12	74LS00	28466-345
TR3	BFY90	28452-157	IC13	74LS02	28466-214
TR4	BFY90	28452-157	IC14	74LS00	28466-345
TR5	BSX20	28452-197	IC15	7425	28466-208
TR7	BSX20	28452-197	IC16	74LS04	28469-171
			IC17	74LS00	28466-345
			IC18	74S00N	28466-331
			IC19	74LS03	28466-346
			IC20	74LS03	28466-346
			IC21	74LS03	28466-346
<b>Counter control and dividers – AG2 (B)</b>					
<i>When ordering, prefix with AG2 (B)</i>					
	Complete board	44828-183			
C1	Plas 220pF 2% 350V	26516-329	R1	Met film 2.0kΩ 2% ¼W	24773-280
C2	Plas 220pF 2% 350V	26516-329	R2	Met film 2.0kΩ 2% ¼W	24773-280
C3	Plas 120pF 2% 350V	26516-266	R3	Met film 2.2kΩ 2% ¼W	24773-281
C4	Plas 0.1μF 10% 100V	26582-211	R4	Met film 8.2kΩ 2% ¼W	24773-295
C5	Plas 150pF 2% 350V	26516-289	R5	Met film 2.0kΩ 2% ¼W	24773-280
C6	Plas 30pF 2pF 350V	26516-118	R6	Met film 2.0kΩ 2% ¼W	24773-280
C7	Plas 0.1μF 10% 100V	26582-211	R7	Met film 20kΩ 2% ¼W	24773-304
C8	Plas 0.1μF 10% 100V	26582-211	R8 †	Met film 300Ω 2% ¼W	24773-260
C9	Plas 0.1μF 10% 100V	26582-211	R9	Met film 22kΩ 2% ¼W	24773-305
C10	Tant 2.2μF 20% 35V	26486-214			

*For symbols and abbreviations see introduction to this chapter*



<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>	<i>Circuit reference</i>	<i>Description</i>	<i>M.I. code</i>
R20	Met film 750Ω 2% ¼W	24773-270	IC16	7425	28466-208
R21	Met film 750Ω 2% ¼W	24773-270	IC17	7425	28466-208
R22	Met film 6.8kΩ 2% ¼W	24773-293	IC18	7425	28466-208
R23	Met film 6.8kΩ 2% ¼W	24773-293	IC19	74LS20	28466-347
R24	Met film 430Ω 2% ¼W	24773-264	IC20	74LS03	28466-346
R25	Met film 430Ω 2% ¼W	24773-264	IC21	74LS03	28466-346
R26	Met film 2.0kΩ 2% ¼W	24773-280	IC22	74LS03	28466-346
R27	Met film 2.0kΩ 2% ¼W	24773-280	IC23	74LS03	28466-346
			IC24	74LS03	28466-346
			IC25	74LS03	28466-346
TR1	BSX20	28452-197			
TR2	BSX20	28452-197	R1	Met film 820Ω 2% ¼W	24773-271
TR3	BSX20	28452-197	R2	Met film 820Ω 2% ¼W	24773-271
TR4	BSX20	28452-197	R3	Met film 820Ω 2% ¼W	24773-271
			R4	Met film 820Ω 2% ¼W	24773-271

### Main divider chain AG3 (A)

When ordering, prefix with AG3 (A)

	Complete board	44828-118
C1	Plas 0.1μF 10% 100V	26582-211
IC1	74LS192	28464-119
IC2	74LS75	28462-408
IC3	74LS75	28462-408
IC4	74LS192	28464-119
IC5	74LS75	28462-408
IC6	74LS75	28462-408
IC7	74LS192	28464-119
IC8	74LS75	28462-408
IC9	74LS75	28462-408
IC10	74LS192	28464-119
IC11	74LS75	28462-408
IC12	74LS75	28462-408
IC13	74LS192	28464-119
IC14	74LS75	28462-408
IC15	74LS75	28462-408

### Counter time base and X-Y recorder output - AG4 (D)

When ordering, prefix with AG4 (D)

