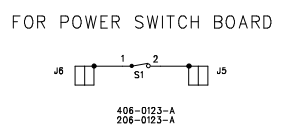
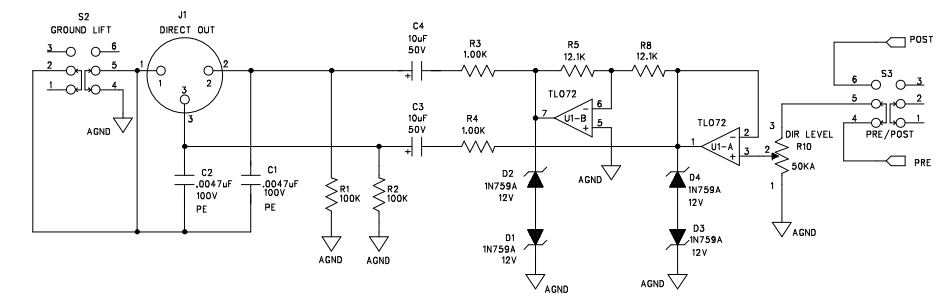
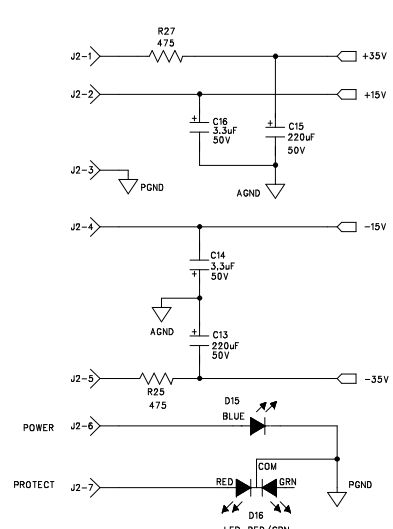
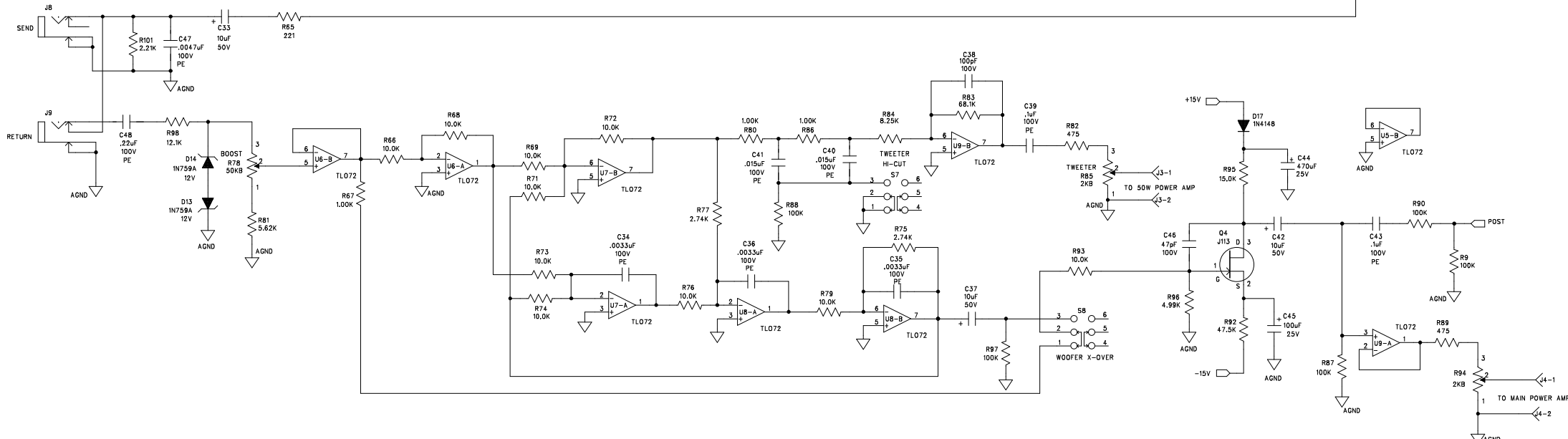
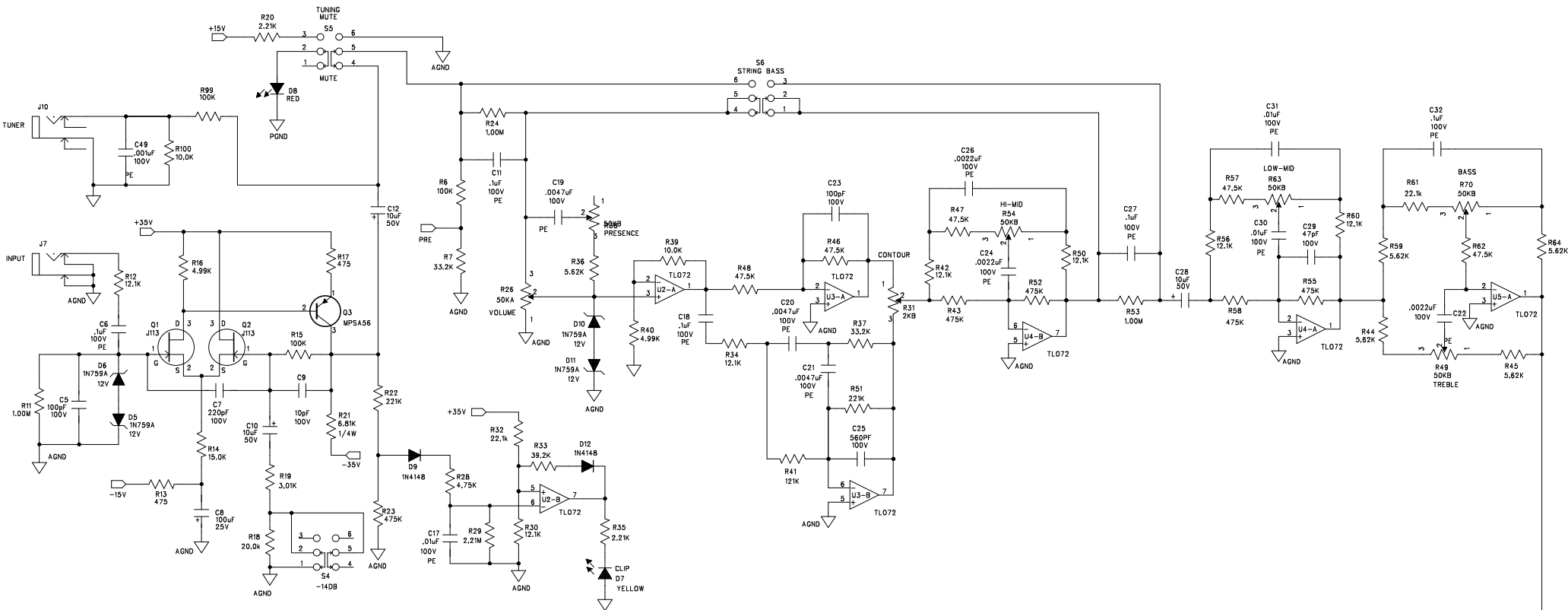


REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



NOT VALID UNLESS STAMP IS RED

gallien technology

2240 PARAGON DRIVE
SAN JOSE CA. 95131
VOICE: 408-441-8081
FAX: 408-441-8085

TITLE: 700RB-II PREAMP

DESIGNED: R.A.G. 7/24/01
DRAWN: R.A.G. 12/4/02
ELEC: B
MECH:
Q/A:
RELEASED:

REV. A

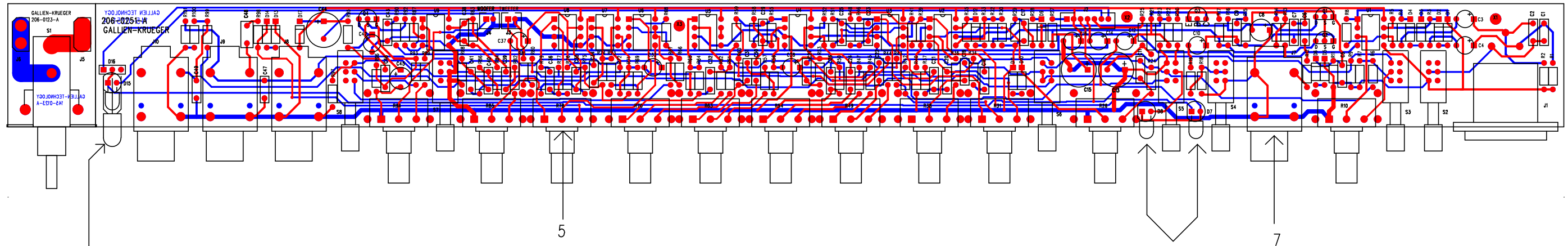
DRAWING NO: 406-0251-A
PART NO: 206-0251-A
COMPANY: GALLIEN-KRUEGER
FILENAME: 6251A

NOTES:
1. CHANGE BOARD NO. TO 206-0251-A FROM 206-0105-02.
2. CHANGE R18 TO 20.0K FROM 15.0K.
3. CORRECT SHORTED TRACE FROM C45 TO S8.
4. UPDATE HOLE AND PAD SIZES.

GK GALLIEN-KRUEGER

1001RB-II PRE AMP 206-0251-A

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-1030-1	U1-9	TLO72CP, LOW NOISE JFET OPAMP	MOTOROLA	TL072CP
010-1013-0	Q3	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
010-2010-0	Q1-2 Q4	J113,N-JFET,.35V,2MA,TO-92	NATIONAL	J113
020-0120-0	D1-6 D10-11 D13-14	1N759A, ZENER,12V,5%,400MW, DO-35	MOTOROLA	1N759A
020-1000-0	D9 D12 D17	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
025-0012-0	D16	LED,RED/GRN,5MM,630NM/560NM,15MCD	STANLEY	VRPG5614S
025-0023-0	D7	LED,YELLOW, 3MM, 585NM, 5MCD, 10MA	EVERLIGHT	EL204YD
025-0030-2	D15	LED,BLUE, 10MA	LITEON	LTL-42B6
025-0116-0	D8	LED,RED, 3MM, 635NM, 6MCD, 10MA	EVERLIGHT	EL2041D
031-1107-0	C8 C45	CAP,ELEC,RAD,107,20%,25V	UNITED CHEMI-CON	SMG25VB101M6X11LL
031-1477-0	C44	CAP, ELEC, RAD, 470uF, 20%, 25V	UNITED CHEMI-CON	SMG25VB471M10X12LL
031-2106-0	C3,4,10,12,28,33,37,42	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2227-0	C13 C15	CAP, ELEC, 220uF, 20%, 50V	UNITED CHEMI-CON	SMG50VB221M10X12LL
031-2335-0	C14 C16	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
032-4102-0	C49	CAP,PE,102,5%,100V,	PANASONIC	ECQB1102JF
032-4103-0	C17 C30-31	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C6,11,18,27,32,39,43	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4153-0	C40-41	CAP,PE,153,5%,100V,	PANASONIC	ECQV1153JM
032-4222-0	C22 C24 C26	CAP,PE,222,5%,100V,	PANASONIC	ECQB1222JF
032-4224-0	C48	CAP,PE,224,5%,100V,	PANASONIC	ECQV1224JM
032-4332-0	C34-36	CAP,PE,332,5%,100V,	PANASONIC	ECQB1332JF
032-4472-0	C1-2 C19-21 C47	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
034-4100-0	C9	CAP, MCR,10pF,5%,100V,NPO	TAITRON	TMRS100J100NPOB
034-4101-0	C5 C23 C38	CAP,MCR,100pF,5%,100V,	TAITRON	TMRS101J100NPOB
034-4221-0	C7	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4470-0	C29 C46	CAP,MCR,47PF,5%,100V,NPO	TAITRON	TMRS470J100NPOB
034-4561-0	C25	CAP,MCR,560pF,5%,100V,	TAITRON	TMRS561J100NPOB
052-6812-0	R21	RES, METAL FILM, 6.81K OHM, 1/4W, 1%	ECI	M2F1AK006.81
060-1002-0	R3-4 R67 R80 R86	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R39,66,68,69,71-74,76 R79,93,100	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R1,2,6,9,15,87,88,90,97 R99	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1005-0	R11 R24 R53	RES, MF, 1.00M, 1%,1/8W, 060-1005-0	ECI	M1F1AM001.00
060-1213-0	R5,8,12,30,34,42,50,56 R60 R98	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10
060-1214-0	R41	RES,METAL FILM, 121K, 1/8W, 1%	ECI	M1F1AK121.00
060-1503-0	R14,95	RES,METAL FILM, 15.0K, 1/8W, 1%	ECI	M1F1AK015.00
060-2003-0	R18	RES,METAL FILM, 20.0K, 1/8W, 1%	ECI	M1F1AK020.00
060-2211-0	R65	RES,METAL FILM, 221 ohm, 1/8W, 1%	ECI	M1F1AJ221.00
060-2212-0	R20 R35 R101	RES,METAL FILM, 2.21K, 1/8W, 1%	ECI	M1F1AK002.21
060-2213-0	R32 R61	RES,METAL FILM, 22.1K, 1/8W, 1%	ECI	M1F1AK022.10
060-2214-0	R22 R51	RES,METAL FILM, 221K, 1/8W, 1%	ECI	M1F1AK221.00
060-2215-0	R29	RES, METAL FILM, 2.21M, 1/8W, 1%	ECI	M1F1AM002.21
060-2742-0	R75 R77	RES,METAL FILM, 2.74K, 1/8W, 1%	ECI	M1F1AK002.74
060-3012-0	R19	RES,METAL FILM, 3.01K, 1/8W, 1%	ECI	M1F1AK003.01
060-3323-0	R7 R37	RES,METAL FILM, 33.2K, 1/8W, 1%	ECI	M1F1AK033.20
060-3923-0	R33	RES,METAL FILM,39.2K,1/8W,1%	ECI	M1F1AK039.2
060-4751-0	R13,17,25,27,82,89	RES,METAL FILM, 475 ohm, 1/8W, 1%	ECI	M1F1AJ475.00
060-4752-0	R28	RES,METAL FILM, 4.75K, 1/8W, 1%	ECI	M1F1AK004.75
060-4753-0	R46-48 R57 R62 R92	RES,METAL FILM, 47.5K, 1/8W, 1%	ECI	M1F1AK047.50
060-4754-0	R23 R43 R52 R55 R58	RES,METAL FILM, 475K, 1/8W, 1%	ECI	M1F1AK475.00
060-4992-0	R16 R40 R96	RES,METAL FILM, 4.99K, 1/8W, 1%	ECI	M1F1AK004.99
060-5622-0	R36,44,45,59,64,81	RES,METAL FILM, 5.62K, 1/8W, 1%	ECI	M1F1AK005.62
060-6813-0	R83	RES,METAL FILM, 68.1K, 1/8W, 1%	ECI	M1F1AK068.10
060-8252-0	R84	RES,METAL FILM, 8.25K, 1/8W, 1%	ECI	M1F1AK008.25
070-1513-0	R10 R26	POT,50K-15A,7MM,KNURL,.1W	SONG HUEI	16K1-A50K-L15KC
070-1514-0	R38,49,54,63,70,78	POT,50KB,7MM,KNURL,.1W	SONG HUEI	16K1-B50K-L15KC
070-1522-0	R31 R85 R94	POT,2KB,7MM,KNURL,.1W	SONG HUEI	16K1-B2K-L15KC
090-0007-0	S1	SWITCH, 8A/128A,250V,PP,PCB	TECX	KDC-A04-10-B, B2-F
090-0012-0	S2-8	SWITCH,MIMI PP,DPDT,.1A BRK/MAKE	ELKECTRONIC COMP	MTH2UEE-1D911
092-0069-0	J5-6	FASTON, M, PC, .250",HOR	ZIERICK	901
092-0081-0	J7-10	JACK,1/4",MONO,PC,NON GROUNDING	NEUTRIK	S102-84
092-0084-0	J1	CON,XLR,MALE,PC,PL, SCREW MNT	NEUTRIK	X906-05
093-0051-0	J3-4	HDR, 2MMX2, VERT, LOCK	JST	B2B-PH-K-S
093-2005-0	J2	HDR, 2MMX7, VERT, SHROUDED	JST	B7B-PH-K-S
145-0251-A		700RB-II PREAMP RAW BOARD		



6 PCB WORK INSTRUCTIONS
 DWG #420-0251-A

NOTES:

UNLESS OTHERWISE SPECIFIED:

1. SQUARE PADS ON THRU HOLE PARTS (ie: CONNECTORS, DIPS, SIPS, LEDES) DENOTE PIN 1.
2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTIONS.
3. ALL BOARDS MUST BE BARE BOARD TESTED.
4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.

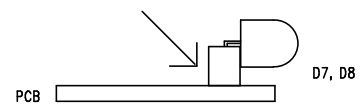
LOADING

5. CLIP TABS OFF ON POTS R8, R24, R30, R47, R52, R61, R68, R76, R83, R91
6. SEE DETAIL A FOR MOUNTING D7 AND D8. SEE DETAIL B FOR MOUNTING D15 AND D16.

