SPECIFICATIONS

FINAL UNIT PERFORMANCE:

Inputs:	Unbalanced,True balanced XLR
Input Sensitivity:	1V rms per channel
Power Output:	110W rms per channel into 8Ω @ 1kHz 250W rms bridged
Total Harmonic Distortion:	<0.003% (1kHz)
Residual Output Noise:	<-102dB (unweighted, ref 100W)
Mains Power:	100V,115V,230V, AC ,50/60Hz Supplied at correct voltage for country of use

A4A9F13: PA200 Final Unit Test Spec-Issue 1.

Initial checks

1) Lead orientation and arrangement. Look for stray ends on shielded pair.

2) Check output terminal tags are well clear of any contact.

3) Transformer should not be able to be turned by hand. Tighten if necessary. Check leads are not fouled by bracket.

4) Has correct voltage been selected on power PCB ?

5) Check orientation of diodes & electrolytics.

6) Using DVM, check for shorts between fetplates and ground.

7) Set both potentiometers fully clockwise.

7a) Set switch on rear to 'Stereo'.

Power-up tests

8) Set variac to 10Vac*. Plug in & switch on.

9) Check supplies: fetplates @ 1.7V and -1.7V, SMD amp modules @ 2V and -2V.

10) Set mains to 100V ac*. Bicolour LED and LED on control board will glow dimly.

11) Check supplies: 20V, -20V, 25V, -25V.

12) Measure bias on each channel. Should be 0 mA before adjustment. Check it can be set to approx 400mA. Turn bias down again.

13) Set mains to rated voltage. On power-up, bicolour LED will glow orange then after 10s green, & output relays switch over.

14) Set bias on each channel to 320-340mA. Check stable. Switch off & unplug.

15) Solder two VSPAD6.35, one on each amp board.

16) Load each channel with 8 Ohms.

*{ * for 230V unit. Scale down for other units as appropriate }*

Test each channel using both balanced & unbalanced inputs:

17) 100W rms @ < 0.003% THD+N.

18) Increase input level until protection activates (~ 120W). LED goes RED and output relays cut out. Turn input level down.

Bridged operation:

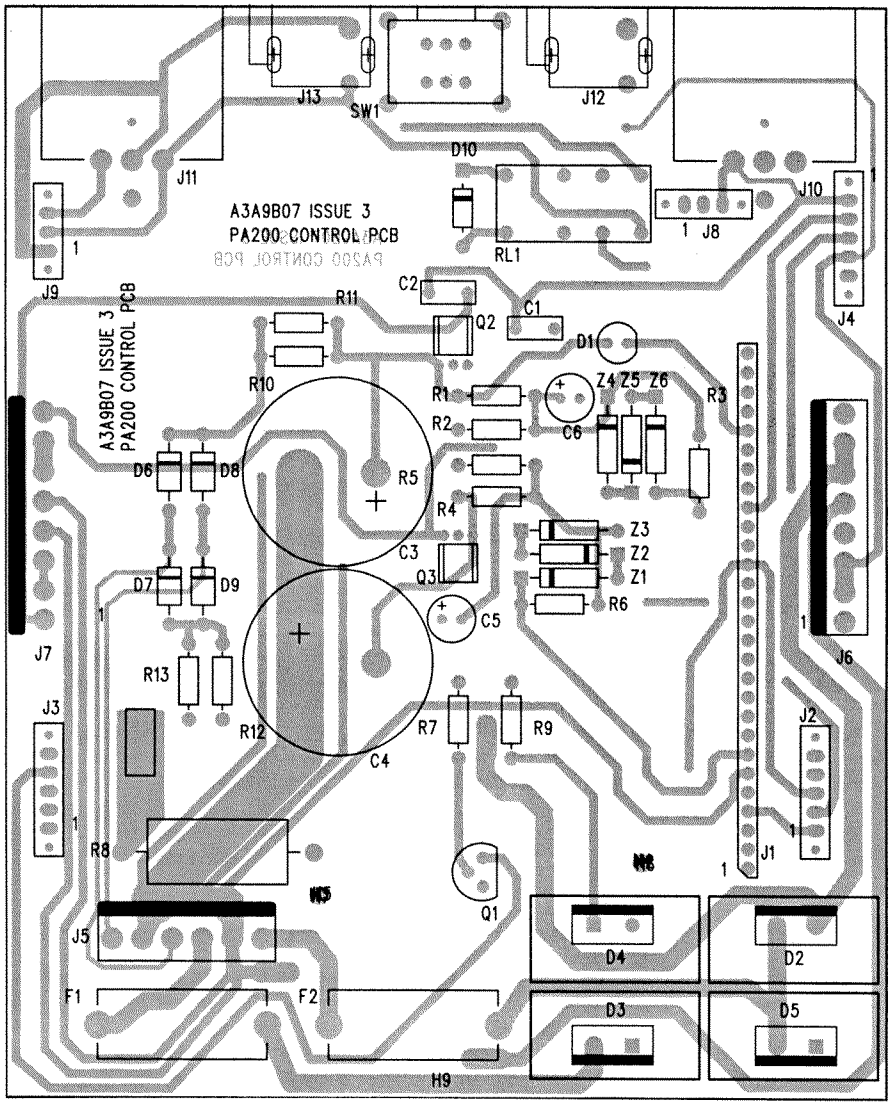
19) Switch off. Set switch on rear to 'Bridged'

