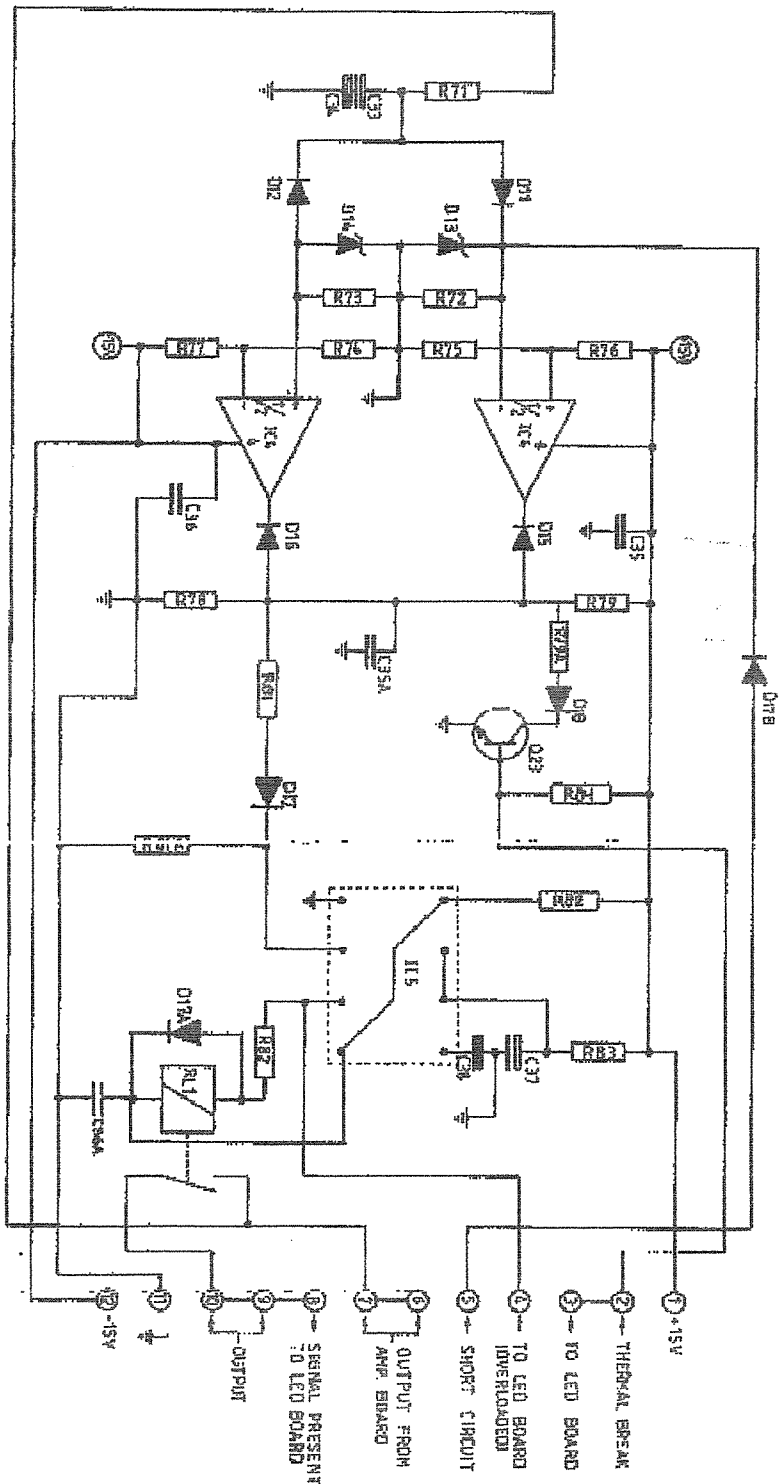

AMPLIFIER BOARD
 SA 900 B
 designer: E. Schreier
 storage & company address: P5-machhausen
 date: 11-87-83
 ref: A4 1



SA Socketed PROTECTION BOARD		ref: 2
designed by: H. Schouten		quantity: 2
drawn by: P. van Alphen		date: 13-04-86

SA 900 B AMPLIFIER BOARD (page 1)

1)