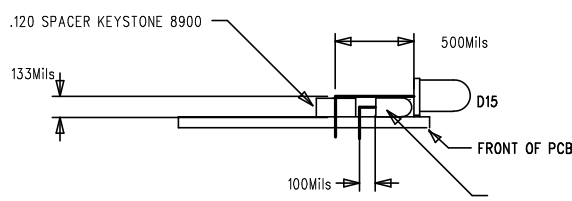
FINAL QA

7. CHECK TO SEE ALL POTS, JACKS, AND SWITCHES ARE MOUNTED FLUSH AND STRAIGHT

DETAIL A
 LED SPACER
 GT PART# 100-0119-0



DETAIL "B"



NOT VALID UNLESS STAMP IS RED

gallien technology

2240 PARAGON DRIVE
 SAN JOSE CA, 95131
 VOICE: 408-441-8081
 FAX: 408-441-8085

APPROVALS		TITLE:	
INIT	DATE	700B-II PRE-AMP BD	
DESIGNED:		SIZE	DRAWING NO: 405-0251-A
DRAWN:		B	PART NO: 145-0251-A
ELEC:			REV. A
LAYER DESCRIPTION:		COMPANY:	
SOPR SSBEEB BOCNOCEN		GERBER FILE NAME: sst01209.pbo	
		FILENAME: 5251A	

Customer Name:		Gallien-Krueger		Current Rev #:	A	New ECO Rev #:	A1
Model:		700RB-II/1001RB-II		Distribute To:		Page:	1 Of: 2
Assembly Description:		700RB-II/1001RB-II preamp		Originator:	Robert A. Gallien		
Assembly Numbers:		206-0251-A		Approved by:			
				Effective Date:	4/17/2003		
Effective				Document Update		Date	Initials
<input checked="" type="checkbox"/>	All in Process	<input checked="" type="checkbox"/>	Next Buy	<input type="checkbox"/>	Artwork		
<input type="checkbox"/>	All in Service	<input checked="" type="checkbox"/>	Next Production Run	<input type="checkbox"/>	Assembly Dwg.		
<input type="checkbox"/>	All in Stock	<input type="checkbox"/>		<input type="checkbox"/>	Board Artwork		
Beginning Serial Number:				<input checked="" type="checkbox"/>	BOM		
Reason For Change				<input type="checkbox"/>	Control Form		
Preamp will oscillate under certain EQ settings				<input checked="" type="checkbox"/>	Costing		
				<input type="checkbox"/>	Fab Drawing		
				<input type="checkbox"/>	Inspection Proc.		
				<input checked="" type="checkbox"/>	Part Master File		
				<input checked="" type="checkbox"/>	Schematic		
				<input type="checkbox"/>	Service Manual		
				<input type="checkbox"/>	Test Procedure		
				<input type="checkbox"/>			
				<input type="checkbox"/>			
Other Affected Assemblies							
303 & 302 Assmblies							
<input type="checkbox"/>	Continued on ECO Supplement Page						
Description Of Change				Distribution		Date	Initials
				<input type="checkbox"/>	Accounting		
Remove C29 (Figure 1)				<input type="checkbox"/>	Assembly		
				<input type="checkbox"/>	Customer		
Add .001uf cap from D14 cathode to gnd (Fig 2)				<input checked="" type="checkbox"/>	Engineering		
This will be referenced as C29.				<input checked="" type="checkbox"/>	Incoming Q.C.		
				<input type="checkbox"/>	Planning		
This change is a mod to existing Rev A boards.				<input checked="" type="checkbox"/>	Production Eng.		
The board artwork was not updated.				<input checked="" type="checkbox"/>	Purchasing		
				<input type="checkbox"/>	Q.A.		
				<input type="checkbox"/>	Receiving		
				<input type="checkbox"/>	Service		
				<input checked="" type="checkbox"/>	Test		
				<input type="checkbox"/>	Vendor		
				<input type="checkbox"/>			
				<input type="checkbox"/>			
<input type="checkbox"/>	Continued on ECO Supplement Page						
				<input checked="" type="checkbox"/>	Drawing(s) attached		
Part Number	Description	Parts Added		Parts Deleted			
		Qty	Ref. Designator	Qty	Ref. Designator		
034-4470-0	47pf, 100V			1	C29		
032-4102-0	.001UF, 100v	1	C29				

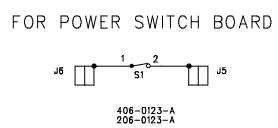
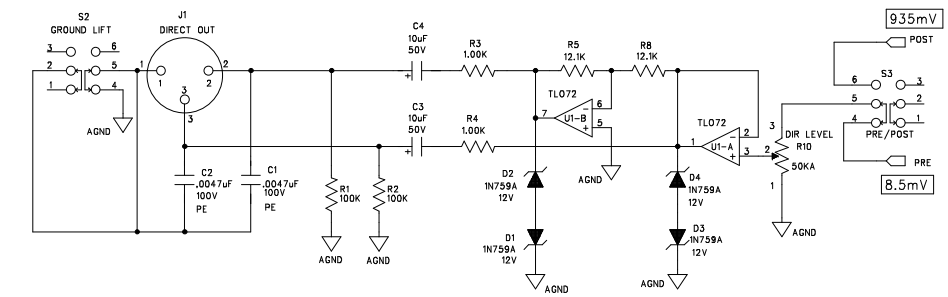
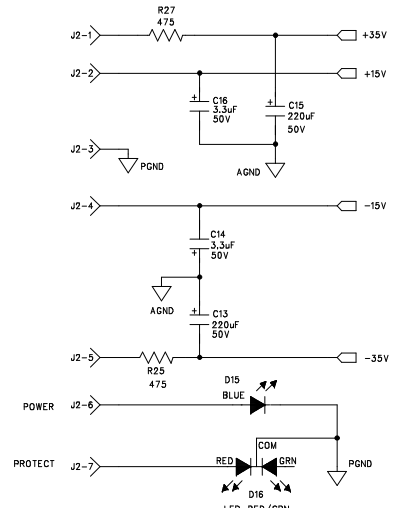
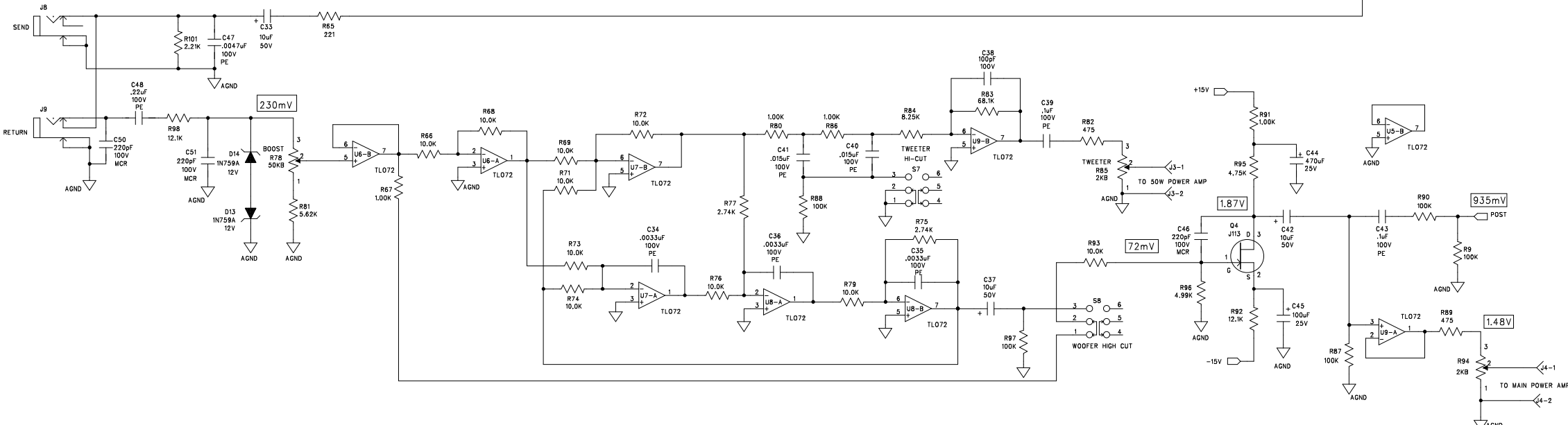
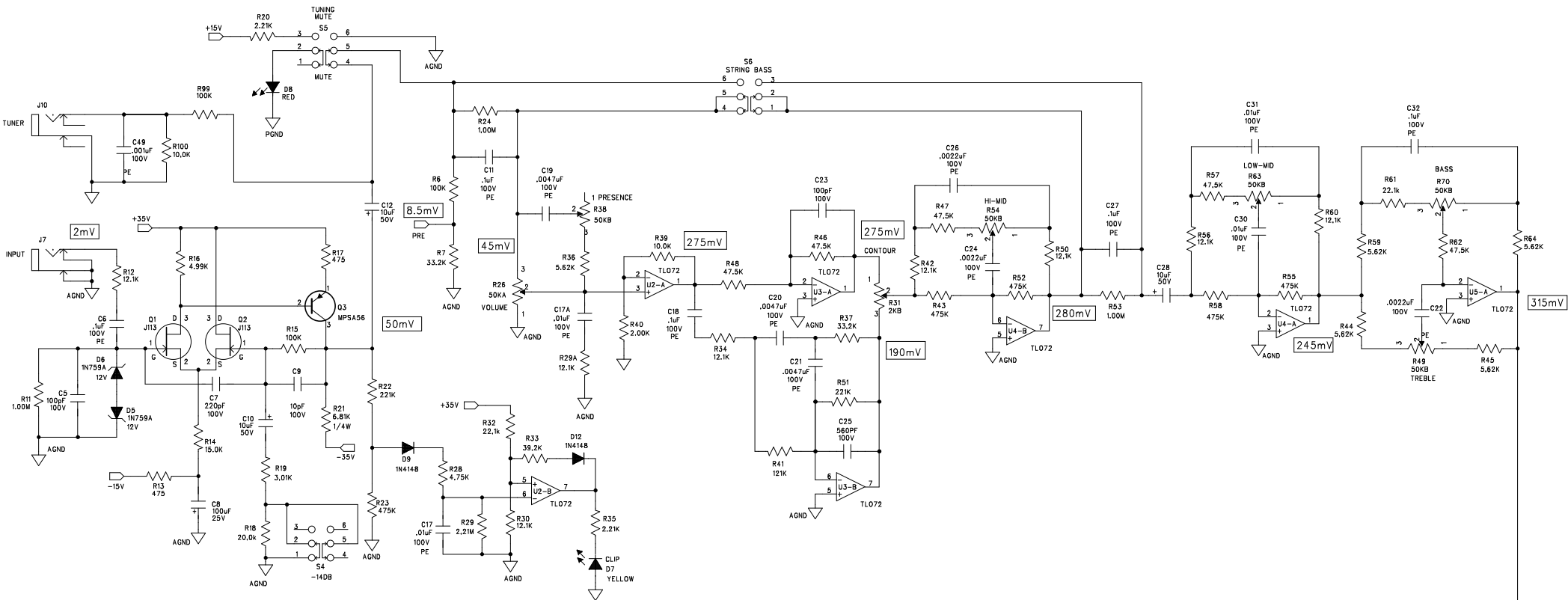
GK GALLIEN-KRUEGER

1001RB-II Preamp 206-0251-A1

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-1030-1	U1-9	TLO72CP, LOW NOISE JFET OPAMP	MOTOROLA	TL072CP
010-1013-0	Q3	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
010-2010-0	Q1-2 Q4	J113,N-JFET,35V,2MA,TO-92	NATIONAL	J113
020-0120-0	D1-6 D10-11 D13-14	1N759A, ZENER,12V,5%,400MW, DO-35	MOTOROLA	1N759A
020-1000-0	D9 D12 D17	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
025-0012-0	D16	LED,RED/GRN,5MM,630NM/560NM,15MCD	STANLEY	VRPG5614S
025-0023-0	D7	LED,YELLOW, 3MM, 585NM, 5MCD, 10MA	EVERLIGHT	EL204YD
025-0030-2	D15	LED,BLUE, 10MA	LITEON	LTL-42B6
025-0116-0	D8	LED,RED, 3MM, 635NM, 6MCD, 10MA	EVERLIGHT	EL2041D
031-1107-0	C8 C45	CAP,ELEC,RAD,107,20%,25V	UNITED CHEMI-CON	SMG25VB101M6X11LL
031-1477-0	C44	CAP, ELEC, RAD, 470uF, 20%, 25V	UNITED CHEMI-CON	SMG25VB471M10X12LL
031-2106-0	C3,4,10,12,28,33,37,42	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2227-0	C13 C15	CAP, ELEC, 220uF, 20%, 50V	UNITED CHEMI-CON	SMG50VB221M10X12LL
031-2335-0	C14 C16	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
032-4102-0	C49, (C29 ECOA1)	CAP,PE,102,5%,100V,	PANASONIC	ECQB1102JF
032-4103-0	C17 C30-31	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C6,11,18,27,32,39,43	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4153-0	C40-41	CAP,PE,153,5%,100V,	PANASONIC	ECQV1153JM
032-4222-0	C22 C24 C26	CAP,PE,222,5%,100V,	PANASONIC	ECQB1222JF
032-4224-0	C48	CAP,PE,224,5%,100V,	PANASONIC	ECQV1224JM
032-4332-0	C34-36	CAP,PE,332,5%,100V,	PANASONIC	ECQB1332JF
032-4472-0	C1-2 C19-21 C47	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
034-4100-0	C9	CAP, MCR,10pF,5%,100V,NPO	TAITRON	TMRS100J100NPOB
034-4101-0	C5 C23 C38	CAP,MCR,100pF,5%,100V,	TAITRON	TMRS101J100NPOB
034-4221-0	C7	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4470-0	C46	CAP,MCR,47PF,5%,100V,NPO	TAITRON	TMRS470J100NPOB
034-4561-0	C25	CAP,MCR,560pF,5%,100V,	TAITRON	TMRS561J100NPOB
052-6812-0	R21	RES, METAL FILM, 6.81K OHM, 1/4W, 1%	ECI	M2F1AK006.81
060-1002-0	R3-4 R67 R80 R86	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R39,66,68,69,71-74,76 R79,93,100	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R1,2,6,9,15,87,88,90,97 R99	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1005-0	R11 R24 R53	RES, MF, 1.00M, 1%,1/8W, 060-1005-0	ECI	M1F1AM001.00
060-1213-0	R5,8,12,30,34,42,50,56 R60 R98	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10
060-1214-0	R41	RES,METAL FILM, 121K, 1/8W, 1%	ECI	M1F1AK121.00
060-1503-0	R14,95	RES,METAL FILM, 15.0K, 1/8W, 1%	ECI	M1F1AK015.00
060-2003-0	R18	RES,METAL FILM, 20.0K, 1/8W, 1%	ECI	M1F1AK020.00
060-2211-0	R65	RES,METAL FILM, 221 ohm, 1/8W, 1%	ECI	M1F1AJ221.00
060-2212-0	R20 R35 R101	RES,METAL FILM, 2.21K, 1/8W, 1%	ECI	M1F1AK002.21
060-2213-0	R32 R61	RES,METAL FILM, 22.1K, 1/8W, 1%	ECI	M1F1AK022.10
060-2214-0	R22 R51	RES,METAL FILM, 221K, 1/8W, 1%	ECI	M1F1AK221.00
060-2215-0	R29	RES, METAL FILM, 2.21M, 1/8W, 1%	ECI	M1F1AM002.21
060-2742-0	R75 R77	RES,METAL FILM, 2.74K, 1/8W, 1%	ECI	M1F1AK002.74
060-3012-0	R19	RES,METAL FILM, 3.01K, 1/8W, 1%	ECI	M1F1AK003.01
060-3323-0	R7 R37	RES,METAL FILM, 33.2K, 1/8W, 1%	ECI	M1F1AK033.20
060-3923-0	R33	RES,METAL FILM,39.2K,1/8W,1%	ECI	M1F1AK039.2
060-4751-0	R13,17,25,27,82,89	RES,METAL FILM, 475 ohm, 1/8W, 1%	ECI	M1F1AJ475.00
060-4752-0	R28	RES,METAL FILM, 4.75K, 1/8W, 1%	ECI	M1F1AK004.75
060-4753-0	R46-48 R57 R62 R92	RES,METAL FILM, 47.5K, 1/8W, 1%	ECI	M1F1AK047.50
060-4754-0	R23 R43 R52 R55 R58	RES,METAL FILM, 475K, 1/8W, 1%	ECI	M1F1AK475.00
060-4992-0	R16 R40 R96	RES,METAL FILM, 4.99K, 1/8W, 1%	ECI	M1F1AK004.99
060-5622-0	R36,44,45,59,64,81	RES,METAL FILM, 5.62K, 1/8W, 1%	ECI	M1F1AK005.62
060-6813-0	R83	RES,METAL FILM, 68.1K, 1/8W, 1%	ECI	M1F1AK068.10
060-8252-0	R84	RES,METAL FILM, 8.25K, 1/8W, 1%	ECI	M1F1AK008.25
070-1513-0	R10 R26	POT,50K-15A,7MM,KNURL,.1W	SONG HUEI	16K1-A50K-L15KC
070-1514-0	R38,49,54,63,70,78	POT,50KB,7MM,KNURL,.1W	SONG HUEI	16K1-B50K-L15KC
070-1522-0	R31 R85 R94	POT,2KB,7MM,KNURL,.1W	SONG HUEI	16K1-B2K-L15KC
090-0007-0	S1	SWITCH, 8A/128A,250V,PP,PCB	TECX	KDC-A04-10-B, B2-F
090-0012-0	S2-8	SWITCH,MIMI PP,DPDT,.1A BRK/MAKE	ELKECTRONIC COMP	MTH2UEE-1D911
092-0069-0	J5-6	FASTON, M, PC, .250",HOR	ZIERICK	901
092-0081-0	J7-10	JACK,1/4",MONO,PC,NON GROUNDING	NEUTRIK	S102-84
092-0084-0	J1	CON,XLR,MALE,PC,PL, SCREW MNT	NEUTRIK	X906-05
093-0051-0	J3-4	HDR, 2MMX2, VERT, LOCK	JST	B2B-PH-K-S
093-2005-0	J2	HDR, 2MMX7, VERT, SHROUDED	JST	B7B-PH-K-S
145-0251-A		700RB-II PREAMP RAW BOARD		

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

TEST CONDITIONS:
 SET VOLUME, BOOST AND MASTERS ON 10.
 SET TONE ON 10, VOICING FILTERS OFF.
 SET INPUT ATTENUATOR AND X-OVER OFF.
 SIGNAL 200HZ SINE SHOWN AS: 350mV
 DC VOLTAGES SHOWN AS: 3.4V



NOT VALID UNLESS STAMP IS RED

gallien technology

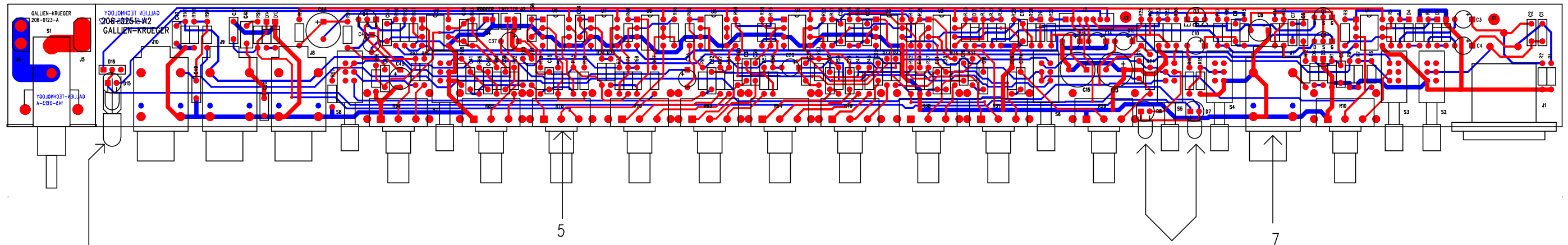
2234 INDUSTRIAL DRIVE
 STOCKTON CA. 95206
 VOICE: 209-234-7300
 FAX: 209-234-8420

TITLE: 700RB-II PREAMP

NOTES:
 1. CHANGE BOARD NO. TO 206-0251-A2
 2. CHANGE R40 TO 2.00K FROM 4.99K.
 3. ADD C51- 220pF ACROSS D14 & D15.
 4. ADD C50-220pF ACROSS J9.
 5. CHANGE D17 TO R91-1K.
 6. CHANGE R95-4.75K, R92-12.1K,R40-2.00K.
 7. REPLACE D10 AND D11 WITH R29A & C17A.
 8. RETROUTE GROUND TRACES FROM U5 TO U6.