20) Check Blue LED comes on.

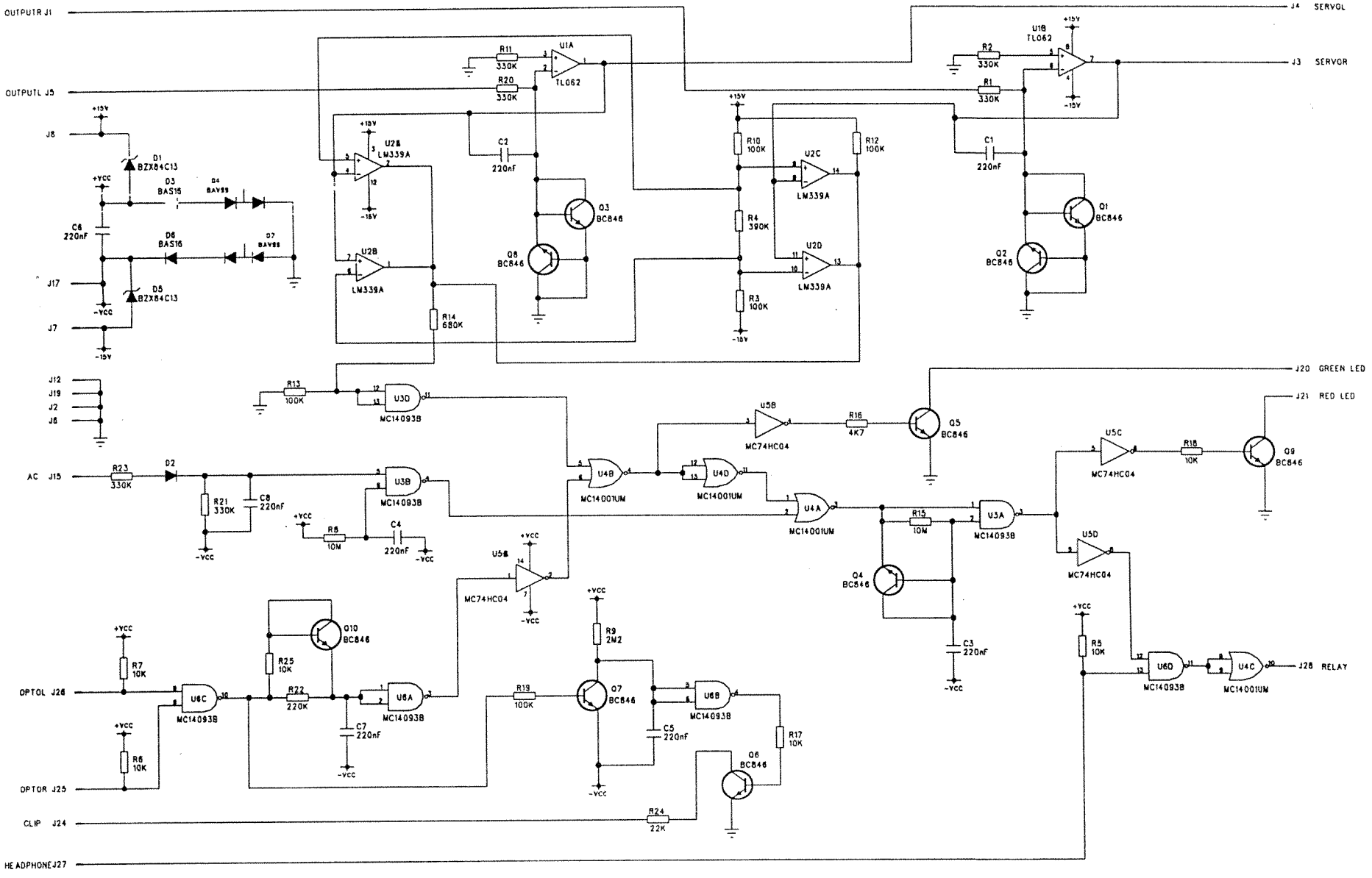
21) Feed signal to Right XLR input only.