CAPACITORS		TRANSISTORS	
NO.		NO.	
C 1	10UF 35V TANTALUM	Q 1	MJE 350 PNP TRANSISTOR
C 2	10UF 35V TANTALUM	Q 2	MJE 340 NPN TRANSISTOR
C 3	68PF CERAMIC	Q 3	BD 235 NPN BIAS TRANSISTOR
C 4	68PF CERAMIC	Q 4	MPS A-43 NPN TRANSISTOR
C 5	220PF CERAMIC	Q 5	MPS A-93 PNP TRANSISTOR
C 6	33PF CERAMIC	Q 6	MJE 340 NPN TRANSISTOR
C 7	47UF ELECTROLYTIC	Q 7	MJE 350 PNP TRANSISTOR
C 8	33PF CERAMIC	Q 8	MJ 15004 PNP POWER TRANSISTOR
C 9	47PF CERAMIC	Q 9	MJ 15003 NPN POWER TRANSISTOR
C10	68PF CERAMIC	Q10	MJ 15003 NPN POWER TRANSISTOR
C11	100NF 250V	Q11	MJ 15003 NPN POWER TRANSISTOR
C12	100NF 250V	Q12	MJ 15003 NPN POWER TRANSISTOR
C13	100NF 250V	Q13	MJ 15003 NPN POWER TRANSISTOR
C14	100NF 250V	Q14	MJ 15003 NPN POWER TRANSISTOR
C15	120PF CERAMIC	Q15	MJ 15004 PNP POWER TRANSISTOR
C16	22UF 100V ELECTROLYTIC	Q16	MJ 15004 PNP POWER TRANSISTOR
C17	22UF 100V ELECTROLYTIC	Q17	MJ 15004 PNP POWER TRANSISTOR
C18	120PF CERAMIC	Q18	MJ 15004 PNP POWER TRANSISTOR
C19	15NF	Q19	MJ 15004 PNP POWER TRANSISTOR
C20	100NF 250V	Q20	MPS A-93 PNP TRANSISTOR
C21	120PF CERAMIC	Q21	MPS A-43 NPN TRANSISTOR
C22	100NF 32V CERAMIC	Q22	MPS A-43 NPN TRANSISTOR
C23	100NF 250V		
C24	47NF 250V		
C25	1NF CERAMIC		
C26	1NF CERAMIC		
C27	47NF 250V		
C28	1NF CERAMIC		
C29	1NF CERAMIC		
C30	100NF 250V		
C31	100NF 250V		
C32	470NF 100V		
DIODES		RESISTORS	
NO.		NO.	
D 1	10V ZENER DIODE	R 1	15K - 1%
D 2	10V ZENER DIODE	R 2	15K - 1%
D 3	1N4148	R 3	22K - 1%
D 4	1N4148	R 4	22K - 1%
D 5	1N4005	R 5	47K - 1%
D 6	1N4005	R 6	2K49 - 1%
D 7	1N4005	R 7	1KOHM - 1%
D 8	1N4005	R 8	1KOHM - 1%
D 9	16V ZENER DIODE	R 9	47K - 1%
D10	16V ZENER DIODE	R10	4K7 - 1%
		R11	300 OHMS - 1%
		R12	3K9-2W
		R13	680 OHMS
		R14	15K
		R15	15K
		R16	680 OHMS
		R17	3K9-2W
		R18	100 OHMS
		R19	680 OHMS
		R20	360 OHMS - 1%
		R21	300 OHMS - 1%
		R22	100 OHMS POTMETER
		R23	180 OHMS
		R24	100 OHMS POTMETER
		R25	180 OHMS
		R26	100 OHMS
		R27	1K
		R28	47K - 1%
		R29	47K - 1%
		R30	1K
INTEGRATED CIRCUITS			
NO.			
IC1	NE5534AN OP AMP.		
IC2	LM318P OP AMP.		
IC3	4N26 OPTO COUPLER.		
INDUCTORS			
NO.			
L 1	0.5UH INDUCTOR.		