APPROVALS		DATE	TITLE
INIT			
DESIGNED:	R.A.G.	7/24/01	
DRAWN:	R.A.G.	8/04/03	
ELEC:			
MECH:			
Q/A:			
RELEASED:			

DRAWING NO: 406-0251-A2
 PART NO: 206-0251-A2
 COMPANY: GALLIEN-KRUEGER
 FILENAME: 6251A2

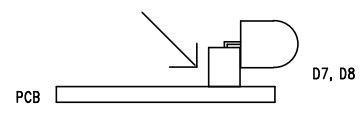


6 PCB WORK INSTRUCTIONS
 DWG #420-0251-A2

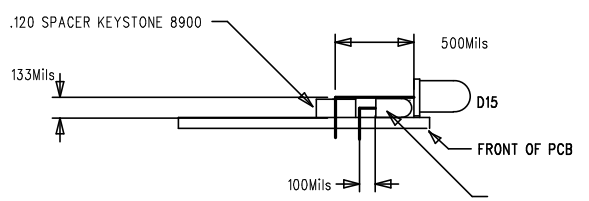
NOTES:

- UNLESS OTHERWISE SPECIFIED:
1. SQUARE PADS ON THRU HOLE PARTS (ie: CONNECTORS, DIPS, SIPS, LEDES) DENOTE PIN 1.
 2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTIONS.
 3. ALL BOARDS MUST BE BARE BOARD TESTED.
 4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.
- LOADING
5. CLIP TABS OFF ON POTS R8, R24, R30, R47, R52, R61, R68, R76, R83, R91
 6. SEE DETAIL A FOR MOUNTING D7 AND D8. SEE DETAIL B FOR MOUNTING D15 AND D16.
- FINAL QA
7. CHECK TO SEE ALL POTS, JACKS, AND SWITCHES ARE MOUNTED FLUSH AND STRAIGHT

DETAIL A
 LED SPACER
 GT PART# 100-0119-0



DETAIL "B"



NOT VALID UNLESS STAMP IS RED

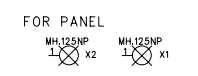
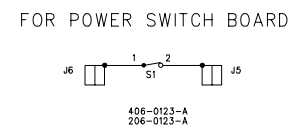
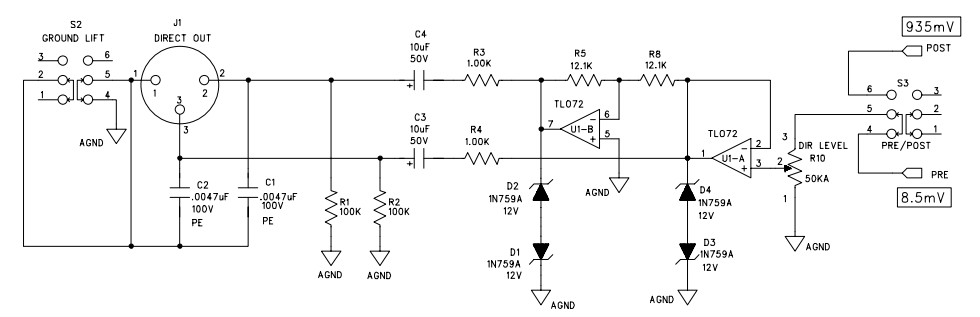
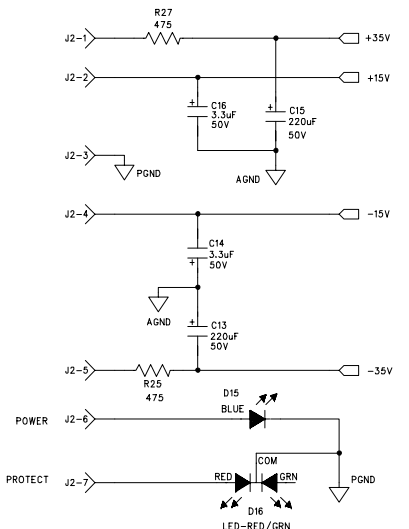
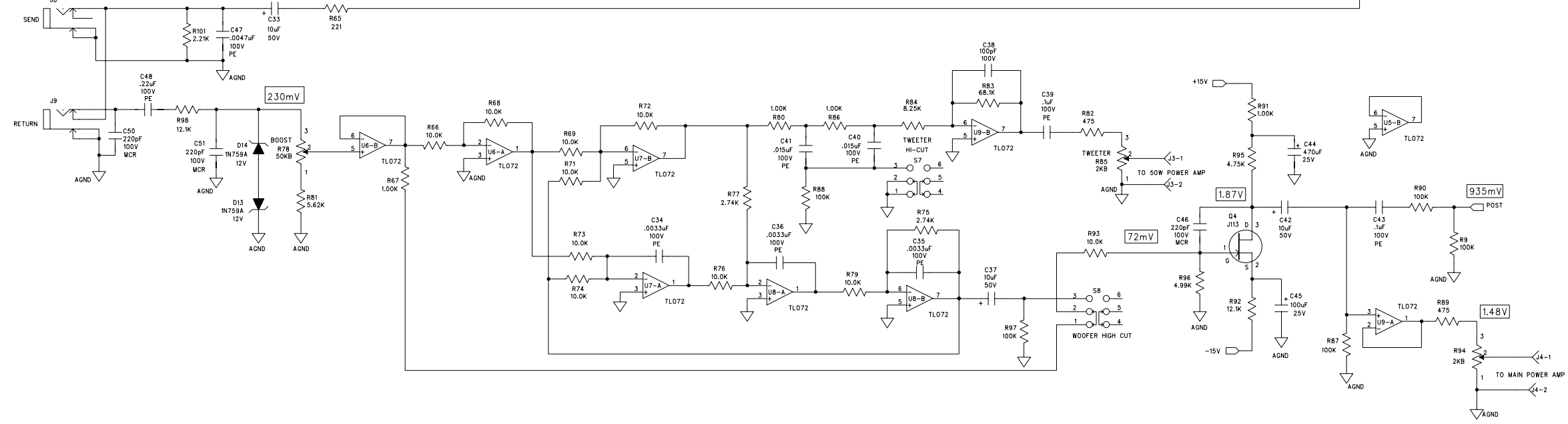
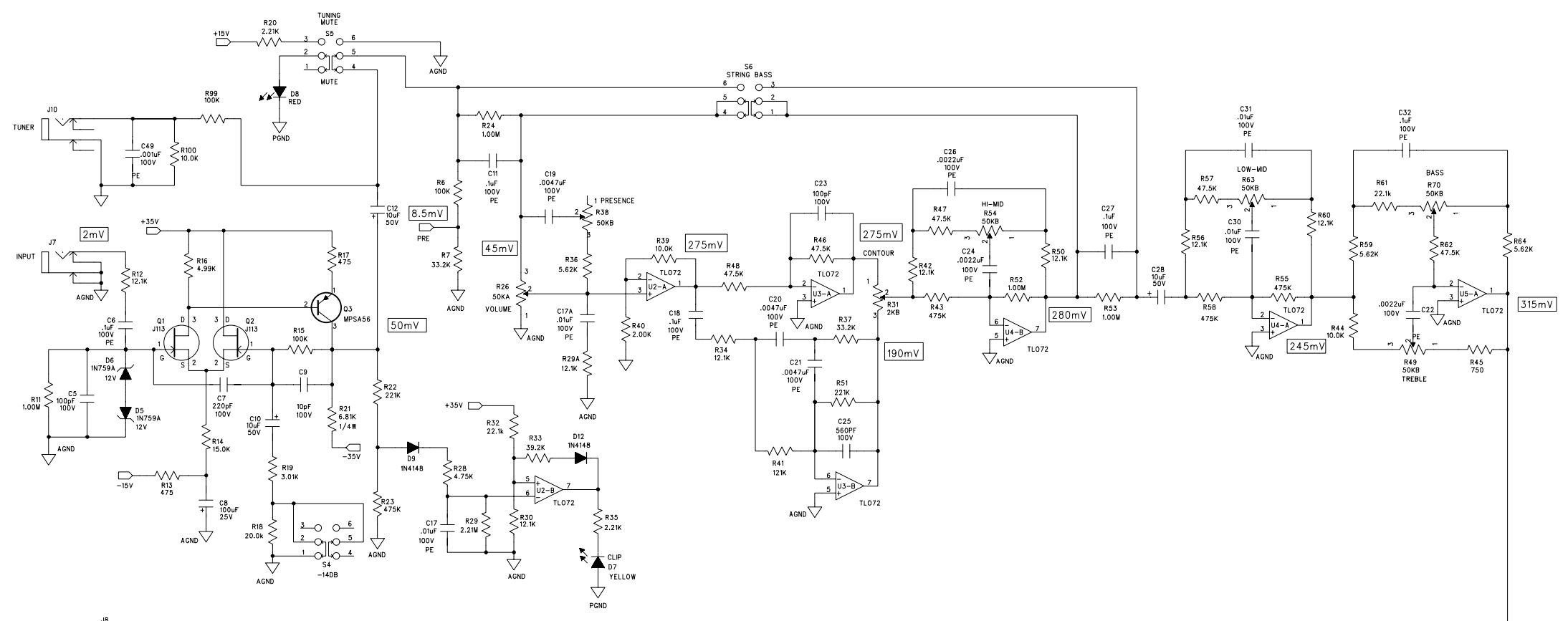
gallien technology

2240 PARAGON DRIVE
 SAN JOSE CA, 95131
 VOICE: 408-441-8081
 FAX: 408-441-8085

APPROVALS		TITLE: 700B-II PRE-AMP BD	
INIT	DATE	SIZE	DRAWING NO: 405-0251-A2
DESIGNED:		B	PART NO: 145-0251-A2
DRAWN:			REV. A2
ELEC:			
LAYER DESCRIPTION:		COMPANY:	
SOP SOURCE BOARD DESIGN		GERBER FILE NAME: 5251A2.pbo	
		FILENAME: 5251A2	

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

TEST CONDITIONS:
 SET VOLUME, BOOST AND MASTERS ON 10.
 SET TONE ON 10, VOICING FILTERS OFF.
 SET INPUT ATTENUATOR AND X-OVER OFF.
 SIGNAL 200HZ SINE SHOWN AS: **350mV**
 DC VOLTAGES SHOWN AS: 3.4V



NOT VALID UNLESS STAMP IS RED

gallien technology

2234 INDUSTRIAL DRIVE
 STOCKTON CA. 95206
 VOICE: 209-234-7300
 FAX: 209-234-8420

NOTES:
 TO REDUCE BRIGHTNESS AND BASS EFFECYENCY THE VALUE OF THE FOLLOWING COMPONENT WERE CHANGED:
 1. CHANGE R44 TO 10K FROM 5.62K.
 2. CHANGE R45 TO 750 FROM 5.62K.
 3. CHANGE R52 TO 1M FROM 475K.
 4. CHANGE BOARD NO. TO 206-0251-A3

APPROVALS		TITLE:	
INIT	DATE	SIZE	DRAWING NO:
R.A.G.	7/24/01	B	406-0251-A3
NOLI	8/13/04		206-0251-A3

COMPANY: GALLIEN-KRUEGER
 FILENAME: 6251A3

REV: **A3**

700RB-II Preamp		Bill Of Material	206-0251-A3		
Part No.	Reference	Description	Manufacturer	Mfr. Part No.	Quan
032-4102-0	C49	CAP,PE,102,5%,100V,	PANASONIC	ECQB1102JF	1
032-4222-0	C22 C24 C26	CAP,PE,222,5%,100V,	PANASONIC	ECQB1222JF	3
032-4332-0	C34-36	CAP,PE,332,5%,100V,	PANASONIC	ECQB1332JF	3
032-4472-0	C1-2 C19-21 C47	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF	6
032-4153-0	C40-41	CAP,PE,153,5%,100V,	PANASONIC	ECQV1153JM	2
032-4103-0	C17 C30-31 C17A	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM	4
032-4104-0	C6 C11 C18 C27 C32 C39 C43	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM	7
032-4224-0	C48	CAP,PE,224,5%,100V,	PANASONIC	ECQV1224JM	1
034-4101-0	C5 C23 C38	CAP,MCR,100pF,5%,100V,	TAITRON	TMRS101J100NPOB	3
031-1107-0	C8 C45	CAP,ELEC,RAD,107,20%,25V	UNITED CHEMI-CON	SMG25VB101M6X11LL	2
034-4100-0	C9	CAP, MCR,10pF,5%,100V,NPO	TAITRON	TMRS100J100NPOB	1
031-2106-0	C3-4 C10 C12 C28 C33 C37 C42	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL	8
034-4221-0	C7 C46 C50-51	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB	4
031-2227-0	C13 C15	CAP, ELEC, 220uF, 20%, 50V	UNITED CHEMI-CON	SMG50VB221M10X12LL	2
031-2335-0	C14 C16	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL	2
031-1477-0	C44	CAP, ELEC, RAD, 470uF, 20%, 25V	UNITED CHEMI-CON	SMG25VB471M10X12LL	1
034-4561-0	C25	CAP,MCR,560pF,5%,100V,	TAITRON	TMRS561J100NPOB	1
092-0081-0	J7-10	JACK,1/4",MONO,PC,NON GROUNDING	NEUTRIK	S102-84	4
092-0069-0	J5-6	FASTON, M, PC, .250",HOR	ZIERICK	901	2
092-0084-0	J1	CON,XLR,MALE,PC,PL, SCREW MNT	NEUTRIK	X906-05	1
020-1000-0	D9 D12	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148	2
020-0120-0	D1-6 D13-14	1N759A, ZENER,12V,5%,400MW, DO-35	MOTOROLA	1N759A	8
093-0051-0	J3-4	HDR, 2MMX2, VERT, LOCK	JST	B2B-PH-K-S	2
093-2005-0	J2	HDR, 2MMX7, VERT, SHROUDED	JST	B7B-PH-K-S	1
001-1030-1	U1-9	TLO72CP, LOW NOISE JFET OPAMP	MOTOROLA	TL072CP	9
025-0030-2	D15	LED,BLUE, 10MA	LITEON	LTL-42B6	1
025-0012-0	D16	LED,RED/GRN,5MM,630NM/560NM,15MCD/15MCD	STANLEY	VRPG5614S	1
025-0116-0	D8	LED,RED, 3MM, 635NM, 6MCD, 10MA, 40DEG	EVERLIGHT	EL2041D	1
025-0023-0	D7	LED,YELLOW, 3MM, 585NM, 5MCD, 10MA	EVERLIGHT	EL204YD	1
000-0000-0	X1-2	.125 HOLE, NON-PLATED			2
070-1522-0	R31 R85 R94	POT,2KB,7MM,KNURL,.1W	SONG HUEI	16K1-B2K-L15KC	3
070-1513-0	R10 R26	POT,50K-15A,7MM,KNURL,.1W	SONG HUEI	16K1-A50K-L15KC	2
070-1514-0	R38 R49 R54 R63 R70 R78	POT,50KB,7MM,KNURL,.1W	SONG HUEI	16K1-B50K-L15KC	6
060-1002-0	R3-4 R67 R80 R86 R91	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00	6
060-1005-0	R11 R24 R53	RES, MF, 1.00M, 1%,1/8W, 060-1005-0	ECI	M1F1AM001.00	3
060-1005-0	R52	RES, METAL FILM, 1.00M, 1/8W, 1%	ECI	M1F1AK475.00	1
060-1003-0	R39 R66 R68-69 R71-74 R76 R79 R93 R100	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00	12
060-1003-0	R44	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK005.62	1
060-1004-0	R1-2 R6 R9 R15 R87-88 R90 R97 R99	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00	10
060-1213-0	R5 R8 R12 R30 R34 R42 R50 R56 R60 R98	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10	10
060-1213-0	R92 R29A	RES,METAL FILM, 12.1K, 1/8W, 1%	ECI	M1F1AK012.10	2
060-1214-0	R41	RES,METAL FILM, 121K, 1/8W, 1%	ECI	M1F1AK121.00	1
060-1503-0	R14	RES,METAL FILM, 15.0K, 1/8W, 1%	ECI	M1F1AK015.00	1
060-2002-0	R40	RES,METAL FILM, 2.00K, 1/8W, 1%	ECI	M1F1AK002.00	1
060-2212-0	R20 R35 R101	RES,METAL FILM, 2.21K, 1/8W, 1%	ECI	M1F1AK002.21	3
060-2215-0	R29	RES, METAL FILM, 2.21M, 1/8W, 1%	ECI	M1F1AM002.21	1
060-2742-0	R75 R77	RES,METAL FILM, 2.74K, 1/8W, 1%	ECI	M1F1AK002.74	2
060-2003-0	R18	RES,METAL FILM, 20.0K, 1/8W, 1%	ECI	M1F1AK020.00	1
060-2213-0	R32 R61	RES,METAL FILM, 22.1K, 1/8W, 1%	ECI	M1F1AK022.10	2
060-2214-0	R22 R51	RES,METAL FILM, 221K, 1/8W, 1%	ECI	M1F1AK221.00	2
060-2211-0	R65	RES,METAL FILM, 221 ohm, 1/8W, 1%	ECI	M1F1AJ221.00	1
060-3012-0	R19	RES,METAL FILM, 3.01K, 1/8W, 1%	ECI	M1F1AK003.01	1
060-3323-0	R7 R37	RES,METAL FILM, 33.2K, 1/8W, 1%	ECI	M1F1AK033.20	2
060-3923-0	R33	RES,METAL FILM,39.2K,1/8W,1%	ECI	M1F1AK039.2	1
060-4752-0	R28 R95	RES,METAL FILM, 4.75K, 1/8W, 1%	ECI	M1F1AK004.75	2
060-4992-0	R16 R96	RES,METAL FILM, 4.99K, 1/8W, 1%	ECI	M1F1AK004.99	2
060-4753-0	R46-48 R57 R62	RES,METAL FILM, 47.5K, 1/8W, 1%	ECI	M1F1AK047.50	5
060-4754-0	R23 R43 R55 R58	RES,METAL FILM, 475K, 1/8W, 1%	ECI	M1F1AK475.00	4
060-4751-0	R13 R17 R25 R27 R82 R89	RES,METAL FILM, 475 ohm, 1/8W, 1%	ECI	M1F1AJ475.00	6
060-5622-0	R36 R59 R64 R81	RES,METAL FILM, 5.62K, 1/8W, 1%	ECI	M1F1AK005.62	4
052-6812-0	R21	RES, METAL FILM, 6.81K OHM, 1/4W, 1%	ECI	M2F1AK006.81	1
060-6813-0	R83	RES,METAL FILM, 68.1K, 1/8W, 1%	ECI	M1F1AK068.10	1
060-7501-0	R45	RES,METAL FILM, 750, 1/8W, 1%	ECI	M1F1AK005.62	1
060-8252-0	R84	RES,METAL FILM, 8.25K, 1/8W, 1%	ECI	M1F1AK008.25	1
090-0012-0	S2-8	SWITCH,MIMI PP,DPDT,.1A BRK/MAKE,PC TERM	ELKELECTRONIC COMP	MTH2UEE-1D911	7

ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

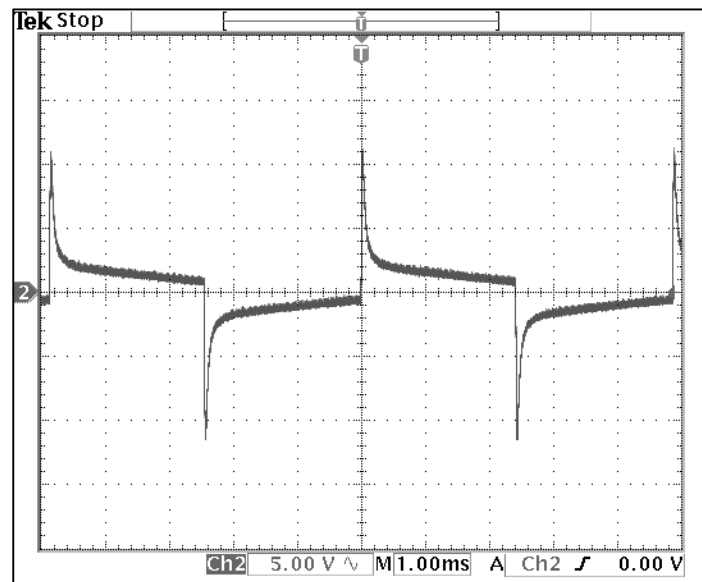


Figure 1
Tones center, Filters OFF

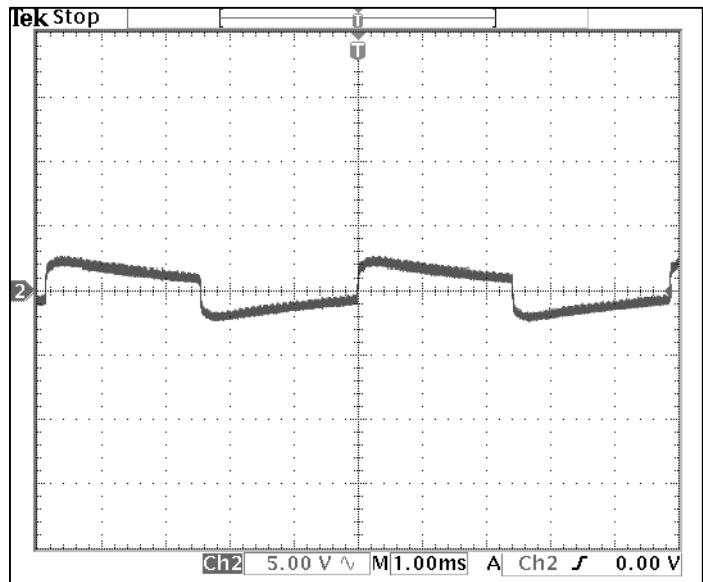


Figure 3
TREBLE to 0

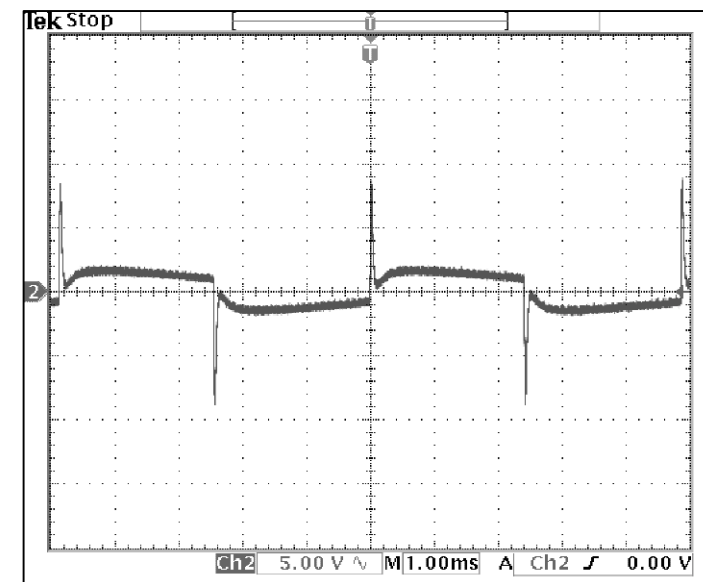


Figure 5
HI-MID to 0

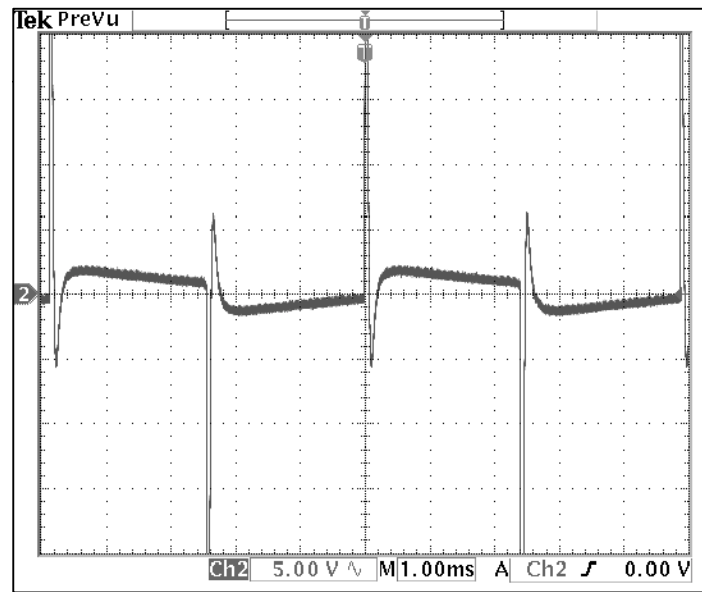


Figure 2
TREBLE to 10

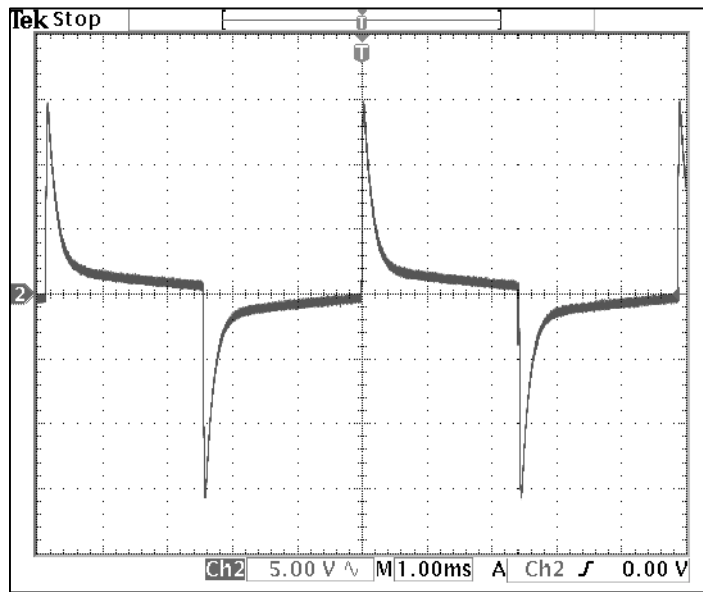


Figure 4
HI-MID to 10

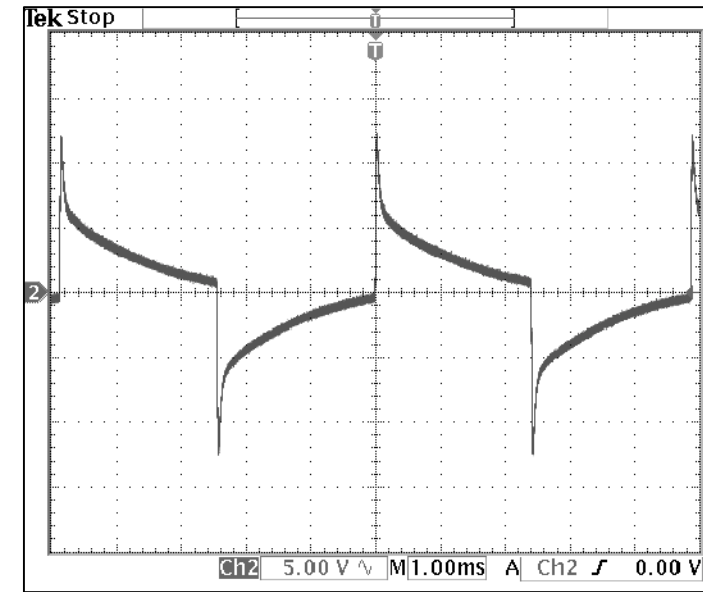


Figure 6
LO-MID to 10

Set up:

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set VOLUME, all ACTIVE EQ's, BOOST, TWEETER, and WOOFER to center(half way). CONTOUR and PRESENCE to 0.
3. Look at output with scope set on 1mS/div and 5V/div.

QTY PER ASSY	PART NUMBER	DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY				
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<small>TOLERANCES UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES</small> FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		APPROVALS		
		INIT	DATE	
MATERIAL: (SEE NOTE 1)		MECH. DESIGN:	SIZE	DRAWING NUMBER:
FINISH: (SEE NOTE 1)		ELEC:	B	206-0251-A1
PROJ. MGR.:		Q/A:	RELEASED:	REVISION
FILENAME:		SCALE: NOT TO SCALE		A1
SHEET 1 OF 2				

ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

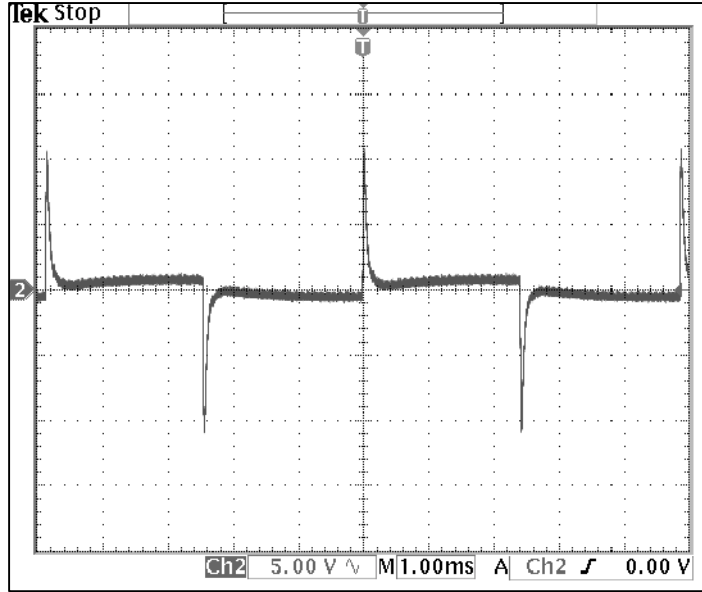


Figure 7
LO-MID to 0

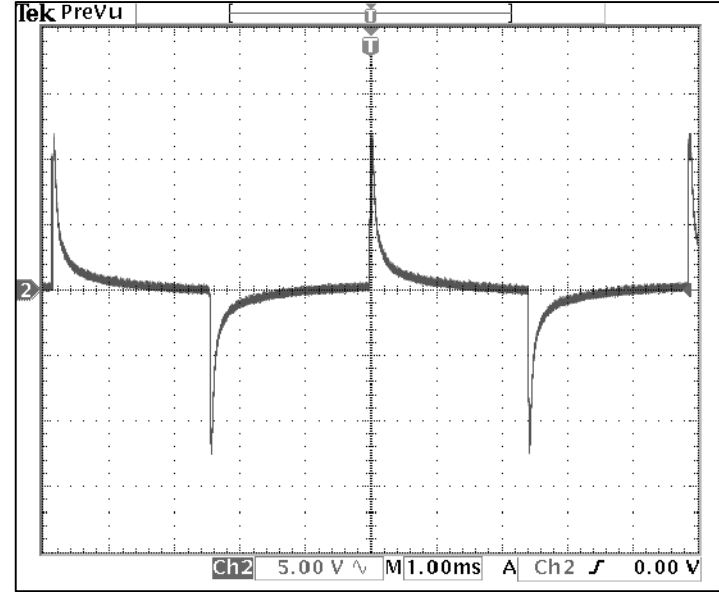


Figure 9
BASS to 0

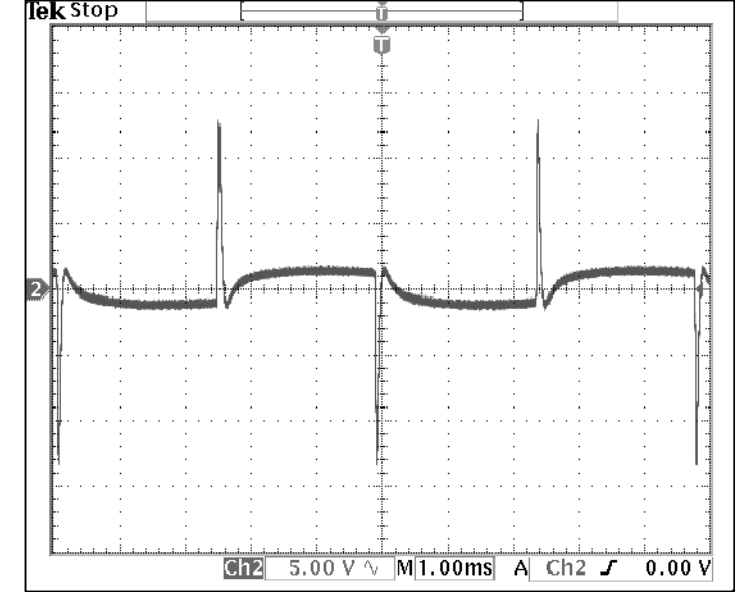


Figure 11
CONTOUR to 10

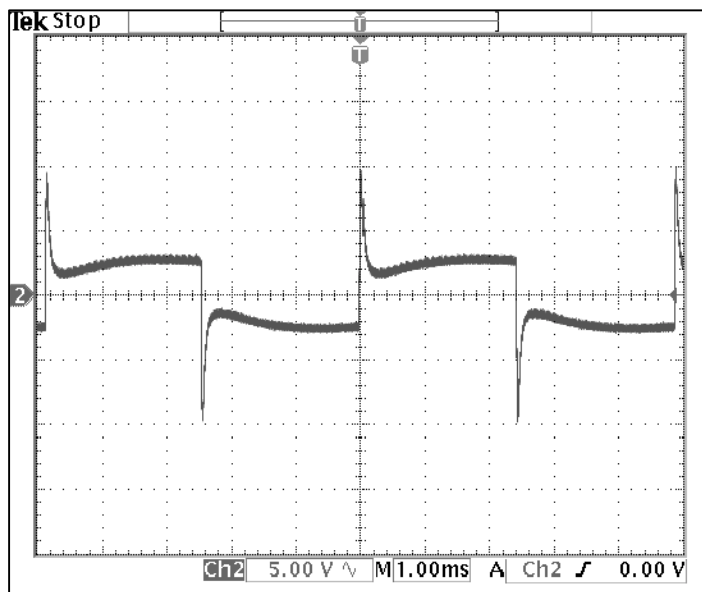


Figure 8
BASS to 10

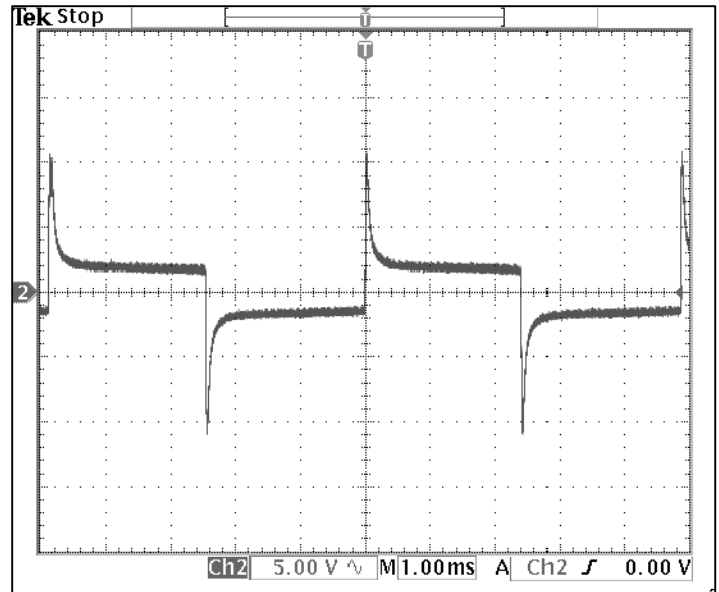


Figure 10
STRING BASS SWITCH IN

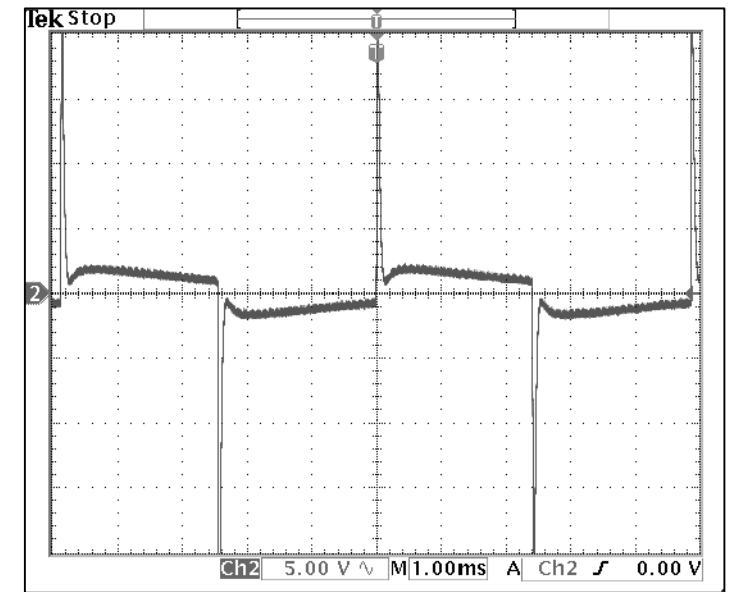


Figure 12
PRESENCE to 10

Set up:

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set VOLUME, all ACTIVE EQ's, BOOST and MASTER to center(half way), CONTOUR and PRESENCE to 0.
3. Look at output with scope set on 1mS/div and 5V/div.