22) Protection should activate at ~400W output.

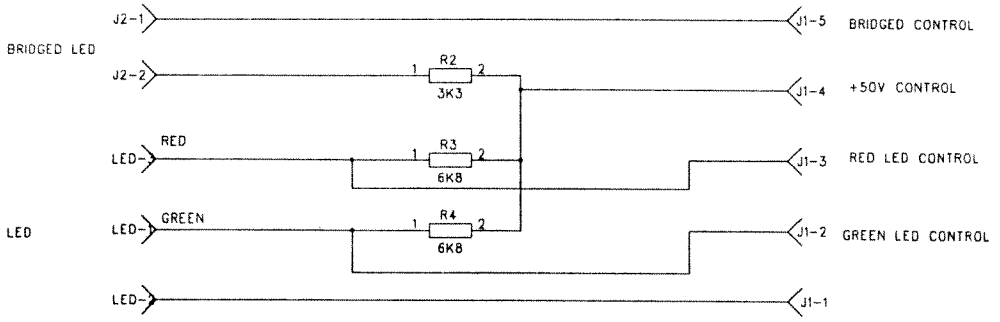
23) Switch off and set switch back to 'Stereo'.

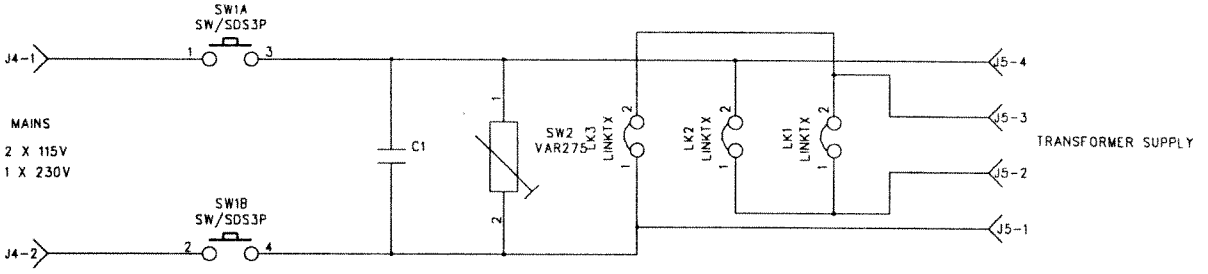


MATERIAL	FINISH					COPYRIGHT © 1996
						DRAWN APT / DATE 16/4/96
		3	INITIAL ISSUE		16/4/96	
	DIMENSIONS IN mm	ISS	AMENDMENT	ECN	DATE	PART NO.
	TOLERANCES 0. ± 0.5, 0.0 ± 0.3, 0.00 ± 0.1 UNLESS OTHERWISE STATED	SCALE DO NOT SCALE	USED ON PA200			
			TITLE PA200 CONTROL PCB OVERLAY L2 TRACKSIDE + SILKSCREEN			DRG. NO. A3A9B07-L2 ISS 3



USED ON	MATERIAL				COPYRIGHT © 1996
					DRAWN PLB / DATE 19-3-96
DIMENSIONS IN mm TOLERANCES 0. ± 0.5 0.0 ± 0.3 0.00 ± 0.1	SCALE	1	INITIAL ISSUE	19-3-96	PART NO.
	FINISH	TITLE	VA150/PA200 SMT PROTECT MODULE		DRG. NO. A3A7B38-201 ISS