	Complete board	44828-282
C1	Plas 200pF ±2% 350V	26516-318
C2	Plas 0.1μF ±10% 100V	26582-211
C3	Plas 0.1μF ±10% 100V	26582-211
IC1	7490	28464-002
IC2	74LS90	28464-014
IC3	74LS90	28464-014
IC4	7490	28464-002
IC5	74LS90	28464-014
IC6	74LS90	28464-014
IC7	74LS90	28464-014
IC8	74LS00	28466-345
IC9	74LS00	28466-345
IC10	74LS03	28466-346
IC11	74LS03	28466-346

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
IC12	74LS51	28466-454	IC2	74LS04	28469-171
IC13	74LS51	28466-454	IC3	7425	28466-208
IC14	74LS04	28469-171	IC4	74LS00	28466-345
IC15	74LS03	28466-346	IC5	74LS12	28466-352
IC16	74LS10	28466-351	IC6	74LS12	28466-352
IC17	74LS10	28466-351			
IC18	74LS04	28469-171	R1	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
			R2	Met film 33k $\Omega$ 2% $\frac{1}{4}$ W	24773-309
R1	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289	R3	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
R2	Met film 2.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-283	R4	Carb 560k $\Omega$ 5% 1/8W	24311-939
R3	Met film 2.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-283	R5	Carb 1M $\Omega$ 5% 1/8W	24311-945
R4	Met film 2.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R6	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
R5	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289	R7	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
R6	Met film 2.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-283	R8	Carb 560k $\Omega$ 5% 1/8W	24311-939
R7	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289	R9	Carb 1M $\Omega$ 5% 1/8W	24311-945
R8	Met film 8.2k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-295	R10	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
R9	Met film 2.0k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-280	R11	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
R10	Met film 2.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-283	R12	Carb 560k $\Omega$ 5% 1/8W	24311-939
R11	Met film 33k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-309	R13	Carb 1M $\Omega$ 5% 1/8W	24311-945
R12	Met film 1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-273	R14	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
R13	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289	R15	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
R14	Met film 1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-273	R16	Carb 560k $\Omega$ 5% 1/8W	24311-939
R15	Met film 1k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-273	R17	Carb 1M $\Omega$ 5% 1/8W	24311-945
R16	Met film 4.7k $\Omega$ $\pm 2\%$ $\frac{1}{4}$ W	24773-289	R18	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
RLA	Reed relay	23486-436	R19	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
			R20	Carb 560k $\Omega$ 5% 1/8W	24311-939
TR1	BSX20	28452-197	R21	Carb 1M $\Omega$ 5% 1/8W	24311-945
TR2	BC208B	28452-781	R22	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
TR3	BC308B	28433-455	R23	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
			R24	Carb 560k $\Omega$ 5% 1/8W	24311-939
			R25	Carb 1M $\Omega$ 5% 1/8W	24311-945
			R26	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
			R27	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301
			R28	Carb 560k $\Omega$ 5% 1/8W	24311-939
			R29	Carb 1M $\Omega$ 5% 1/8W	24311-945
			R30	Met film 2.7k $\Omega$ 2% $\frac{1}{4}$ W	24773-283
			R31	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24773-301

### Counter display AG5 (A)

When ordering, prefix with AG5 (A)

	Complete board	44828-119
C1	Plas 0.01 $\mu$ F 10% 400V	26512-204
C2	Plas 0.1 $\mu$ F 10% 100V	26582-211
C3	Plas 22nF 10% 250V	26582-204
D1	1N4148	28336-676
IC1	74LS18	28465-025