900 AMPLIFIER BOARD

CAPACITORS		TRANSISTORS	
NO.		NO.	
C 1	10UF 35V TANTALUM	Q 1A	MPSA 43 NPN
C 2	10UF 35V TANTALUM	Q 2A	MPSA 93 PNP
C 3	33PF CERAMIC	Q 3	BD 235 NPNBIAS
C 4	33PF CERAMIC	Q 4	MPSA 43 NPN
C 5	220PF CERAMIC	Q 5	MPSA 93 PNP
C 7	1000UF 16V ELECTROLYTIC	Q 6	MJE 340 NPN
C 8	120PF CERAMIC	Q 7	MJE 350 PNP
C10	33PF CERAMIC	Q 8	25A 1494 PNP
C11	100NF 250V	Q 9	25C 3858 NPN
C12	100NF 250V	Q10	25C 3858 NPN
C13	100NF 250V	Q11	25C 3858 NPN
C14	100NF 250V	Q12	25C 3858 NPN
C18	22UF 100V ELECTROLYTIC	Q13	25C 3858 NPN
C19	120PF CERAMIC	Q14	25C 3858 NPN
C20	10UF 35V	Q15	25A 1494 PNP
C21	22UF 100V ELECTROLYTIC	Q16	25A 1494 PNP
C22	10U 16V TANTALUM	Q17	25A 1494 PNP
C23	10UF 35V	Q18	25A 1494 PNP
C24	47NF 250V	Q19	25A 1494 PNP
C25	15NF 400V	Q20	MPSA 93 PNP
C26	680NF 100V	Q21	MPSA 43NPN
C27	47NF 250V	Q22	MPSA 43NPN
C28	47PF CERAMIC		
C29	47PF CERAMIC	RESISTORS	
C30	100NF 250V	R 1	15KO- 1%
C31	100NF 250V	R 2	15KO- 1%
C32	470NF 100V	R 3	14KO- 1%
C33	33PF CERAMIC	R 4	14KO- 1%
DIODES		R 5	22KI- 1%
D 1	15V ZENER DIODE	R 6	200E - 1%
D 2	15V ZENER DIODE	R 7	1KO - 1%
D 1	1N4148	R 8	JEO - 1%
D 4	1N4148	R 9	6K2 - 1%
D 5	1N4148	R10	511E- 1%
D 6	1N4148	R11	2K1 - 1%
D 7	1N4005	R12	3K9 - 2W
D 8	1N4005	R12A	5K POTMETER
D 9	16V ZENER DIODE	R13	100E- 1%
D10	16V ZENER DIODE	R14	15KO-1%
D11	1N4005	R15	15KO-1%
INTEGRATED CIRCUITS		R16	100E -1%
IC1	NE5534N OP AMP.	R17	3KG -2W
IC2	TLO71CP OP AMP.	R18	681E -1%
IC3	4N26 OPTO COUPLER.	R19	365E -1%
INDUCTOR		R20	681E -1%
L 1	0.5UH INDUCTOR	R21	150E -1%
		R22	100E POTMETER
		R23	681E 1/2%
		R25	25K POTMETER
		R26	100E -1%
		R26A	100E
		R27	100E -1%
		R28	100E -1%
		R29	100E -1%
		R30	100E -1%

SA 900 B AMPLIFIER BOARD (page 2)

1)

NO.	RESISTORS	NO.	SWITCHES
R31	100 OHMS	S 4	THERMAL SWITCH 85°C.
R32	100 OHMS		
R33	100 OHMS		
R34	2 OHMS 7 2W		
R35	2 OHMS 7 2W		
R36	10 OHMS		
R37	10 OHMS		
R38	.33 OHMS 5W		
R39	.33 OHMS 5W		
R40	10 OHMS		
R41	10 OHMS		
R42	.33 OHMS 5W		
R43	.33 OHMS 5W		
R44	10 OHMS		
R45	10 OHMS		
R46	.33 OHMS 5W		
R47	.33 OHMS 5W		
R48	10 OHMS		
R49	10 OHMS		
R50	.33 OHMS 5W		
R51	.33 OHMS 5W		
R52	10 OHMS		
R53	10 OHMS		
R54	.33 OHMS 5W		
R55	.33 OHMS 5W		
R56	1K		
R57	47K		
R58	100K		
R59	1 OHM 2W		
R60	33 OHMS 5W		
R62	12K		
R63	36K 1/4		
R64	100K		
R65	100K		
R66	10K		
R67	47K		
R68	4K7		
R69	100K		
R70	2K2		

NO. CAPACITORS

C43 01UF 630V
 C43A 100NF 250V
 C45 220UF 25V ELECTROLYTIC
 C46 220UF 25V ELECTROLYTIC
 C47 10000UF 100V ELECTROLYTIC
 C48 10000UF 100V ELECTROLYTIC
 C49 100NF 100V MKT
 C50 100NF 100V MKT

NO. DIODES

D26 DIODE RECTIFIER KBPC 25-06
 D27 DIODE RECTIFIER B80 C1500
 D26A LED 3 MM. RED
 D28 IN4005
 D29 IN4005

NO. INTEGRATED CIRCUITS

REG 1 7815
 REG 2 7915

NO. FUSES

F1 FUSE 6.3A SLOW BLOW 5x20 MM.
 F2 FUSE 1 A SLOW BLOW 5x20 MM.
 F3 FUSE 1 A SLOW BLOW 5x20 MM.