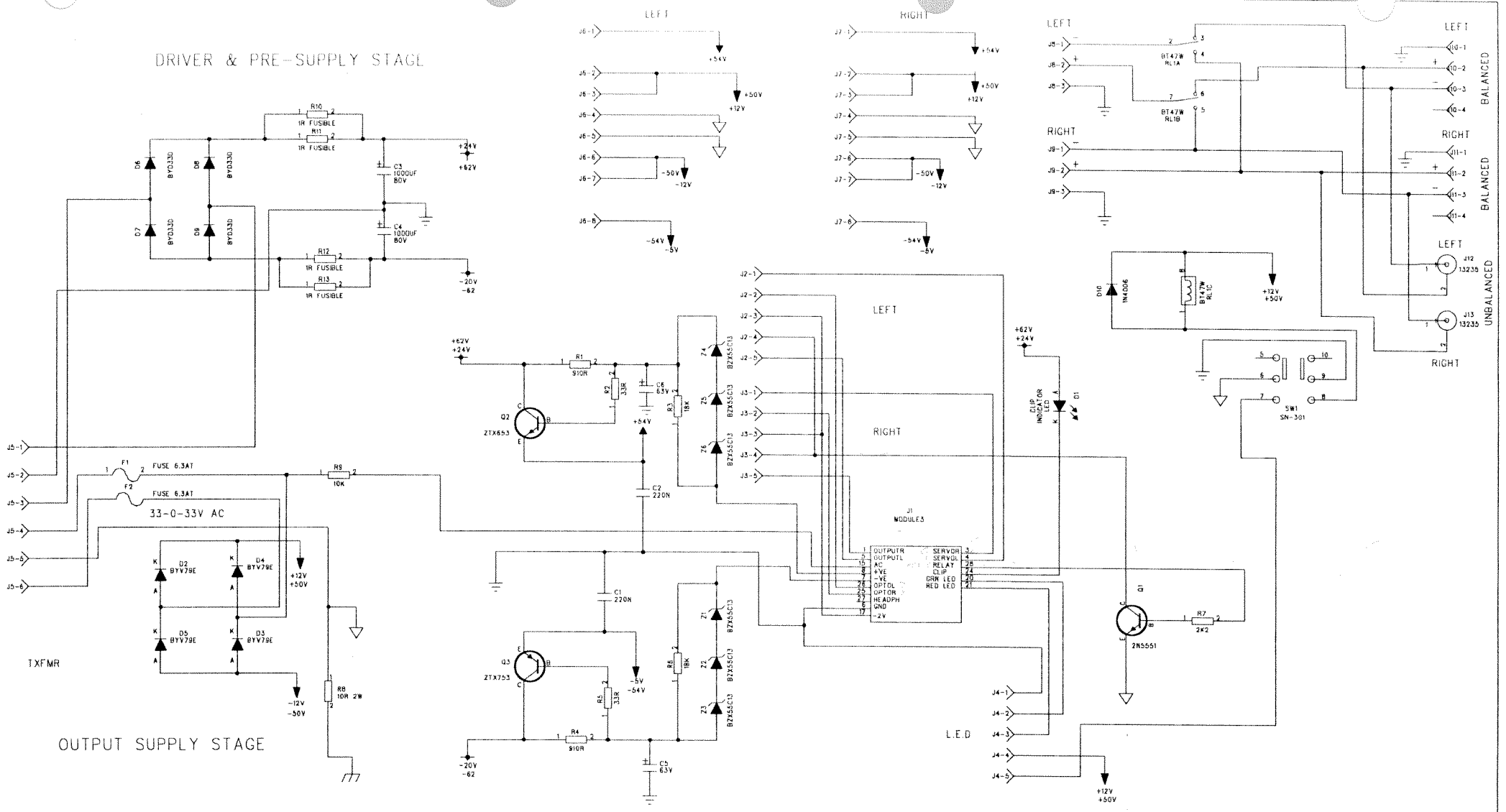


MATERIAL	FINISH				COPYRIGHT ©
					DRAWN / DATE
		1	INITIAL ISSUE	24-2-95	24-2-95
		ISS	AMENDMENT	ECN / DATE	PART NO.
					USED ON
					TITLE: PA200 POWER SWITCH PCB SCHEMATIC
					DRG. NO. A3A9B27-20 ISS 1