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R32	Carb 560kΩ 5% 1/8W	24311-939	TR6	BC212B	28435-428
R33	Carb 1MΩ 5% 1/8W	24311-945	TR7	BF338	28458-577
R34	Met film 2.7kΩ 2% ¼W	24773-283	TR8	BC212B	28435-428
R35	Met film 15kΩ 2% ¼W	24773-301	TR9	BF338	28458-577
R36	Carb 560kΩ 5% 1/8W	24311-939	TR10	BC212B	28435-428
R37	Carb 1MΩ 5% 1/8W	24311-945	TR11	BF338	28458-577
R38	Met film 39kΩ 2% ¼W	24773-311	TR12	BC212B	28435-428
R39	Met film 100kΩ 2% ¼W	24773-321	TR13	BF338	28458-577
R40	Met film 3.3kΩ 2% ¼W	24773-285	TR14	BC212B	28435-428
R41	Carb 2.2MΩ 10% 1/8W	24321-877	TR15	BF338	28458-577
R42	Met film 3.3kΩ 2% ¼W	24773-285	TR16	BC212B	28435-428
R43	Met film 180kΩ 2% ¼W	24773-327	TR17	BF338	28458-577
R44	Met film 3.3kΩ 2% ¼W	24773-285	TR18	BC212B	28435-428
R45	Carb 330kΩ 5% 1/8W	24311-933	TR19	BF338	28458-577
R46	Met film 3.3kΩ 2% ¼W	24773-285	TR20	BF338	28458-577
R47	Carb 330kΩ 5% 1/8W	24311-933	TR21	BF338	28458-577
R48	Met film 3.3kΩ 2% ¼W	24773-285	TR22	BF338	28458-577
R49	Carb 2.2MΩ 10% 1/8W	24321-877	TR23	BF338	28458-577
R50	Met film 3.3kΩ 2% ¼W	24773-285	TR24	BF338	28458-577
R51	Carb 330kΩ 5% 1/8W	24311-933	TR25	BF338	28458-577
R52	Met film 3.3kΩ 2% ¼W	24773-285	TR27	BF338	28458-577
R53	Carb 330kΩ 5% 1/8W	24311-933	Display panel - see page 181.		
R54	Met film 1.1kΩ 2% ¼W	24773-274	<b>Diode bridges AK1</b>		
R55	Met film 100kΩ 2% ¼W	24773-321	<i>When ordering, prefix with AK1</i>		
R56	Met film 3.9kΩ 2% ¼W	24773-287	Complete board 44827-050		
R57	Carb 330kΩ 5% 1/8W	24311-933	C1	Elec 220μF -20+100°C 100V	26415-841
R58	Met film 1.2kΩ 2% ¼W	24773-275	D1		
R59	Met film 2kΩ 2% ¼W	24773-280	to	1N4004	28357-028
R60	Met film 560Ω 2% 1/4W	24773-267	D8		
TR1	BF338	28458-577	D9		
TR2	BC212B	28435-428	to	1N5401	28355-723
TR3	BF338	28458-577	D16		
TR4	BC212B	28435-428	D17		
TR5	BF338	28458-577	to	1N4004	28357-028
			D20		

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
D21	Zener Diode 5.6V	28371-434	C8	Elec 47 $\mu$ F -20+100% 40V	26415-810
D22	Zener Diode 5.6V	28371-434	C9	Elec 4.7 $\mu$ F -20+100% 63V	26415-801
			C10	Plas 100pF $\pm$ 2pF 350V	26516-243
			C11	Elec 47 $\mu$ F -20+100% 63V	26415-810
FS1	250mA	23411-004	C12	Elec 4.7 $\mu$ F -20+100% 63V	26415-801
FS2	250mA	23411-004	C13	Cer 390pF 10% 50V	26346-105
			C14	Elec 47 $\mu$ F -20+100% 40V	26415-810
			C15	Elec 4.7 $\mu$ F -20+100% 63V	26415-801
R1	Met film 20 $\Omega$ 2% $\frac{1}{4}$ W	24773-232	C16	Plas 300pF 2% 500V	26516-364
R2	Met film 20 $\Omega$ 2% $\frac{1}{4}$ W	24773-232	C17	Elec 47 $\mu$ F -20+100% 40V	26415-810
			C18	Plas 100pF $\pm$ 2pF 350V	26516-243
			C19	Elec 47 $\mu$ F -20+100% 40V	26415-810
			C20	Plas 510pF 2% 350V	26516-417