QTY PER ASSY	PART NUMBER	DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY				
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<small>TOLERANCES UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES</small> FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		APPROVALS		
		INIT	DATE	
MATERIAL: (SEE NOTE 1)		MECH. DESIGN:	DRAWN BY: ATM 04/22/04	
FINISH: (SEE NOTE 1)		PROJ. MGR.:	ELEC:	
		Q/A:	RELEASED:	
		TITLE: 700RB-II/1001RB-II PREAMP TEST WAVEFORMS		SIZE: B DRAWING NUMBER: PART NUMBER: 206-0251-A1 REVISION: A1
		SCALE: NOT TO SCALE		SHEET 2 OF 2

ZONE	Dim.	ECO#	Rev.	REVISIONS	Date

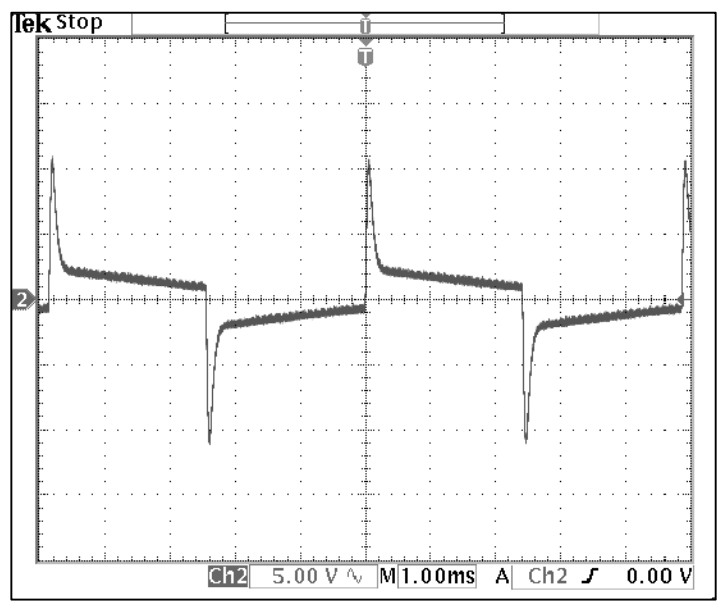


Figure 7
WOOFER HI-CUT SWITCH IN

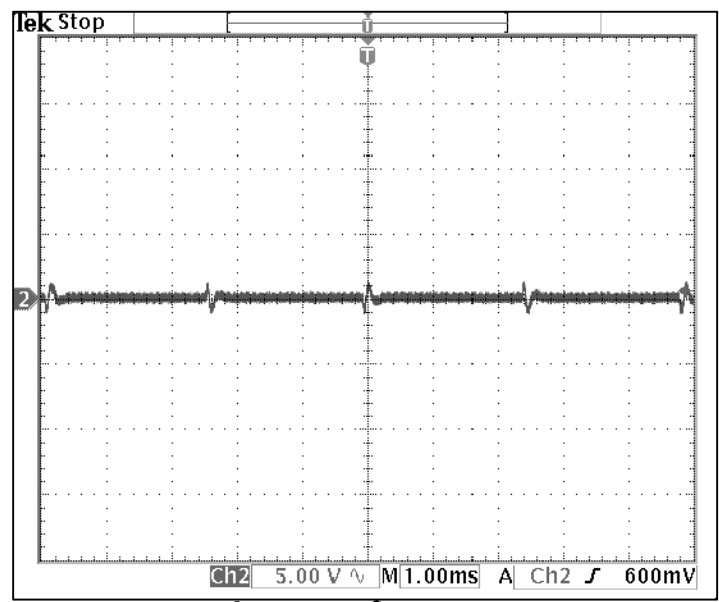


Figure 9
TWEETER HI-CUT SWITCH IN

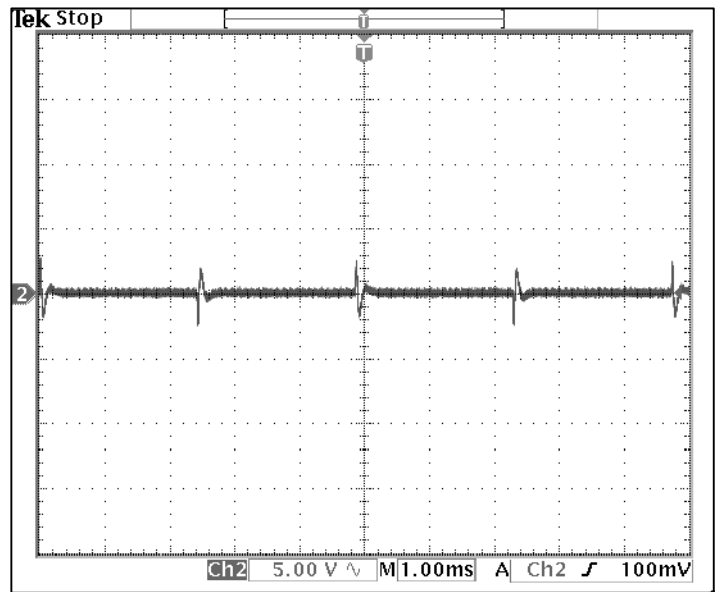


Figure 8
TWEETER

Set up:

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set VOLUME, all ACTIVE EQ's, BOOST and MASTER to center(half way), CONTOUR and PRESENCE to 0.
3. Look at output with scope set on 1mS/div and 5V/div.

QTY PER ASSY	PART NUMBER	DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY				
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<small>UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES</small> TOLERANCES FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		APPROVALS		
		INIT	DATE	
MATERIAL: (SEE NOTE 1)		MECH. DESIGN:	SIZE	DRAWING NUMBER:
FINISH: (SEE NOTE 1)		DRAWN BY: ATM	B	700RB-II/1001RB-II
Q/A:		ELEC:	FILENAME:	REVISION
RELEASED:		PROJ. MGR.:	206-0251-A1	A1
SCALE: NOT TO SCALE			SHEET 2 OF 2	

A

B

C

D

E

F

ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

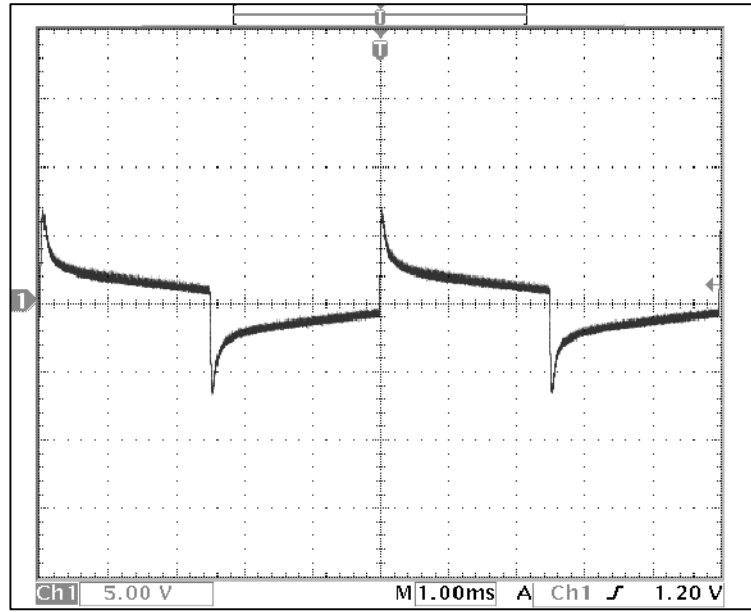


Figure 1
Tones center, Filters off

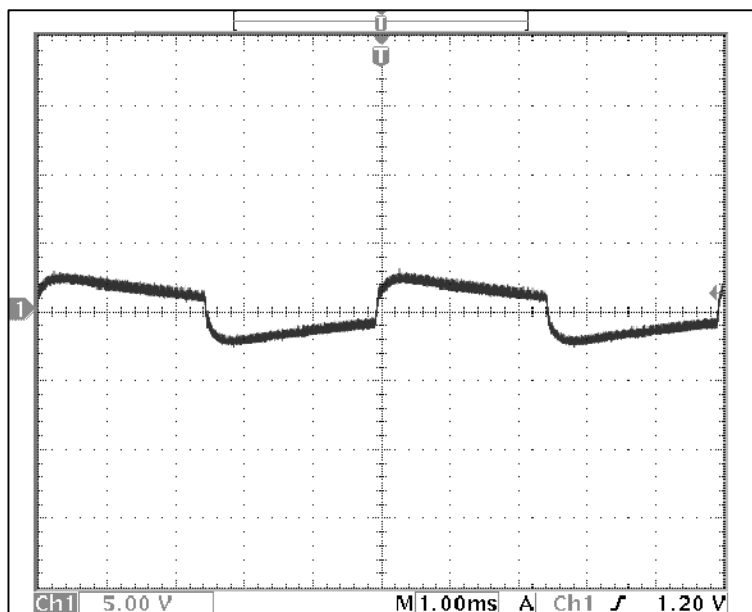


Figure 2
Treble to 0

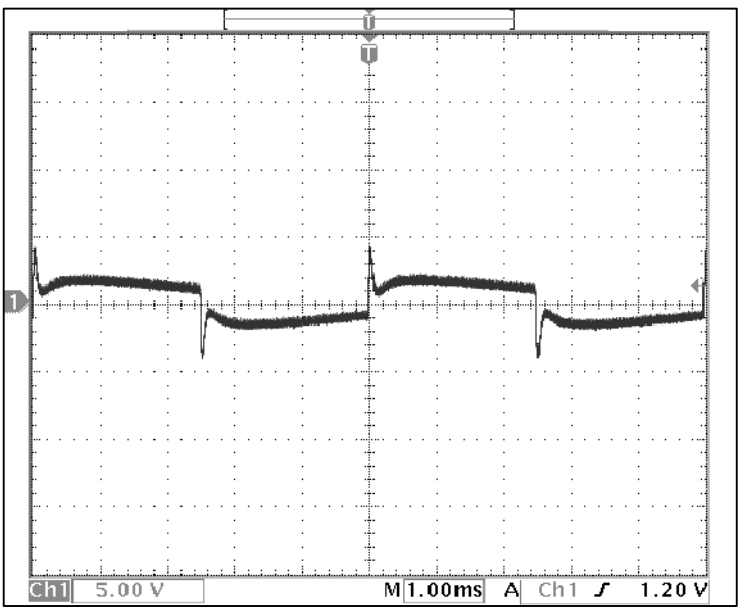
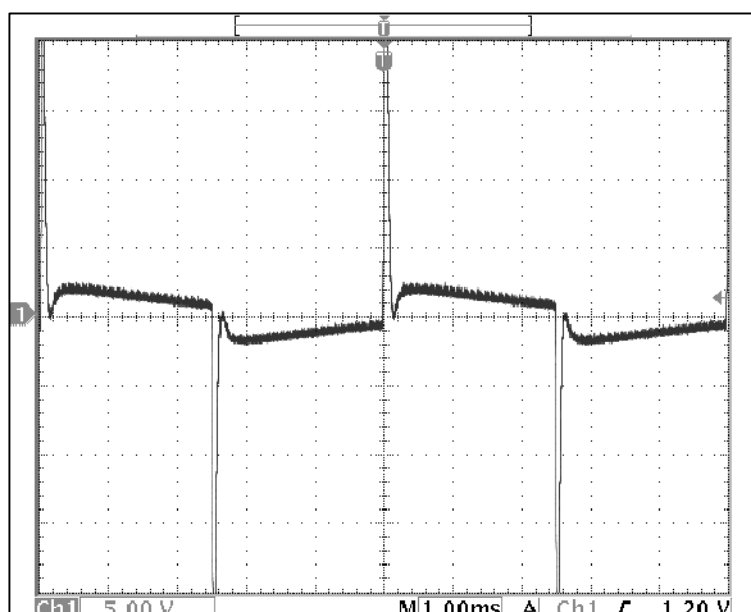


Figure 4
Hi-Mid to 0

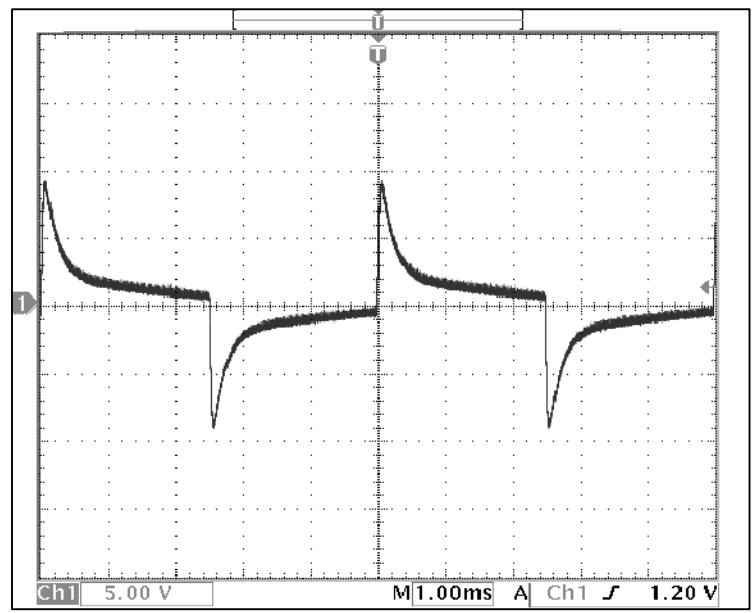


Figure 5
Hi-Mid to 10

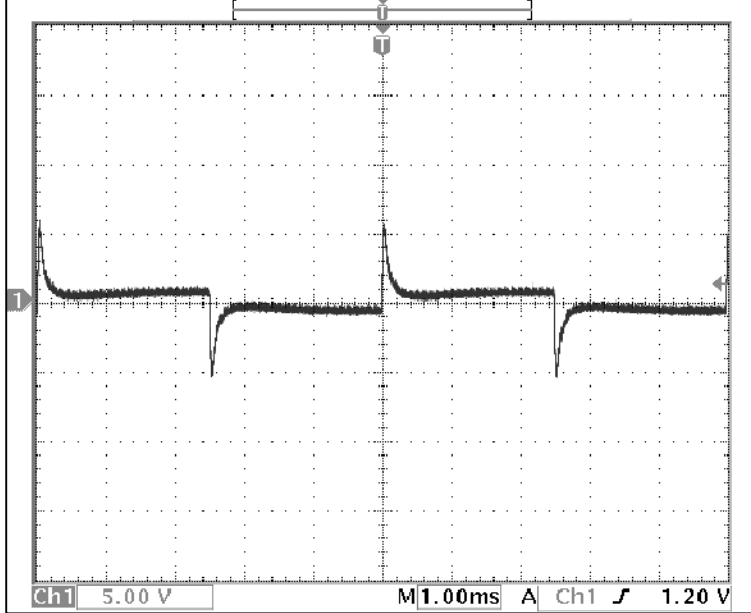


Figure 6
Lo-Mid to 0

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center(halfway), Contour and Presence to 0.
3. Look at output with scope set on 5V/div and 1ms/div.

HOLE REFERENCE CHART		
HOLE	DESCRIPTION	QTY.

QTY PER ASSY		DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY		PARTS LIST		
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UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES		gallien technology 2234 INDUSTRIAL DRIVE STOCKTON, CA 95206		
TOLERANCES FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		TITLE: 700RB-II/1001RB-II		
MATERIAL: (SEE NOTE 1)		APPROVALS INIT DATE MECH. DESIGN: DRAWN BY: EAH 8/20/04 ELEC: PROJ. MGR.: Q/A: RELEASED:		
FINISH: (SEE NOTE 1)		SIZE DRAWING NUMBER: B PART NUMBER: 206-0251-A2 REVISION A2 FILENAME: SCALE: NOT TO SCALE SHEET 1 OF 3		

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ZONE	Dim.	ECO#	Rev.	REVISIONS	Date