BOW LOUDSPEAKERS LIMITED WORTHING ENGLAND

DIMENSIONS IN mm
TOLERANCES
0. ± 0.5
0.0 ± 0.3
0.00 +_ 0.1
UNLESS OTHERWISE STATED

SCALE
DO NOT SCALE



USED ON	A3A9B07	MATERIAL	
DIMENSIONS IN mm TOLERANCES 0. ± 0.5 0.0 ± 0.3 0.00 ± 0.1	SCALE	FINISH	

3	ADDED NEW CAP'S C5 & C6	22-2-96	
2	CHANGED ALL RES TO 10MM PITCH	15-1-96	

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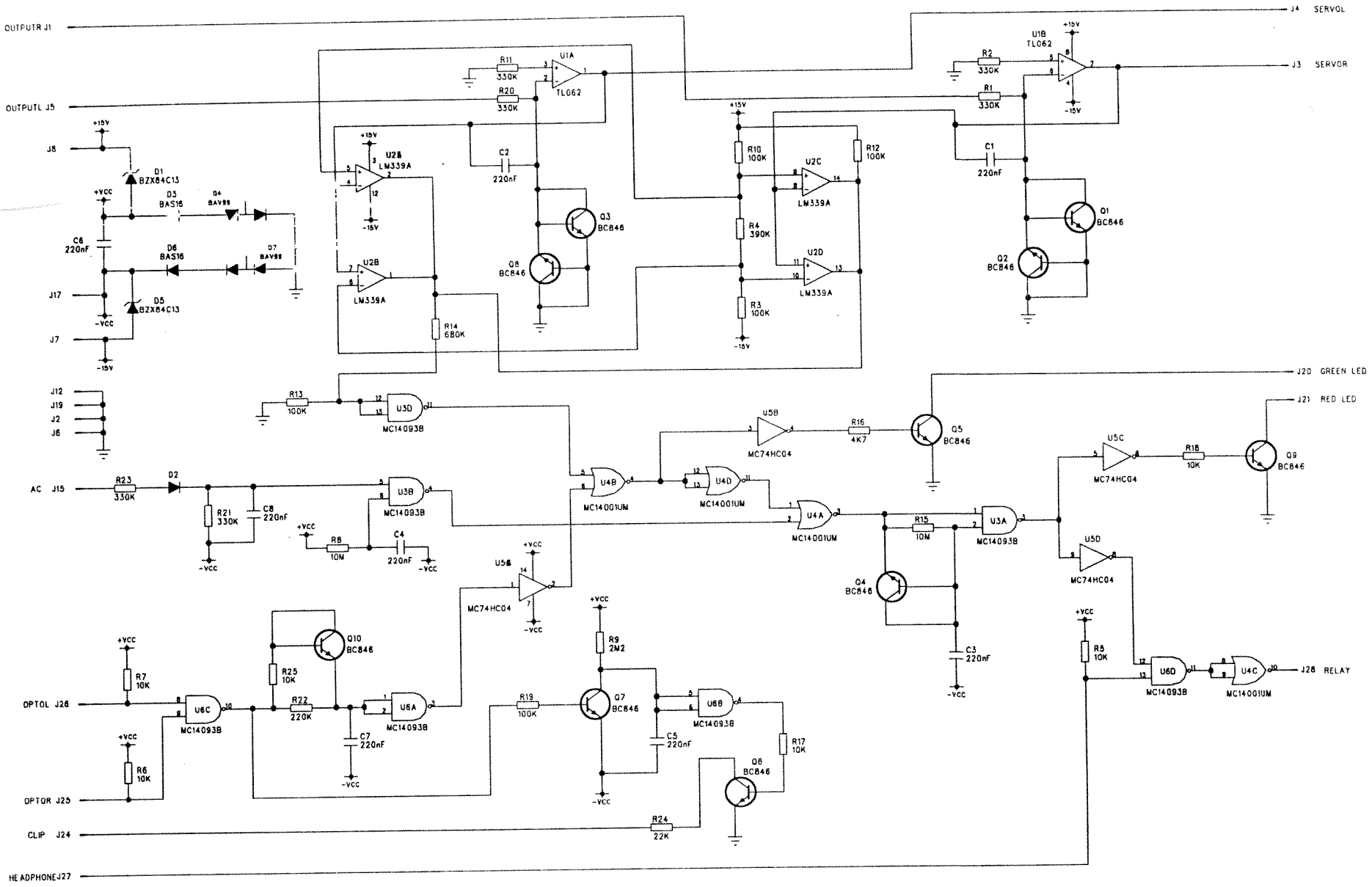
DRAWN APT | DATE 8-6-95

PART NO.

TITLE: PA200 POWER AMPLIFIER CONTROL & PROTECT SCHEMATIC

DRG. NO. A3A9B07-203 ISS



USED ON	MATERIAL				COPYRIGHT © 1996
				DRAWN PLB	DATE 19-3-96
		1	INITIAL ISSUE	19-3-96	PART NO.
DIMENSIONS IN mm TOLERANCES 0. ± 0.5 0.0 ± 0.3 0.00 ± 0.1	SCALE				DRG. NO. A3A7B38-201 ISS 1
	FINISH			TITLE	VA150/PA200 SMT PROTECT MODULE