### Diode bridges AK2

When ordering, prefix with AK2

	Complete board	44827-051	D1	Zener 5.6V	28371-434
			D2		
D1	1N5401	28355-723	to	1N4148	28336-676
D8			D5		
D9	6F10	28355-756			
to			IC1	$\mu$ A723C	28461-701
D12			to		
			IC7		

### Regulator AK3

When ordering, prefix with AK3

	Complete board	44827-098	R1	Met film 2.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-507
			R2	Met film 3.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-508
			R3	WW 0.15 $\Omega$ 10% 1 $\frac{1}{2}$ W	25133-036
			R4	Met film 2.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-507
C1	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	R5	Met film 18k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-513
C2	Cer 390pF 10% 50V	26346-105	R6	Met film 2.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-507
C3	Elec 47 $\mu$ F -20+100% 40V	26415-810	R7	Met film 3.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-508
C4	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	R8	WW 0.15 $\Omega$ 10% 1 $\frac{1}{2}$ W	25133-036
C5	Cer 390pF 10% 50V	26346-105	R9	Met film 2.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-507
C6	Elec 47 $\mu$ F -20+100% 40V	26415-810	R10	Met film 18k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-513
C7	Plas 47pF $\pm$ 2pF 350V	26516-167	R11	Met film 3.61k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-509

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
R12	Met film 1.82k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-506	C3	Plas 1.0 $\mu$ F 10% 63V	26582-414
R13	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201	C4	Elec 220 $\mu$ F -20+100% 40V	26415-819
R14	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201	C5	Plas 0.1 $\mu$ F 10% 100V	26582-211
R15	Met film 3.61k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-509	C6	Plas 0.0162 2% 350V	26516-771
R16	Met film 10k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-511			
R17	WW 1.6k $\Omega$ 5% 3W	25125-085			
R18	Met film 24k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-514	D1	Zener 10V $\pm$ 5% 4W	28371-843
R19	Met film 5.36k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-510	D2	1N4004/DD2026	28357-023
R20	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201	D3	1N4004	28357-028
R21	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201			
R22	Met film 12k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-512	IC1	$\mu$ A723C	28461-701
R23	Met film 10k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-511			
R24	Met film 8.2k $\Omega$ 0.25% $\frac{1}{4}$ W	24732-309			
R25	Met film 6.81k $\Omega$ 0.25% $\frac{1}{4}$ W	24732-308	L1	Inductor	44290-115
R26	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201			
R27	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201			
R29	Met film 11k $\Omega$ 0.25% $\frac{1}{4}$ W	24732-310	R1	Met film 15k $\Omega$ 2% $\frac{1}{4}$ W	24473-301
R30	Met film 3.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-508	R2	Met film 2.4k $\Omega$ 2% $\frac{1}{4}$ W	24473-282
R31	Met film 3.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-508	R3	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24473-201
R32	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201	R4	Var Carb 4.7k $\Omega$ 20% 0.21W	25711-542
R33	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201	R5	Met film 12k $\Omega$ 2% $\frac{1}{4}$ W	24773-299
R34	Met film 3.0k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-508	R6	Met film 2.2k $\Omega$ 2% $\frac{1}{4}$ W	24473-281
R35	Met film 18k $\Omega$ 0.5% $\frac{1}{4}$ W	24753-513	R7	Var cermet 2.2k $\Omega$ 10% $\frac{1}{2}$ W	25711-547
R36	Met film 3.9k $\Omega$ 2% $\frac{1}{4}$ W	24773-287			
R37	Met film 1 $\Omega$ 2% $\frac{1}{4}$ W	24773-201			
R38	Met film 6.81k $\Omega$ 1% $\frac{1}{4}$ W	24761-813			
R39	Var cermet 2k $\Omega$ 10% 0.3W	25748-505			
R40	Met film 6.19k $\Omega$ 1% $\frac{1}{4}$ W	24761-812			