NO. RESISTORS

R90 1K5 0W 5%
 R91 8K2 0W 5% / 4W 5% (2000)
 R92 681E 1%

NO. SWITCHES

S1 = POWER SWITCH C&K
 S2 = GROUND LIFT SWITCH C&K 7101
 S3 = THERMAL SWITCH 55°C.

NO. TRANSFORMER

T1 = TOROIDAL TRANSFORMER 500 VA T.B.S.

SA ESD SA900 BE PROTECTION BOARD

2)

NO. CAPACITORS

C33	10UF 35V ELECTROLYTIC
C34	10UF 35V ELECTROLYTIC
C35	100NF 100V
C35A	100NF 100V
C36	100NF 100V
C36A	100NF 100V
C37	47UF 25V ELECTROLYTIC
C38	100NF 100V MET

NO. DIODES

D11	1N4005
D12	1N4005
D13	10V ZENER DIODE
D14	10V ZENER DIODE
D15	1N4005
D16	1N4005
D17	1N4005
D17A	1N4005
D17B	1N4005
D18	1N4005

NO. INTEGRATED CIRCUITS

Ic4	TL 072
Ic5	NE 555

NO. TRANSISTORS

Q23	BC 547 B
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NO. RESISTORS

R71	182K 1%
R72	100K 1%
R73	100K 1%
R74	22KI 1%
R75	22KI 1%
R76	100K 1%
R77	100K 1%
R78	100K 1%
R79	47K5 1%
R79A	22KI 1%
R81	47K5 1%
R81A	100K 1%
R82	100E 1%
R83	62KO 1%
R84	4K75 1%

NO. RELAYS

RL1	RAPA 011.51-22-001
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900 AMPLIFIER BOARD

(PAGE 2)

E)

NO.	RESISTORS	NO.	SWITCHES
R31	100E	S 4	THERMAL SWITCH 85°C.
R31A	100E		
R32	100E		
R32A	22E		
R33	100E		
R33A	22E		
R34	22E 2W		
R34A	4,7E		
R35	22E 2W		
R35A	4,7E		
R36	10E		
R37	10E		
R38	0,33E 5W		
R38A	4,7E		
R39	0,33E 5W		
R39A	4,7E		
R40	10E		
R41	10E		
R42	0,33e 5W		
R42A	4,7E		
R43	0,33E 5W		
R43A	4,7E		
R44	10E		
R45	10E		
R46	0,33E 5W		
R46A	4,7E		
R47	0,33E 5W		
R47A	4,7E		
R48	10E		
R49	10E		
R50	0,33E 5W		
R50A	4,7E		
R51	0,33E 5W		
R51A	4,7E		
R52	10E		
R53	10E		
R54	0,33e 5W		
R55	0,33E 5W		
R56	2K5 POTMETER		
R57	47K		
R58	100K		
R59	1E 2W		
R60	33E 5W		
R62	1K0 -1%		
R63	19K1 -1%		
R64	100K -1%		
R65	100K -1%		
R66	10K0 -1%		
R67	47K5 -1%		
R68	4K75 -1%		
R69	100K -1%		
R70	3 kg-2W		
R71	2K15 -1%		

SA500 SA900 BCLD BOARDCAPACITORS

C39 - 100 nF 100 V. M&T
C40 - 100 nF 100 V. M&T
C41 - 100 nF 100 V. M&T

DIODES

D 19 - Led 5x5 mm. RED
D 20 - 1N 4148
D 21 - 1N 4148
D 22 - Led 5x5 mm. RED
D 23 - 1N 4148
D 24 - Led 5x5 mm. GREEN
D 25 - Led 5x5 mm. RED

INTEGRATED CIRCUITS

IC6 - TL 081

RESISTORS

R 84 - 10 KO 1%
R 85 - 470E 1%
R 86 - 47K5 1%
R 87 - 10 KO 1%
R 88 - 470E 1%
R 89 - 470E 1%

TRANSISTORS

Q 24 - BC 517
Q 25 - BC 182/BC 547