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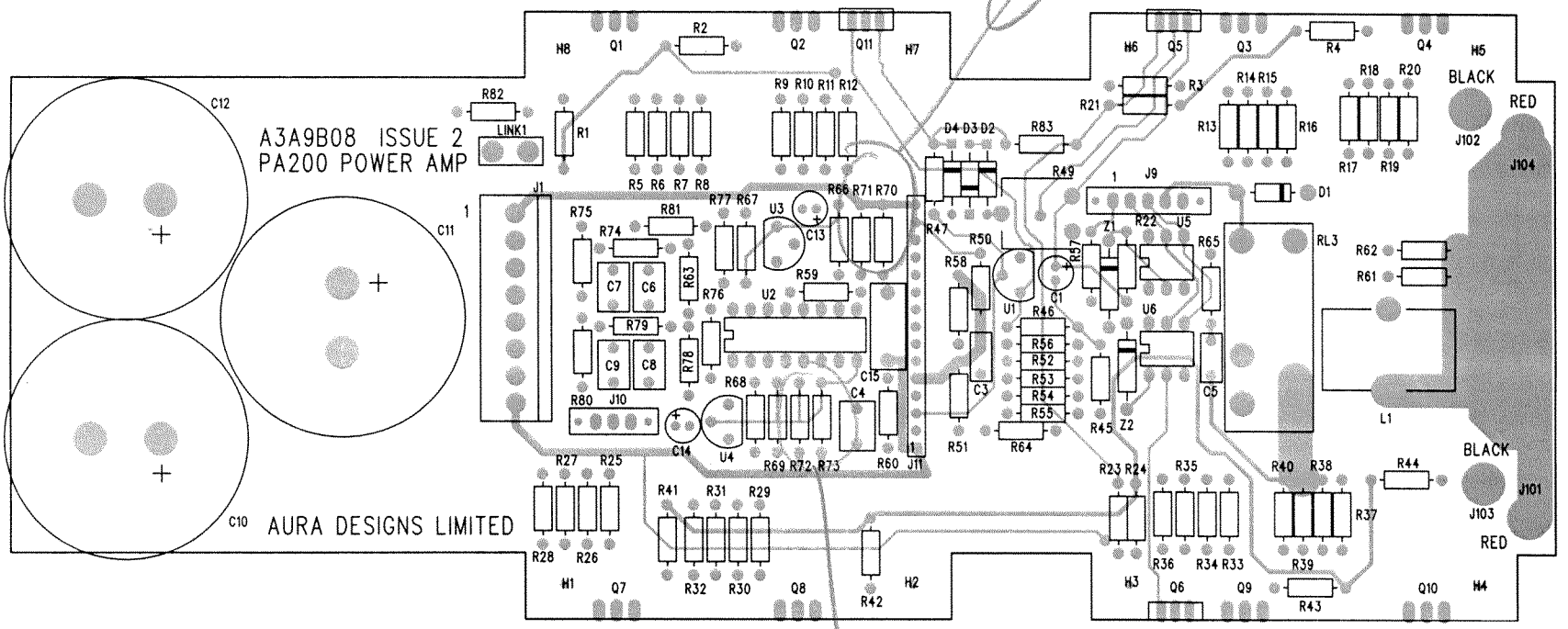
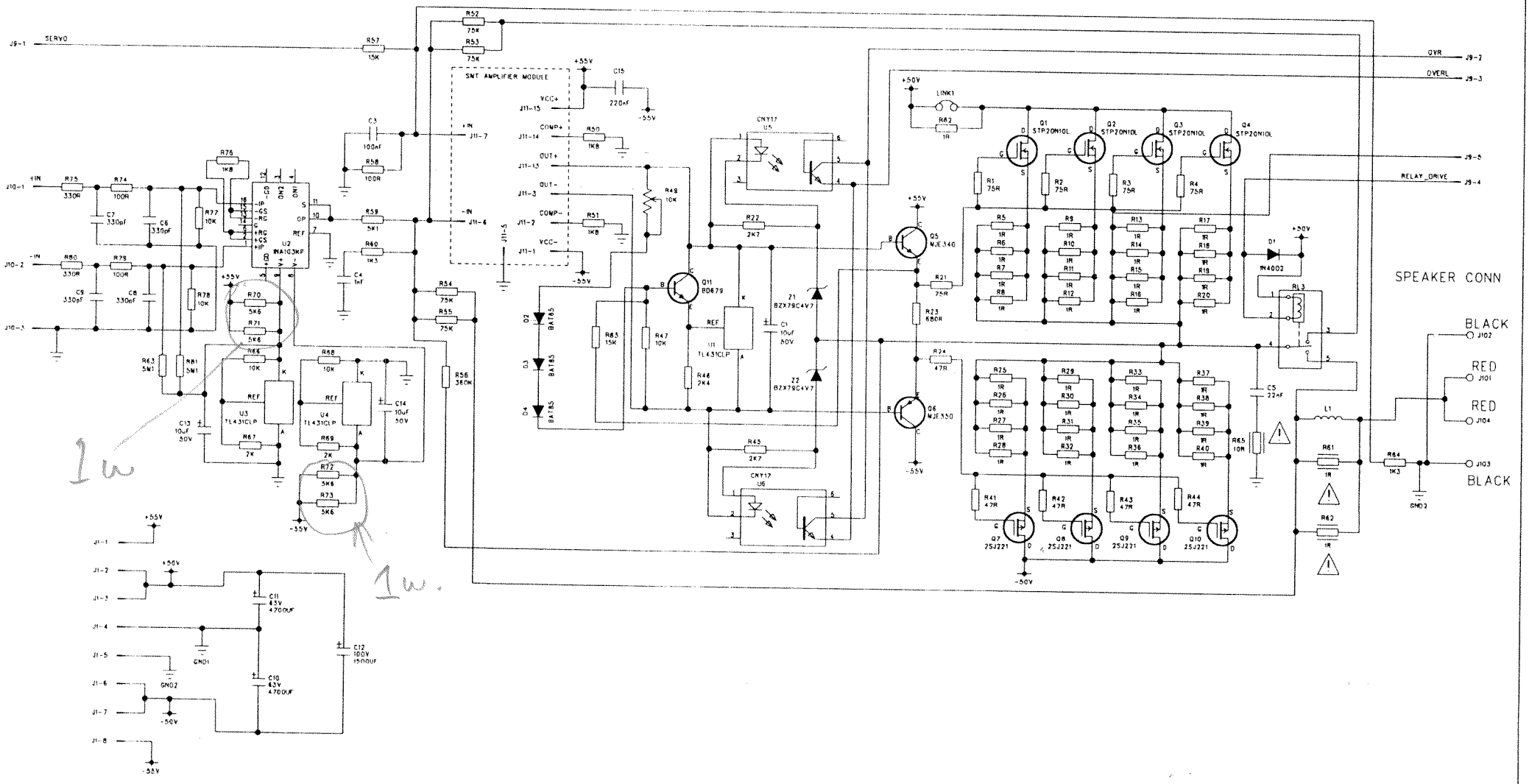