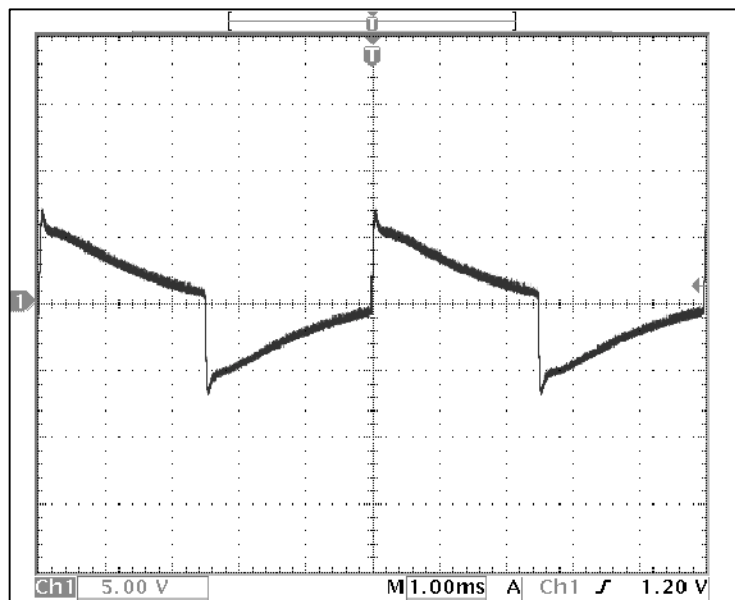


Figure 7
Lo-Mid to 10

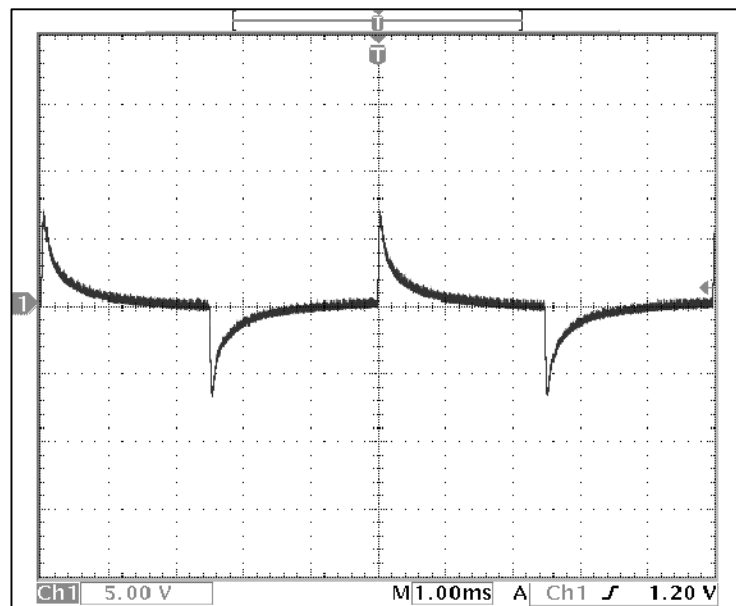


Figure 8
Bass to 0

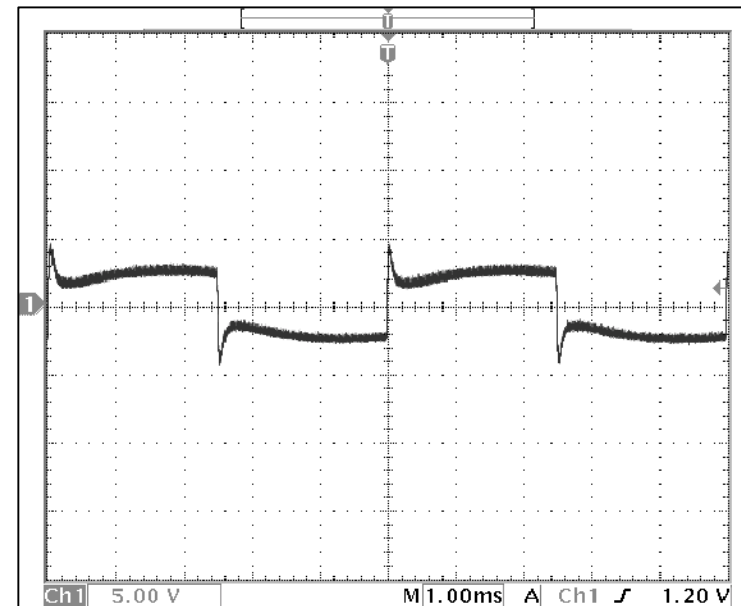


Figure 9
Bass to 10

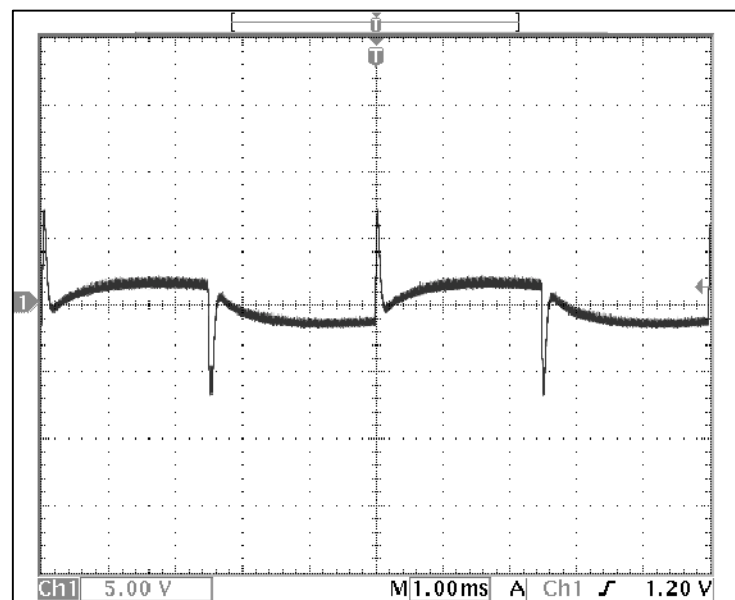


Figure 10
Contour to 10

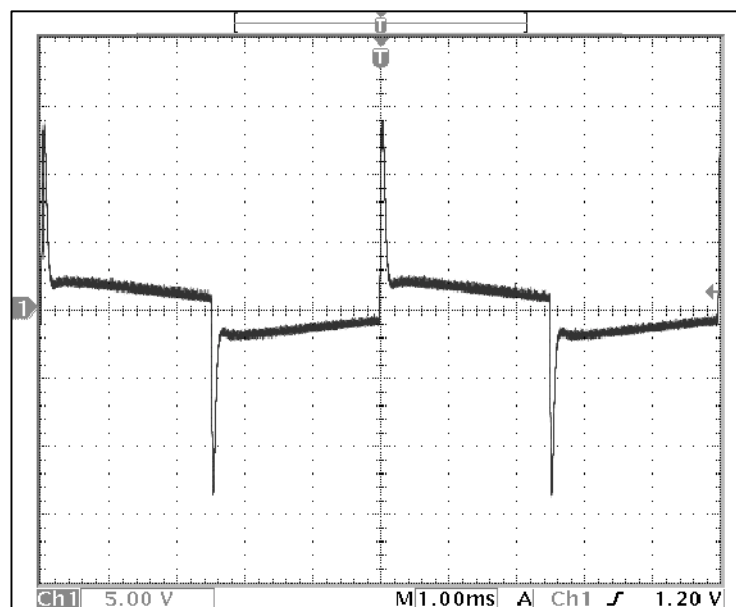


Figure 11
Presence to 10

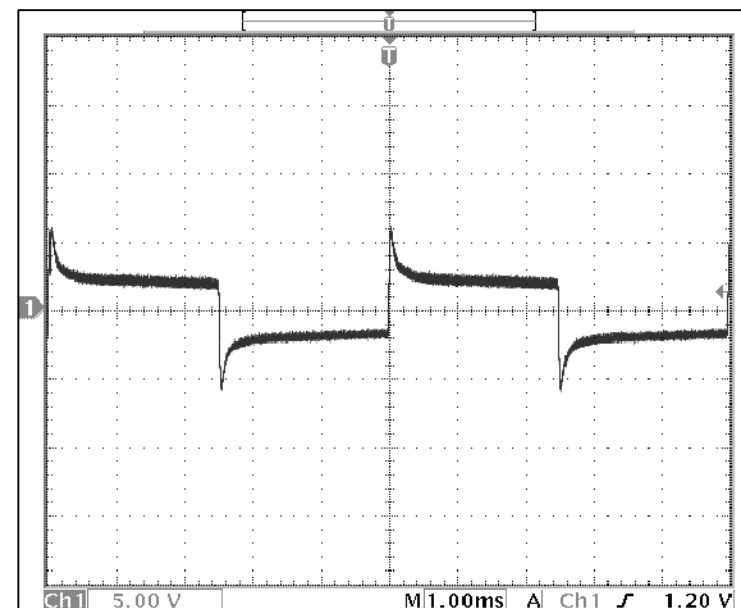


Figure 12
String Bass Switch In

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center (halfway), Contour and Presence to 0.
3. Look at output with scope set on 5V/div and 1ms/div.

HOLE REFERENCE CHART		
HOLE	DESCRIPTION	QTY.

QTY PER ASSY		DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY		PARTS LIST		
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UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES		TITLE: 700RB-II/1001RB-II		
APPROVALS TOLERANCES FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005 MATERIAL: (SEE NOTE 1) FINISH: (SEE NOTE 1)		MECH. DESIGN: DRAWN BY: EAH 8/20/04 ELEC: PROJ. MGR.: Q/A: RELEASED:		
SIZE: B		DRAWING NUMBER: 206-0251-A2		REVISION: A2
SCALE: NOT TO SCALE		SHEET 2 OF 3		

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ZONE	Dim.	ECO#	Rev.	REVISIONS	Date

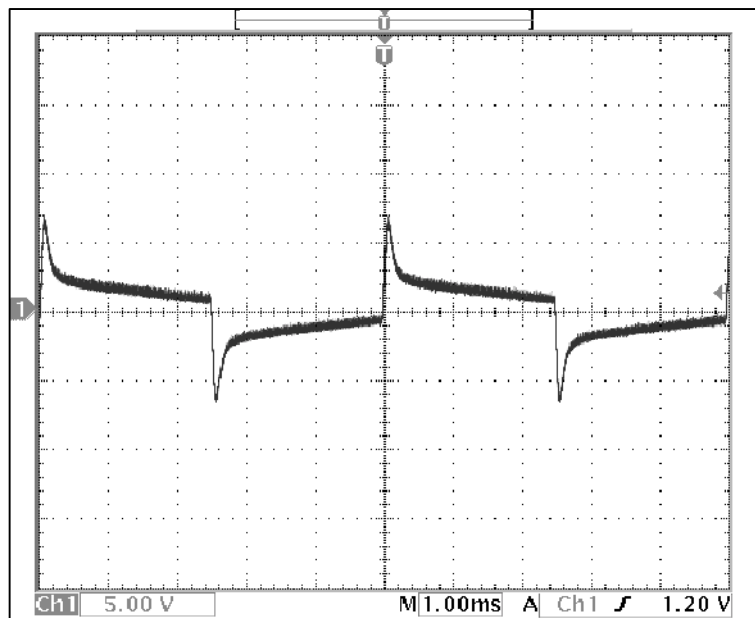
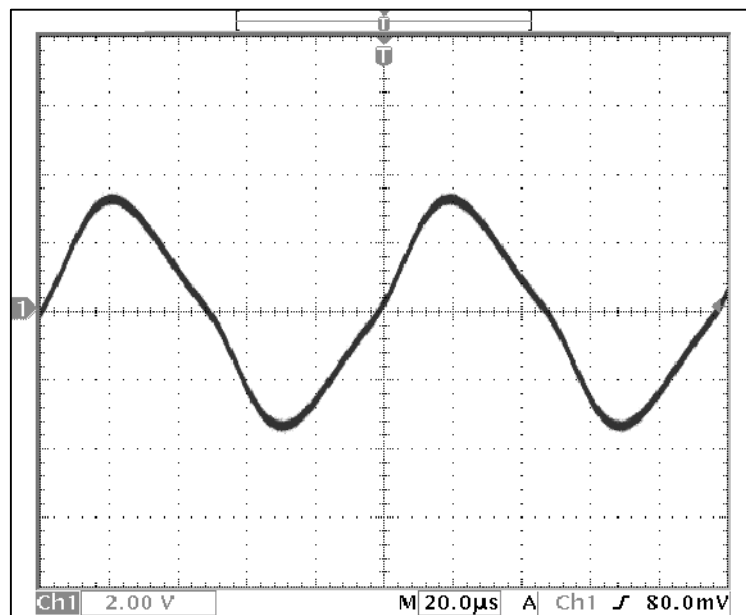
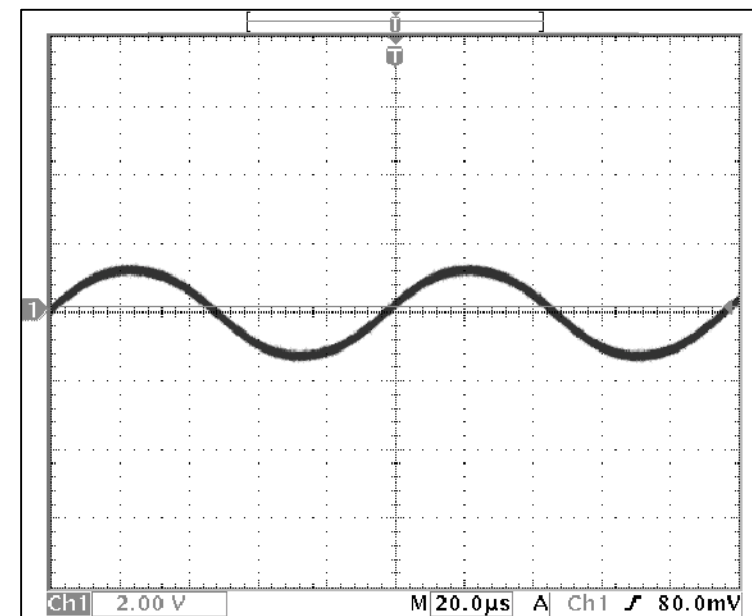


Figure 13
Woofer X-over In



*Figure 14
Tweeter ouput at 10kHz square wave



*Figure 15
Tweeter Hi-cut In

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
 2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center(halfway), Contour and Presence to 0.
 3. Look at output with scope set on 5V/div and 1ms/div.
- *Change oscilloscope time base to 20us and 2V/div.

HOLE REFERENCE CHART		
HOLE	DESCRIPTION	QTY.

QTY PER ASSY		DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY		PARTS LIST		
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APPROVALS		TITLE: 700RB-II/1001RB-II		
TOLERANCES	INIT	DATE	SIZE	DRAWING NUMBER:
FRACTION ±	MECH. DESIGN:		B	
ANGLES ±	DRAWN BY: EAH	8/20/04		PART NUMBER: 206-0251-A2
.XX ± 0.01	ELEC:			REVISION A2
.XXX ± 0.005	PROJ. MGR.:		FILENAME:	
MATERIAL: (SEE NOTE 1)	Q/A:		RELEASED:	
FINISH: (SEE NOTE 1)				SCALE: NOT TO SCALE
				SHEET 3 OF 3

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ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

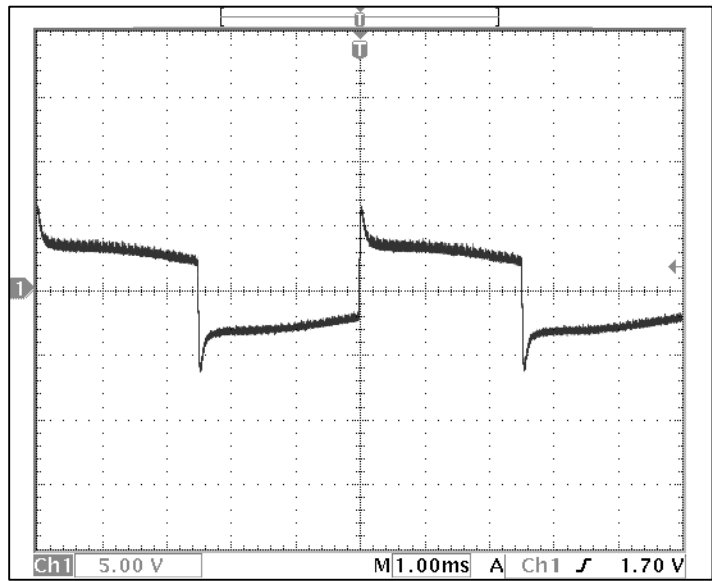


Figure 1
Tones center, Filters off

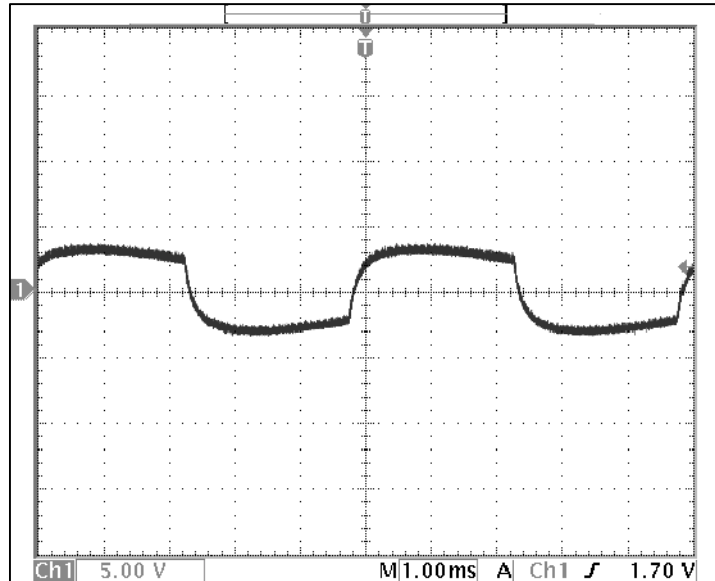


Figure 2
Treble to 0

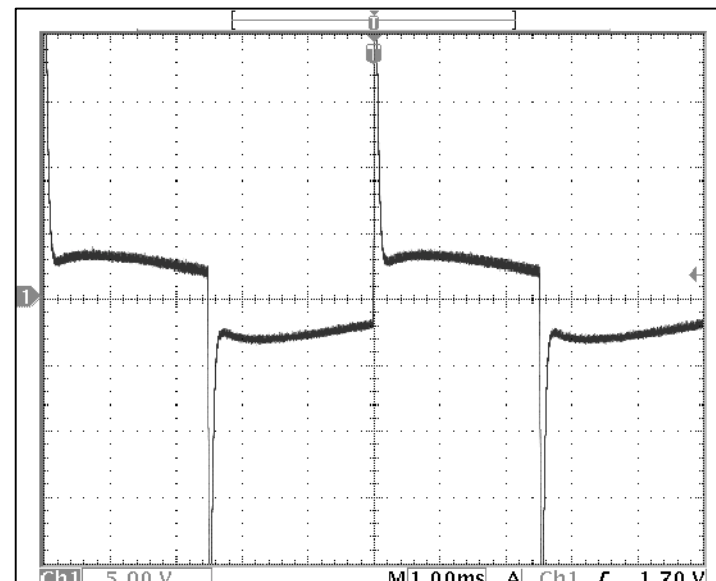


Figure 3
Treble to 10

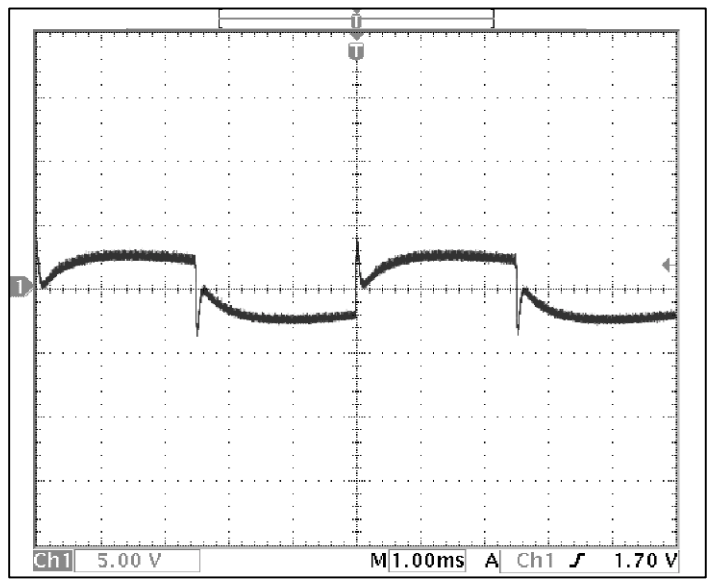


Figure 4
Hi-Mid to 0

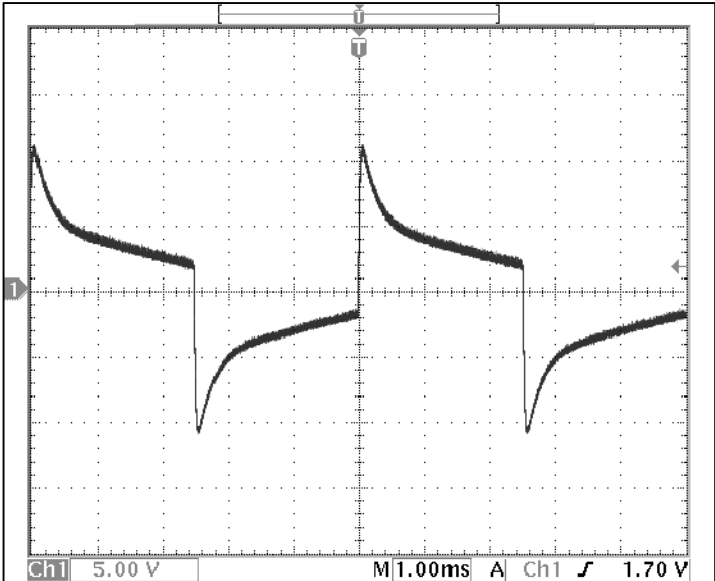


Figure 5
Hi-Mid to 10

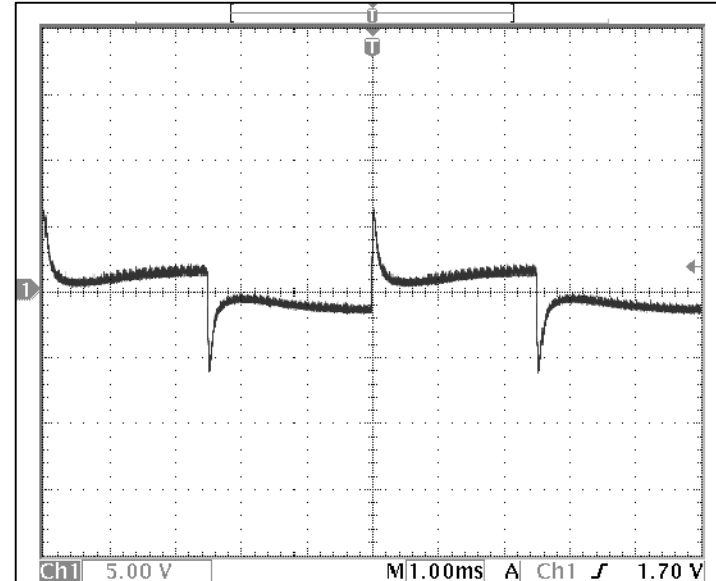


Figure 6
Lo-Mid to 0

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center(halfway), Contour and Presence to 0.
3. Look at output with scope set on 5V/div and 1ms/div.

HOLE REFERENCE CHART		
HOLE	DESCRIPTION	QTY.