#### EHT unit AL1

When ordering, prefix with AL1

	Complete board	44825-230
C1	Elec 47 $\mu$ F -20+100% 40V	26415-810
C2	Plas 510pF 2% 350V	26516-117

#### CRT circuit AM1

When ordering, prefix with AM1

L1		
to	Deflector coil	28238-001
L4		

For symbols and abbreviations see introduction to this chapter



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
TR1	BSX20	28452-197	R10	Met film 5.1k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-290
TR2	2N3440	28458-617	R11	Met film 1.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-277
TR3	BU426	28458-962	R12	Met film 3.6k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-286
TR4	BCY71	28435-235	R13	Met film 1.5k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-277
TR5	SFT187	28458-334	R14	Met film 3.3k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-285
			R15	Met film 15k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-301
			R16	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R17	Var Carb 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	25611-078
			R18	Met film 39k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-311
			R19	Met film 6.8k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-293
			R20	Met film 39k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-311
			R21	Met film 8.2k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-295
			R22	Met film 330 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-261
			R23	Met film 470 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-265
			R24	Met film 1.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-273
			R25	Met film 180 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-255
			R26	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R27	WW 12 $\Omega$ $\pm$ 5% 1 $\frac{1}{2}$ W	25123-022
			R28	Met film 10 $\Omega$ $\pm$ 2% $\frac{1}{2}$ W	24573-025
			R29	Met film 22k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-305
			R30	Var Carb 22k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	25611-080
			R31	Met film 3.3k $\Omega$ $\pm$ 2% $\frac{1}{2}$ W	24573-085
			R32	Met film 10k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-297
			R33	Met film 33k $\Omega$ $\pm$ 2% $\frac{1}{2}$ W	24573-109
			R34	Met film 220 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-257
			R35	Var cermet 2.2k $\Omega$ $\pm$ 10% $\frac{1}{2}$ W	25711-508
R1	Met film 560 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-267			
R2	Met film 4.7k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-289	TR1	BCY71	28435-235
R3	Met film 3.0k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-284	TR2	2N2219	28453-847
R4	Met film 15 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-229	TR3	BF244B	28459-011
R5	Met film 22k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-305	TR4	BC239C	28452-771
R6	Met film 68k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-317	TR5	BC239C	28452-771
R7	Met film 150k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-325	TR6	BCY71	28435-235
R8	Met film 150k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-325	TR7	BUX41	28458-555
R9	Met film 68k $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-317	TR8	BC449	28457-821

### Field scan and c.r.t. bias—AM3

When ordering, prefix with AM3

Complete Board 44824-411

C1	Plas 1 $\mu$ F $\pm$ 10% 100V	26582-217
C2	Plas 0.22 $\mu$ F $\pm$ 10% 100V	26582-226
C3	Elec 100 $\mu$ F -20+100% 40V	26415-814
C4	Elec 47 $\mu$ F -20+100% 40V	26415-810
C5	Elec 100 $\mu$ F -20+100% 40V	26415-814
C6	Plas 0.0015 $\mu$ F $\pm$ 5% 350V	26516-528
C7	Plas 0.005 $\mu$ F $\pm$ 2% 125V	26516-652
C8	Tant 2.2 $\mu$ F 20% 20V	26456-540

D1	Zener 4.7V $\pm$ 5% 4W	28371-373
D2	1N4148	28336-676
D3	1N4148	28336-676
D4	1N4148	28336-676
D5	1N4148	28336-676

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code
<b>Input balanced mixer—AZ1</b>		
<i>When ordering, prefix with AZ1</i>		
	Complete Board	44823-740
C1	Cer 4.7pF ±5% 50V	26343-461
C2	Cer 4.7pF ±5% 50V	26343-461
D1	1N5390	28349-005
D2	1N5390	28349-005
D3	1N5390	28349-005
D4	1N5390	28349-005
T1	Transformer	43590-007
T2	Transformer	43590-006
T3	Transformer	43590-006
T4	Transformer	43590-007