1w
STAND OFF
PCB BY 10mm

1w
STAND OFF PCB BY 10mm.

MATERIAL	FINISH					COPYRIGHT © 1996	
						DRAWN	DATE
		2	INITIAL ISSUE		16/4/96	APT	16/4/96
DIMENSIONS IN mm	SCALE	ISS	AMENDMENT	ECN	DATE	PART NO.	
TOLERANCES 0. ± 0.5 0.0 ± 0.3 0.00 ± 0.1 UNLESS OTHERWISE STATED	DO NOT SCALE	USED ON	PA200				
		TITLE	PA200 POWER AMP PCB OVERLAY L1 TRACKSIDE + SILKSCREEN			DRG. NO.	ISS
						A3A9B08-L1	2

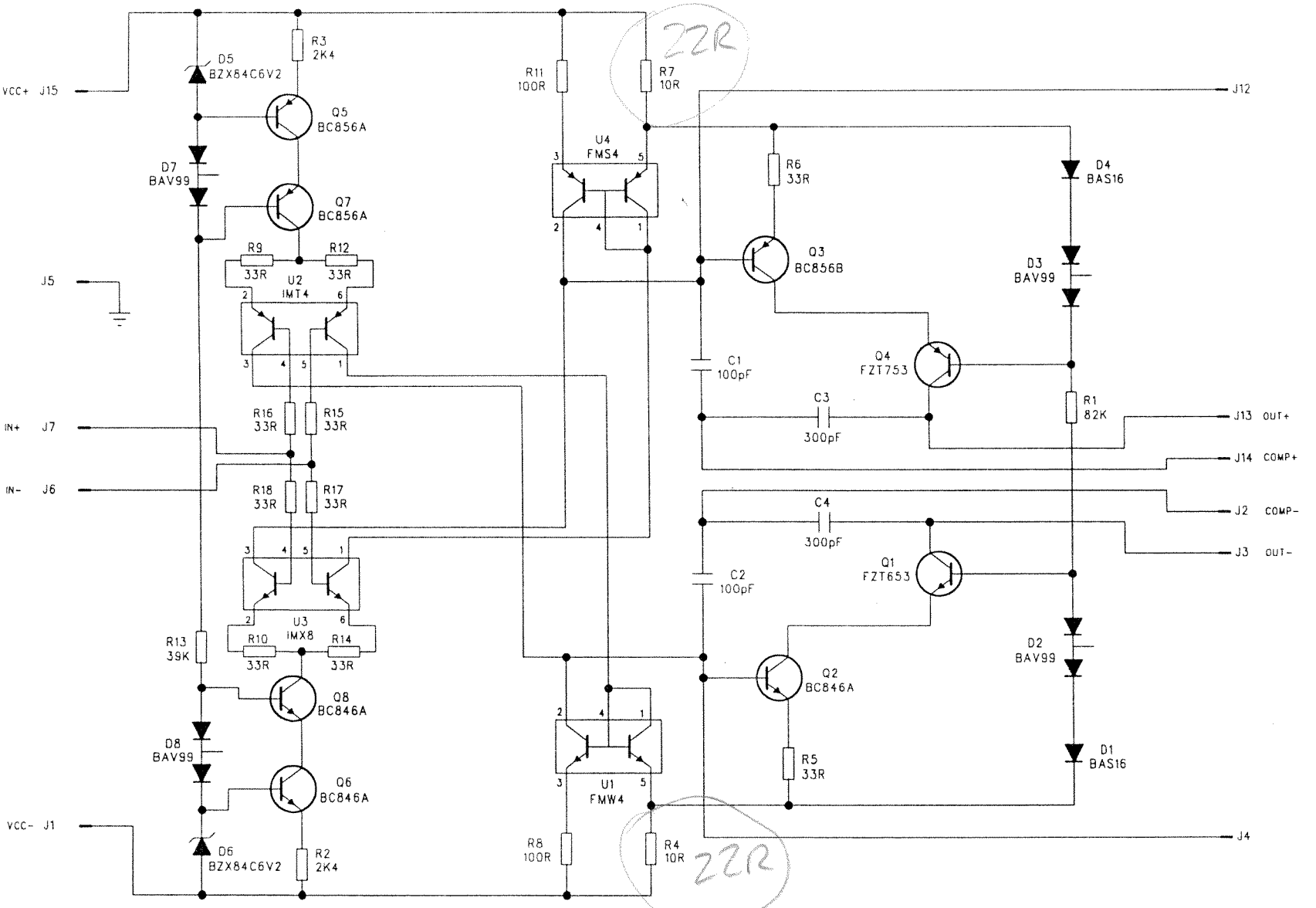


USED ON	MATERIAL		
PA200			
DIMENSIONS IN mm	SCALE		
TOLERANCES 0. ± 0.5 0.0 ± 0.3 0.00 ± 0.1	FINISH		
		2	CHANGED R48 TO D2,3,4 & ADDED CONN J9-5 TO R13 — 10-12-95
TITLE	PA200 POWER AMPLIFIER SCHEMATIC		

DRAWN	DATE
PLB	23-2-95

PART NO.

ORG. NO A3A9R08-202 ISS



MATERIAL	FINISH				COPYRIGHT ©