QTY PER ASSY		DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY		PARTS LIST		
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SIZE: B		DRAWING NUMBER: PART NUMBER: 206-0251-A3		REVISION A3
SCALE: NOT TO SCALE		SHEET 1 OF 3		

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ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

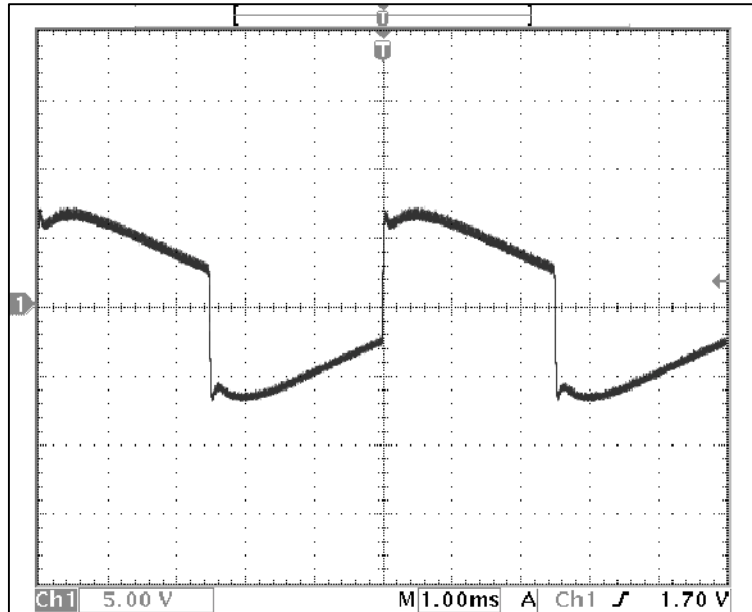


Figure 7
Lo-Mid to 10

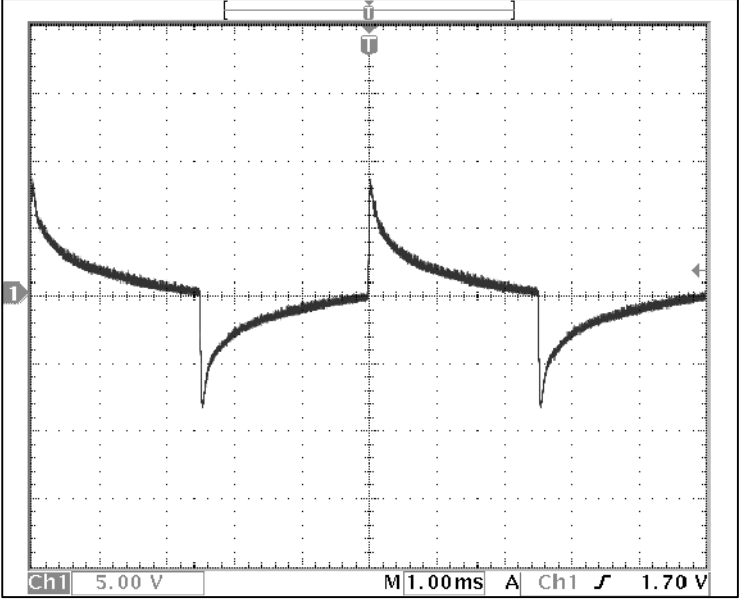


Figure 8
Bass to 0

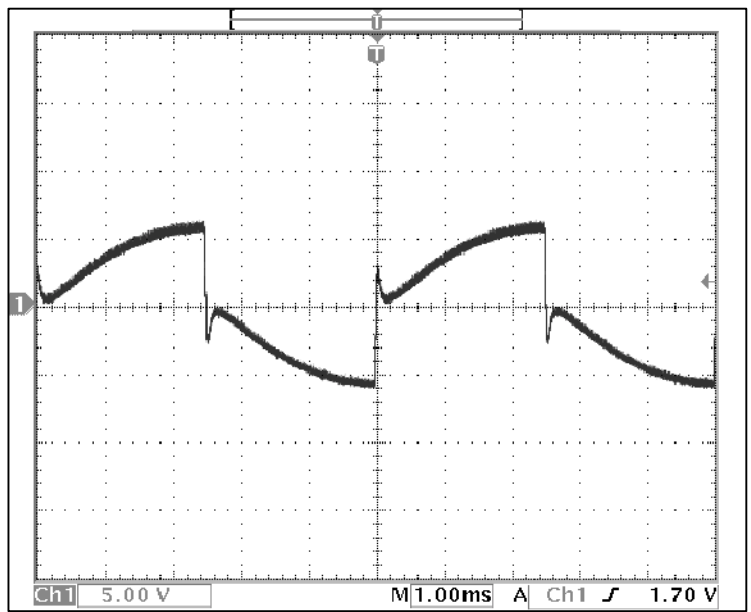


Figure 9
Bass to 10

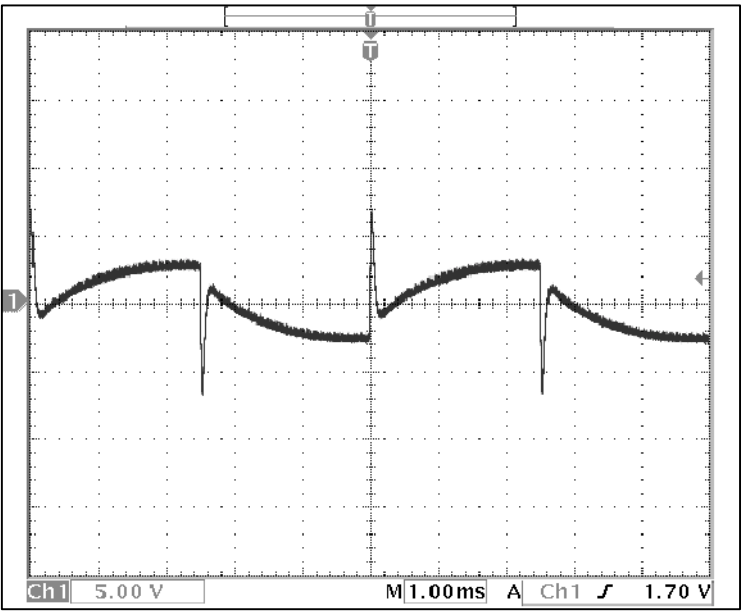


Figure 10
Contour to 10

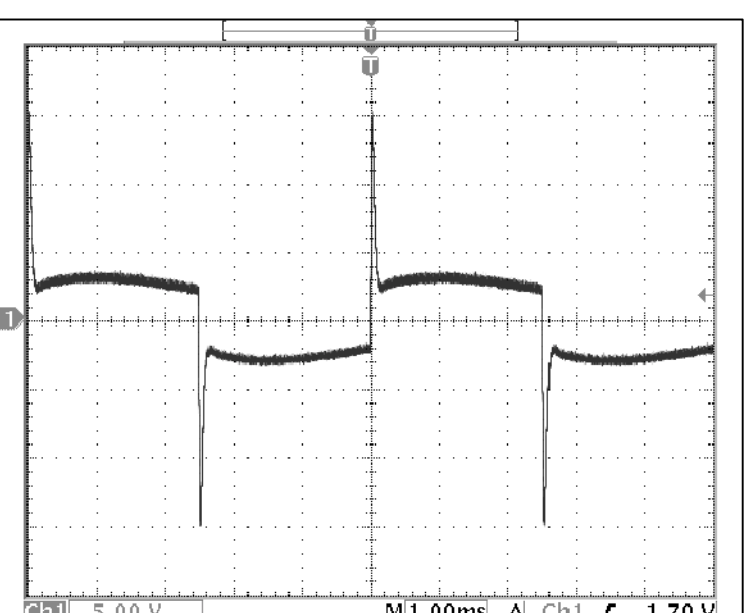


Figure 11
Presence to 10

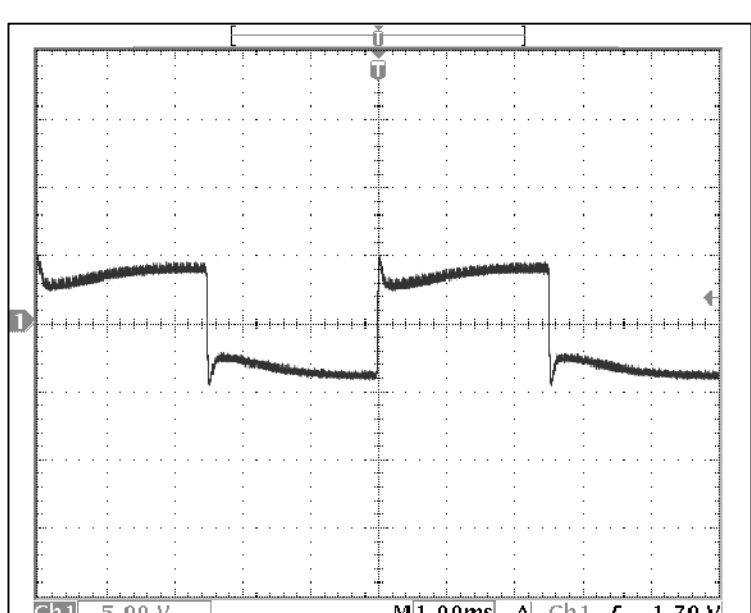


Figure 12
String Bass Switch In

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center (halfway), Contour and Presence to 0.
3. Look at output with scope set on 5V/div and 1ms/div.

HOLE REFERENCE CHART		
HOLE	DESCRIPTION	QTY.

QTY PER ASSY		DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY		PARTS LIST		
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TOLERANCES FRACTION ±		TITLE: 700RB-II/1001RB-II		
ANGLES ±		SIZE: DRAWING NUMBER:		
.XX ± 0.01		B		
.XXX ± 0.005		PART NUMBER: 206-0251-A3		
MATERIAL: (SEE NOTE 1)		REVISION: A3		
FINISH: (SEE NOTE 1)		FILENAME:		
APPROVALS		SCALE: NOT TO SCALE		
INIT	DATE	SHEET 2 OF 3		
MECH. DESIGN:	8/20/04			
DRAWN BY: EAH				
ELEC:				
PROJ. MGR.:				
Q/A:				
RELEASED:				

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ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

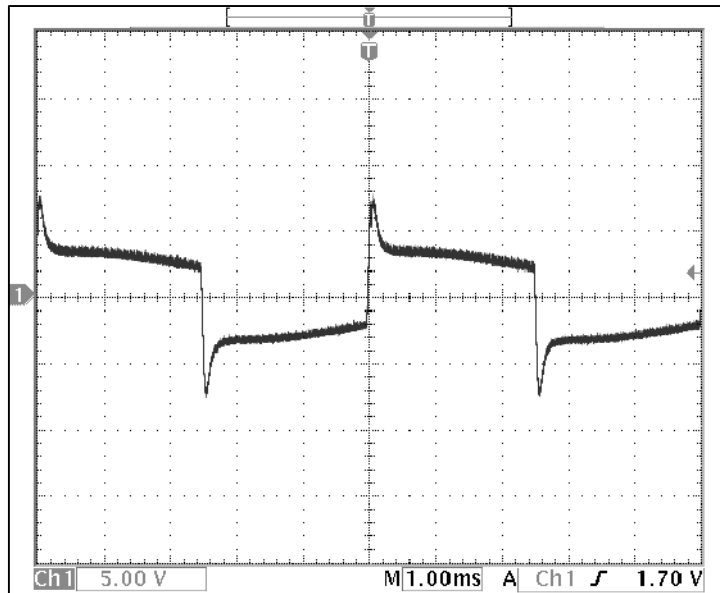
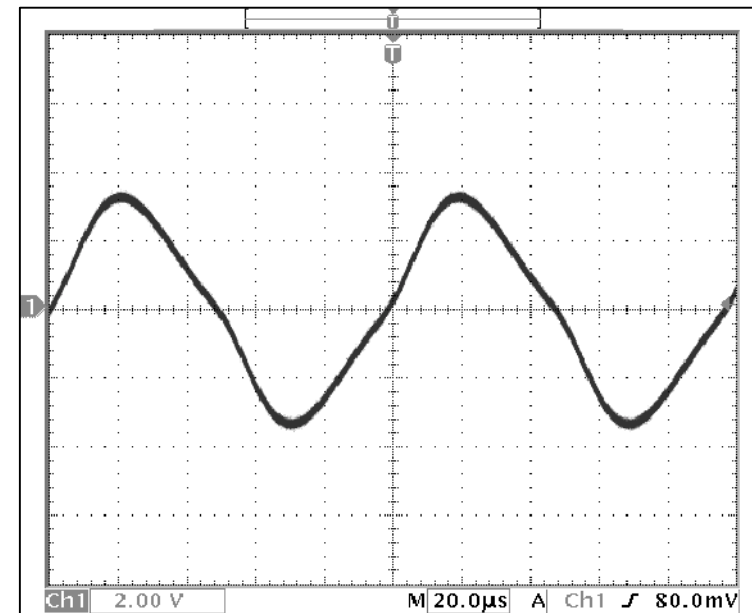
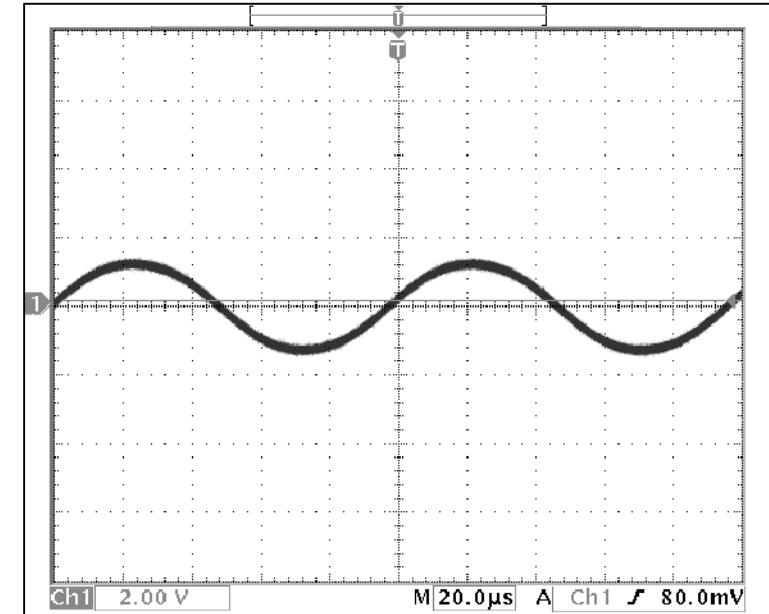


Figure 13
Woofer X-over In



*Figure 14
Tweeter ouput at 10kHz square wave



*Figure 15
Tweeter Hi-cut In

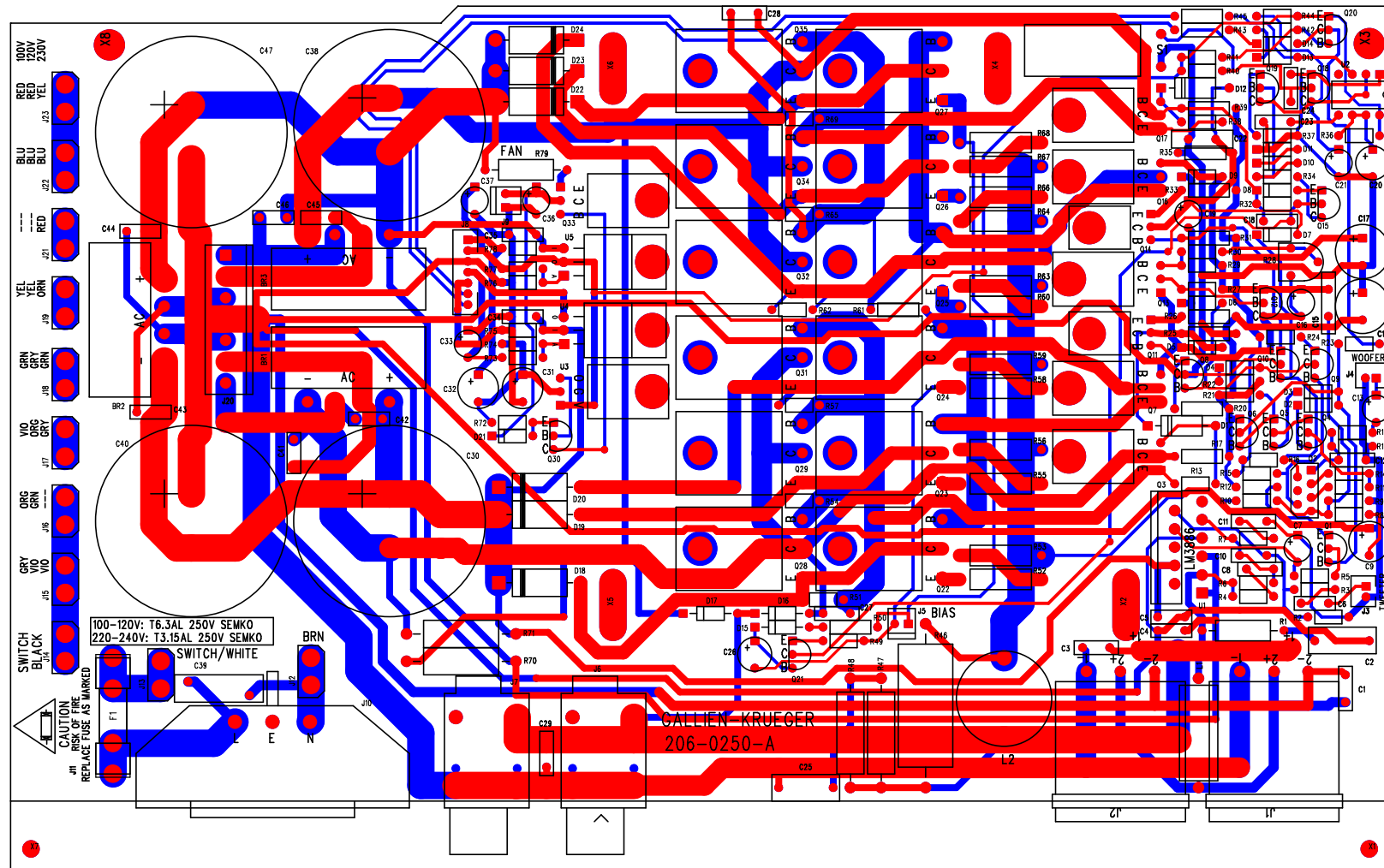
1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
 2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center(halfway), Contour and Presence to 0.
 3. Look at output with scope set on 5V/div and 1ms/div.
- *Change oscilloscope time base to 20us and 2V/div.