### Output balanced mixer—AZ2

*When ordering, prefix with AZ2*

	Complete Board	44823-739
C1	Cer 4.7pF ±5% 50V	26343-461
C2	Cer 4.7pF ±5% 50V	26343-461
D1	1N5390	28349-005
D2	1N5390	28349-005
D3	1N5390	28349-005
D4	1N5390	28349-005
T1	Transformer	43590-007
T2	Transformer	43590-006
T3	Transformer	43590-006
T4	Transformer	43590-007

### Upper front panel A01

*When ordering, prefix with A01*

Panaplex Display Panel BRO 9450	28224-498
Display Assembly	44990-130

**Note** Display Panel BRO 9400, used on early instruments, is superseded by type BRO 9450. If it is necessary to replace BRO 9400, Display Assembly 44990-130 must be ordered.

C1	Elec 4.7μF -20+100% 63V	26415-801
C2	Cer 10pF ±5% 50V	26343-492
C3	Cer 12pF ±5% 50V	26343-497
C4	Cer 0.01μF -20+80% 100V	26383-055
C5	Cer 0.01μF -20+80% 100V	26383-055
LP1 to LP3	Lamp to Lampholder, yellow lens	23735-280 23746-327
R1	Var WW 1kΩ ±5% 1W	25885-098
R2	Var Carb 1kΩ ±20% 0.06W	25532-301
R3	Met film 4.7kΩ ±2% ¼W	24773-289
R4	Var Carb 10kΩ ±20% 0.06W	25531-302
R5	Met film 8.2kΩ ±2% ¼W	24773-295
R6	Var Carb 25kΩ ±10% 0.06W	25561-052
R7	Var Carb 10kΩ ±20% 0.06W	25531-302
R8	Met film 6.2kΩ ±2% ¼W	24773-292
R9	Var Carb 25kΩ ±10% 0.06W	25561-052
R10	Var Carb 1kΩ ±20% 0.06W	25532-301
R11	Met film 470Ω ±2% ¼W	24773-265
R12	Var Carb 500Ω ±20% 0.06W	25531-303
R13	Met film 5.1kΩ ±2% ¼W	24773-290
R14	Var Carb 10kΩ ±10% 0.06W	25561-051
R15	Var Carb 10kΩ ±20% 0.06W	25531-302
R16	Var Carb 1kΩ ±20% 0.06W	25532-301
R17	Met film 33kΩ ±2% ¼W	24773-309
S4-S12	Assembly (including buttons)	44333-436
S13-S22	Assembly (including buttons)	44333-435