					DRAWN APT / DATE 19-3-96
		1	INITIAL ISSUE	19-3-96	
		ISS	AMENDMENT	ECN / DATE	PART NO.
DIMENSIONS IN mm	SCALE	USED ON			
TOLERANCES 0. ± 0.5, 0.0 ± 0.3, 0.00 +_ 0.1		TITLE	VA150/PA200 SMT AMPLIFIER MODULE		DRG. NO. A3A7B39-20 ISS (1)

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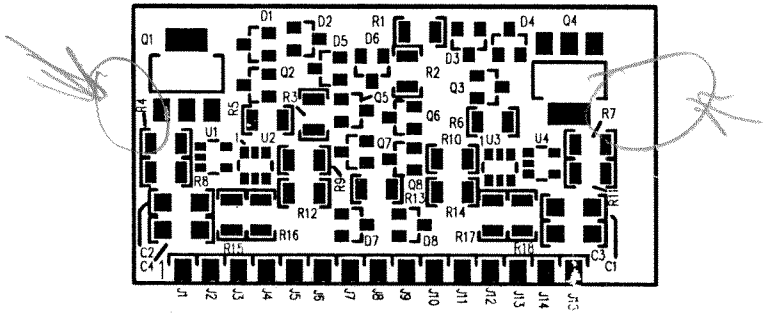

AURA DESIGNS LTD
VA150/PA200 AMPLIFIER MODULE
PLB 24-1-95
A3A7B39-40 ISSUE LAYER 1 SILK SCREEN

MATERIAL	FINISH						
						DRAWN APT	DATE 19/3/96
		1	INITIAL ISSUE		19/3/96		
	DIMENSIONS IN mm	ISS	AMENDMENT	ECN	DATE	PART NO.	
	TOLERANCES 0. ± 0.5 0.0 ± 0.3 0.00 ± 0.1 UNLESS OTHERWISE STATED	USED ON	VA150/PA200				
	SCALE DO NOT SCALE	TITLE	AMPLIFIER MODULE PCB SILK SCREEN			DRG. NO. A3A7B39-40	ISS 1