### Lower control panel—A02

*When ordering, prefix with A02*

C1	Cer 0.001μF -20+80% 500V	26383-242
D1 to D6	1N4148	28336-676

*For symbols and abbreviations see introduction to this chapter*



Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
LP1	Lamp Lampholder, green lens	23735-280 23746-325	<b>AA tray—AA0a</b> When ordering, prefix with AA0a		
LP2	Lamp Lampholder, green lens	23735-280 23746-325	C1 to	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
LP3 to LP5	Lamp Lampholder, blue lens	23735-280 23746-322	C11		
			C12	Cer 100pF 5% 500V	26343-068
LP6	Lamp Lampholder, yellow lens	23735-280 23746-327	C13	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
LP7	Lamp Lampholder, yellow lens	23735-280 23746-327	C14 to	Cer 0.1 $\mu$ F +50-25% 30V	26383-031
R1	Var WW 5k $\Omega$ $\pm$ 5% 1W	25885-099	C16		
R2	Var WW 5k $\Omega$ $\pm$ 5% 5W	25885-152	L1	Choke 10 $\mu$ H	23642-555
R3	Var WW 5k $\Omega$ $\pm$ 5% 1W	25885-099	L2	Choke 470 $\mu$ H	23642-565
R4	Var WW 5k $\Omega$ $\pm$ 5% 5W	25885-152	R1	Met film 7.5 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-222
R5	Met film 10k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-892	<b>AA tray—AA0b</b> When ordering, prefix with AA0b		
R6	Met film 40.2k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-922	C1 to	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R7	Met film 90.9k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-939	C12		
R8	Met film 191k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-954	C13	Plas 0.33 $\mu$ F $\pm$ 10% 100V	26582-213
R9	Met film 10k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-892	<b>AB tray—AB0a</b> When ordering, prefix with AB0a		
R10	Met film 20k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-908	C1		
R11	Met film 40.2k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-922	to	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
R12	Met film 205 $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-811	C18		
R13	Met film 100k $\Omega$ $\pm$ 0.5% $\frac{1}{2}$ W	24753-941	L1 to	Choke 10 $\mu$ H	23642-555
R14	Var Carb 1k $\Omega$ $\pm$ 10% 0.06W	25531-301	L6		
R15	Met oxide 120 $\Omega$ 2% $\frac{1}{2}$ W	24573-051	R1	Met film 47 $\Omega$ $\pm$ 2% $\frac{1}{4}$ W	24773-241
R16	Met film 25 $\Omega$ 1% (for TF 2370/1 only)	24762-523	<b>AB tray AB0b</b> When ordering, prefix with AB0b		
S1-S9	Assembly (excluding buttons)	44338-006	C3 to	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665
S10-S22	Assembly (including buttons)	44338-007	C10		
S23-S32	Assembly (including buttons)	44338-008			
S33-S39	Assembly (excluding buttons)	44338-057			
SKT F to SKT H	50 $\Omega$ BNC	23443-548			
SKT S	PROBE	23427-124			

For symbols and abbreviations see introduction to this chapter

Circuit reference	Description	M.I. code	Circuit reference	Description	M.I. code
L1	Choke 10 $\mu$ H	23642-555	C8	Elec 4700 $\mu$ F -10+50% 25V	26426-092
L2	Choke 22 $\mu$ H	23642-557	C9	Plas 1.0 $\mu$ F $\pm$ 10% 100V	26582-217
L3	Choke 22 $\mu$ H	23642-557	C10	Plas 1.0 $\mu$ F $\pm$ 10% 100V	26582-217
L4	Choke 1 $\mu$ H	23642-549	CSR1	BTY79/100R	28385-707
L5	Choke 22 $\mu$ H	23642-557	CSR2	BTY79/100R	28385-707
L6	Choke 22 $\mu$ H	23642-557	FS1	Fuse link 2A	23411-060
L7	Choke 22 $\mu$ H	23642-557	FS2	Fuse link 3.15A	23411-008

### AC tray—AC0a

When ordering, prefix with AC0a

C1	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R1	Met film 100k $\Omega$ $\pm$ 2% $\frac{1}{2}$ W	24573-121
C2	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	R2	Met film 3k $\Omega$ $\pm$ 2% $\frac{1}{2}$ W	24573-084
C3	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	SKA	32-way socket	23435-644
C4	Elec 4.7 $\mu$ F -20+100% 63V	26415-801	SKR	15-way socket	23435-507
C5	Cer 0.0047 $\mu$ F -20+80% 500V	26373-665	T1	Transformer	43490-004
L1	Choke	23642-565	TR1	to 2N3055	28456-567
L2	Choke	44290-141	TR7		
L3	Choke	44290-141			

### Power unit assembly—AK0

When ordering, prefix with AK0

C1	Elec 100 $\mu$ F -20+50% 310V	26425-141
C2	Elec 680 $\mu$ F -10+50% 63V	26426-078
C3	Elec 1000 $\mu$ F -10+50% 40V	26426-080
C4	Elec 1000 $\mu$ F -10+50% 40V	26426-080
C5	Elec 2200 $\mu$ F -10+50% 25V	26426-085
C6	Elec 2200 $\mu$ F -10+50% 25V	26426-085
C7	Elec 4700 $\mu$ F -10+50% 25V	26426-092

### EHT unit assembly—AL0

When ordering, prefix with AL0

T1	Frame output	43590-008
TR1	2N3055	28456-567
TR2	BDY28	28458-615
VM1	HV Tripler	28359-601

TUBO M17-10W

For symbols and abbreviations see introduction to this chapter