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UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES		TITLE: 700RB-II/1001RB-II		
APPROVALS TOLERANCES FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		INIT: EAH DATE: 8/20/04 MECH. DESIGN: DRAWN BY: ELEC: PROJ. MGR.: Q/A: RELEASED:		SIZE: B DRAWING NUMBER: PART NUMBER: 206-0251-A3 REVISION: A3
MATERIAL: (SEE NOTE 1) FINISH: (SEE NOTE 1)		SCALE: NOT TO SCALE SHEET 3 OF 3		

700RB-II Power Amp 206-0250-A

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-2060-0	U2	LM555, TIMER	NATIONAL	LM555CN
001-3886-0	U1	LM3886 ,68W AUDIO POWER AMP	NATIONAL	LM3886T
010-0000-0	Q2	2SC3381BL,NPNX2,80V,100MA,2-10M1B	TOSHIBA	2SC3281BL
010-0001-0	Q1 Q4-6 Q8 Q21	2SC3478, NPN,180V,100MA,TO-92	NEC	2SC3478-K
010-0003-0	Q11	2SC3502-F,NPN,200V,100MA,TO-126	TOSHIBA	2SC3502
010-0012-0	Q18-19 Q30	MPSAO6, NPN,80V,500MA,TO-92	MOTOROLA	MPS-A06
010-0035-0	U3	LM35DT, TEMPERATURE SENSOR, TO-220	NATIONAL	LM35DT
010-1002-0	Q9-10 Q20	2SA1376, PNP,180V,100MA,TO-92	NEC	2SA1376-K
010-1003-0	Q14	2SA1380-F,PNP,200V,100MA,TO-126	SANYO/TOSHIBA	2SA1380-F/E
010-1013-0	Q12 Q15	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
012-0002-0	Q13 Q16-17	2SC4793,NPN,200V,1.5A,2-10R1A	TOSHIBA	2SC4793
012-0003-0	Q25-27 Q32 Q34-35	2SC5242,NPN,230V,15A,2-16C1A	TOSHIBA	2SC5242-O
012-1002-0	Q3 Q7 Q33	2SA1837,PNP,200V,1.5A,2-10R1A	TOSHIBA	2SA1837
012-1003-0	Q22-24 Q28-29 Q31	2SA1962,PNP,230V,15A,2-16C1A	TOSHIBA	2SA1962
014-0070-0	U5	LM317	NATIONAL	LM317
014-1072-0	U4	LM337	NATIONAL	LM337
020-0004-0	D13	1N755A, ZENER,7.5V,500MW ,D035	TAITRON	1N755A
020-0036-0	D5 D9	1N747A, ZENER, 3.6V, 5%, 400MW, DO-35	TAITRON	1N747A
020-0050-0	D8	1N751, ZENER,5.1V,10%,400MW,DO-35	NATIONAL	1N751
020-0240-0	D21	1N970B, ZENER, 24V, 5%, 500MW, DO-35	TAITRON	1N970B
020-1000-0	D2-4 D10-11 D14	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
020-1022-0	D6-7	BAV20, RECT, 200V, DO-35	NATIONAL	BAV20
020-1104-0	D15	SHOTTKY, 1A, 40V, 10NS, DO-41	MOTOROLA	1N5819
020-1120-0	D1 D12	MUR120,RECT-FAST, 1A, 200V, 25NS, 59-04	MOTOROLA	MUR120
020-1122-0	D18-20 D22-24	MUR410, RECT-FAST, 4A, 100V	MOTOROLA	MUR410
020-2106-0	D16-17	1N4004,RECT,1A,400V,DO-41	TAITRON	1N4004
023-0112-0	BR1-3	BRIDGE, 25A, 200V, VERT, PC, MO25S-02	CHENG-YI	MP25-Q2S
031-1336-0	C20 C26	CAP,ELEC,RAD,336,20%,25V	UNITED CHEMI-CON	SRG25VB33RM5X7LL
031-2105-0	C21	CAP,ELEC,RAD, 105, 20%, 50V	UNITED CHEMI-CON	C440C105M5U5CA
031-2106-0	C7,16,19,33,36,37	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2107-0	C9 C31-32	CAP,ELEC,RAD,107, 20%, 50V	UNITED CHEMI-CON	SMG50VB101M8X11LL
031-2159-0	C30 C38 C40 C47	CAP, ELEC, RAD, 159, 20%, 50V	UNITED CHEMI-CON	SMH50VN153M35X45T2
031-2335-0	C13	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
031-4476-0	C14 C17	CAP,ELEC,RAD,476,-10%+50%,100V	UNITED CHEMI-CON	SMG100VB47RM10X12LL
032-4103-0	C23	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C4,6,18,24,34,35,41-46	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4333-0	C11	CAP,PE,333,5%,100V,	PANASONIC	ECQV1333JM
032-4472-0	C1 C3 C27-29	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
032-7104-0	C2 C25	CAP,PE,104,10%, 250V	ILLINOIS CAPACITOR	104MSR250K
034-4221-0	C10	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4470-0	C8	CAP,MCR,47PF,5%,100V,NPO	TAITRON	TMRS470J100NPOB
034-4471-0	C12	CAP,MCR,470pF,5%,100V,	TAITRON	TMRS471J100NPOB
034-7103-0	C39	CAP, CERMIC DISK, 103, 10%, X-250V	PANASONIC	ECK-DRS103ZV
035-8030-0	C15	CAP MICA AXIAL , 3pF, 10%, 500V	CORNELL	CD10CD030D03
035-8561-0	C22	CAP MICA RADIAL, 561, 5%, 300V	CORNELL	CD15FC561J103
052-2212-0	R43 R45	RES,METAL FILM,2.21k,1/4W,1%	ECI	M2F1AK002.21
052-5622-0	R25 R35	RES,METAL FILM,5.62K,1/4W,1%	ECI	M5F1AK005.62
053-0270-0	R1	RES ,CARBON FILM,2.7 ,1/2W,5%	ECI	R5J3AJ002.70
054-100-0	R52,53,55,56,58,60,63 R64,66-68	RES, METAL OXIDE, 0.1, 1W, 5%	ECI	MO10J3AJ000.10
054-.330-0	R79	RES, METAL OXIDE, 0.33, 1W, 5%	ECI	MO10J3AJ000.33
055-0101-0	R47-48	RES, METAL OXIDE, 10, 2W, 5%	ECI	MOM20J3AJ010.00
055-2702-0	R70-71	RES, METAL OXIDE, 2.7K, 2W, 5%	ECI	MOM20J3AK002.70
056-0100-0	R46	RES, CERAMIC WW, 1.0, 5W, 10%	ECI	WWC50J3AJ001.00
059-1000-0	R17 R39	RES,MF,FUSE, 10.0, 1/4W,1%	JUKN.OHM	FR25-10.0
059-1002-0	R20 R31 R50	RES,MF,FUSE, 1.00K,1/4W,1%	JUKN.OHM	FR25-1.00K
059-4750-0	R26 R33	RES,MF,FUSE, 47.5, 1/4W,1%	JUKN.OHM	FR25-47.5
059-6810-0	R61	RES,MF,FUSE, 68.1, 1/4W,1%	JUKN.OHM	FR25-68.1
060-1001-0	R72	RES, METAL FILM, 100, 1/8W, 1%	ECI	M1F1AJ100.00
060-1002-0	R3,7,8,13,19,30,38,49 R75 R78	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R40-41	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R36 R44	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1213-0	R9 R18	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10
060-1821-0	R11 R14 R27	RES,METAL FILM, 182, 1/8W, 1%	ECI	M1F1AJ182.00



PCB WORK INSTRUCTIONS

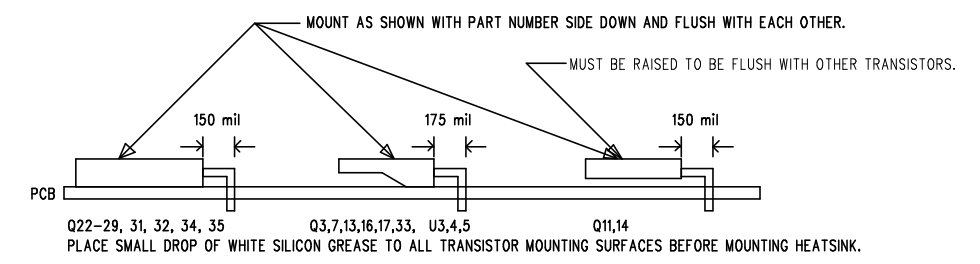
DWG 420-0250-A

NOTES:

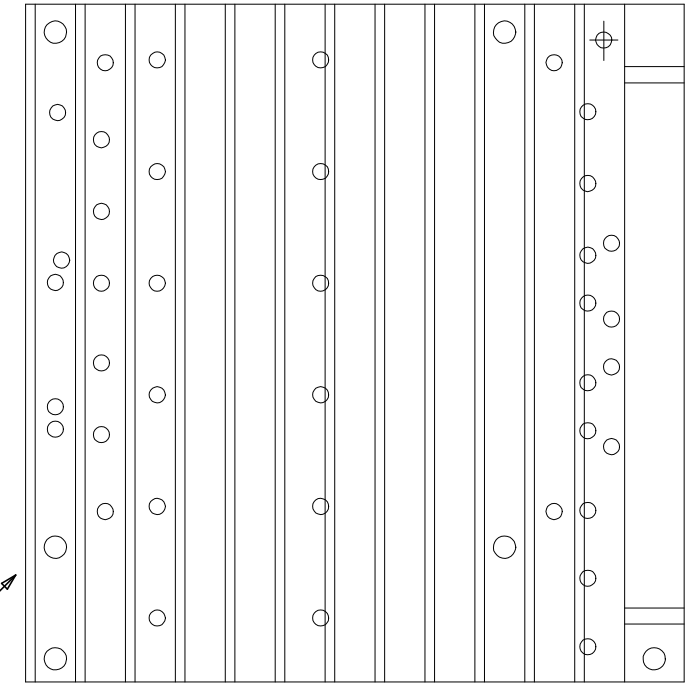
- UNLESS OTHERWISE SPECIFIED:
1. SQUARE PADS ON THRU HOLE PARTS (ie: CONNECTORS, DIPS, SIPS, LEDS) DENOTE PIN 1.
 2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTION.
 3. ALL BOARDS MUST BE BARE BOARD TESTED.
 4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.

LOADING

5. SEE FORMING AND LOADING INSTRUCTIONS BELOW FOR INSTALLING SPECIFIED COMPONENTS.
6. CHECK THAT R52,53,55,56,58,60,63,64,66,67,68 & S1 ARE FLUSH TO BOARD.
7. CHECK THAT ALL CONNECTORS AND JACKS ARE FLUSH WITH PCB.
8. MAKE CERTAIN ALL POWER TRANSISTOR MOUNTING HOLES ARE PROPERLY ALIGNED FOR HEAT SINK.



HEAT SINK ASSEMBLY

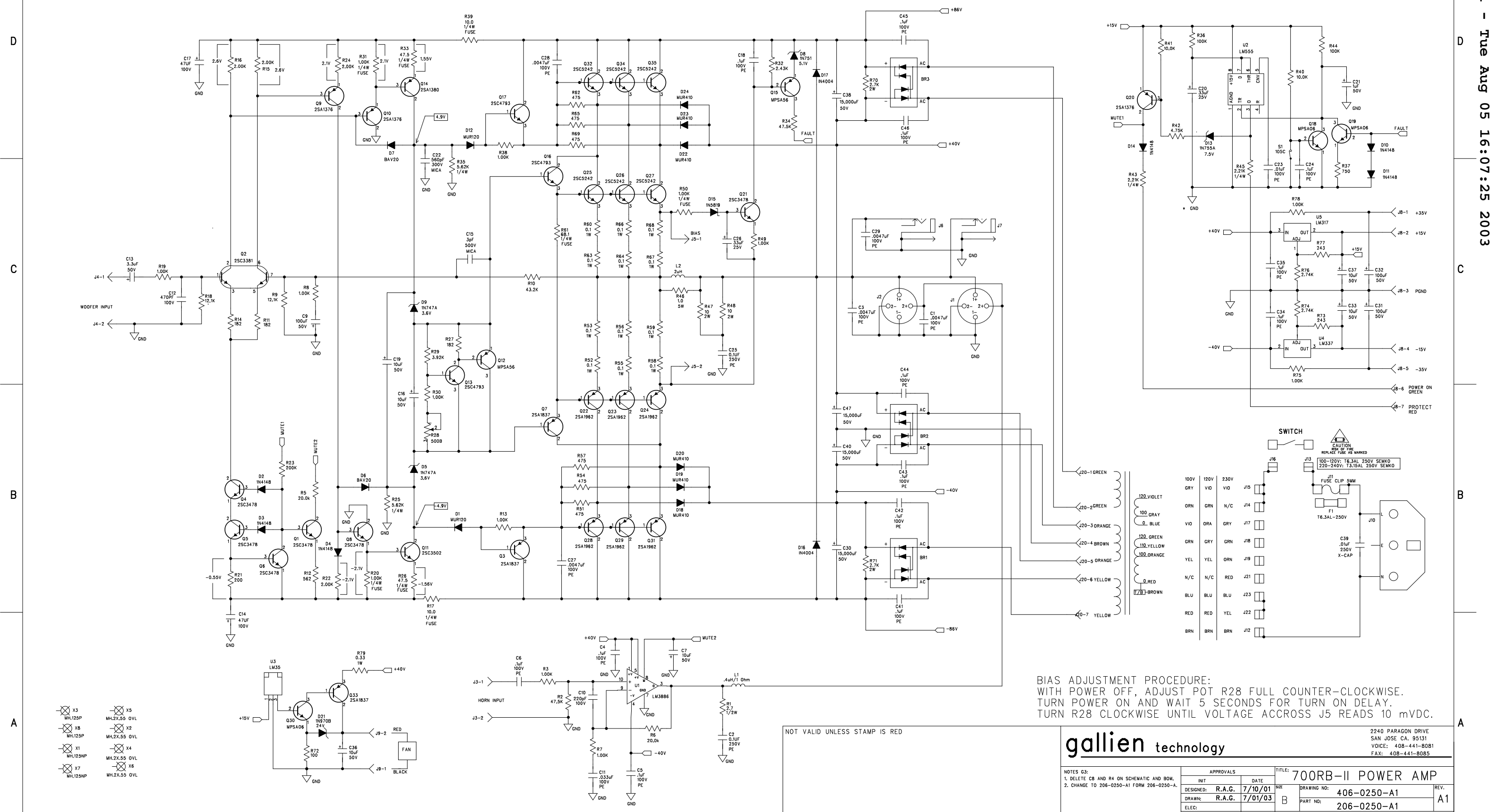


APPLY THERMAL INSULATOR TAPE (105-0014-0), AND ALIGN WITH THIS EDGE.

NOT VALID UNLESS STAMP IS RED		2240 PARAGON DRIVE SAN JOSE CA. 95131 VOICE: 408-441-8081 FAX: 408-441-8085	
gallien technology		TITLE: 700RB-II POWER AMP BD	
APPROVALS		SIZE: B	DRAWING NO: 405-0250-A
INIT	DATE	REV. A	PART NO: 145-0250-A
DESIGNED: R.A.G.	7/16/01		
DRAWN: R.A.G.	12/02/02	COMPANY: GALLIEN-KRUEGER	
ELEC:		FILENAME: 5250A	
MECH:		GERBER FILE NAME: sst01289pbo	
LAYER DESCRIPTION: SQRSSBREESILKSCROWN			

Customer Name:		Gallien-Krueger		Current Rev #:	A0	New ECO Rev #:	A1		
Model:		700RB-II		Distribute To:		Page:	1	Of:	1
Assembly Description:		700RB-II power amp board		Originator:	A . R . V .				
Assembly Numbers:		206-0250-A 145-0250-A		Approved by:					
				Effective Date:	6/26/2003				
Effective				Document Update		Date	Initials		
<input checked="" type="checkbox"/>	All in Process	<input checked="" type="checkbox"/>	Next Buy	<input type="checkbox"/>	Artwork				
<input type="checkbox"/>	All in Service	<input type="checkbox"/>	Next Production Run	<input type="checkbox"/>	Assembly Dwg.				
<input type="checkbox"/>	All in Stock	<input type="checkbox"/>		<input type="checkbox"/>	Board Artwork				
Beginning Serial Number:				<input checked="" type="checkbox"/>	BOM				
Reason For Change				<input type="checkbox"/>	Control Form				
Horn amp oscillates when approaching full power				<input checked="" type="checkbox"/>	Costing				
				<input type="checkbox"/>	Fab Drawing				
				<input type="checkbox"/>	Inspection Proc.				
				<input type="checkbox"/>	Part Master File				
				<input checked="" type="checkbox"/>	Schematic				
				<input type="checkbox"/>	Service Manual				
				<input checked="" type="checkbox"/>	Test Procedure				
				<input type="checkbox"/>					
				<input type="checkbox"/>					
Other Affected Assemblies									
<input type="checkbox"/> Continued on ECO Supplement Page									
Description Of Change				Distribution		Date	Initials		
				<input type="checkbox"/>	Accounting				
Remove loop compensation R4 (20.0k) and C8 (47pf)				<input type="checkbox"/>	Assembly				
For boards in production clip out R4.				<input type="checkbox"/>	Customer				
Layout not updated.				<input checked="" type="checkbox"/>	Engineering				
				<input checked="" type="checkbox"/>	Incoming Q.C.				
				<input type="checkbox"/>	Planning				
				<input checked="" type="checkbox"/>	Production Eng.				
				<input checked="" type="checkbox"/>	Purchasing				
				<input type="checkbox"/>	Q.A.				
				<input type="checkbox"/>	Receiving				
				<input type="checkbox"/>	Service				
				<input checked="" type="checkbox"/>	Test				
				<input type="checkbox"/>	Vendor				
				<input type="checkbox"/>					
				<input type="checkbox"/>					
<input type="checkbox"/> Continued on ECO Supplement Page				<input type="checkbox"/>	Drawing(s) attached				
Part Number	Description	Parts Added		Parts Deleted					
		Qty	Ref. Designator	Qty	Ref. Designator				
060-2003-0	20.0k 1/8W 1%			1	R4				
034-4470-0	47pf 100V			1	C8				

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



BIAS ADJUSTMENT PROCEDURE:
 WITH POWER OFF, ADJUST POT R28 FULL COUNTER-CLOCKWISE.
 TURN POWER ON AND WAIT 5 SECONDS FOR TURN ON DELAY.
 TURN R28 CLOCKWISE UNTIL VOLTAGE ACROSS J5 READS 10 mVDC.

NOT VALID UNLESS STAMP IS RED

gallien technology

2240 PARAGON DRIVE
 SAN JOSE CA. 95131
 VOICE: 408-441-8081
 FAX: 408-441-8085

TITEL: 700RB-II POWER AMP		REV.:
DESIGNED: R.A.G. 7/10/01	DRAWING NO: 406-0250-A1	A1
DRAWN: R.A.G. 7/01/03	PART NO: 206-0250-A1	
COMPANY: GALLIEN KRUEGER		FILENAME: 6250A1.sch

NOTES C3:
 1. DELETE C8 AND R4 ON SCHEMATIC AND BOM.
 2. CHANGE TO 206-0250-A1 FORM 206-0250-A.

- X3 MH.125P
- X5 MH.2X.55 OVL
- X8 MH.125P
- X2 MH.2X.55 OVL
- X1 MH.125NP
- X4 MH.2X.55 OVL
- X7 MH.125NP
- X6 MH.2X.55 OVL

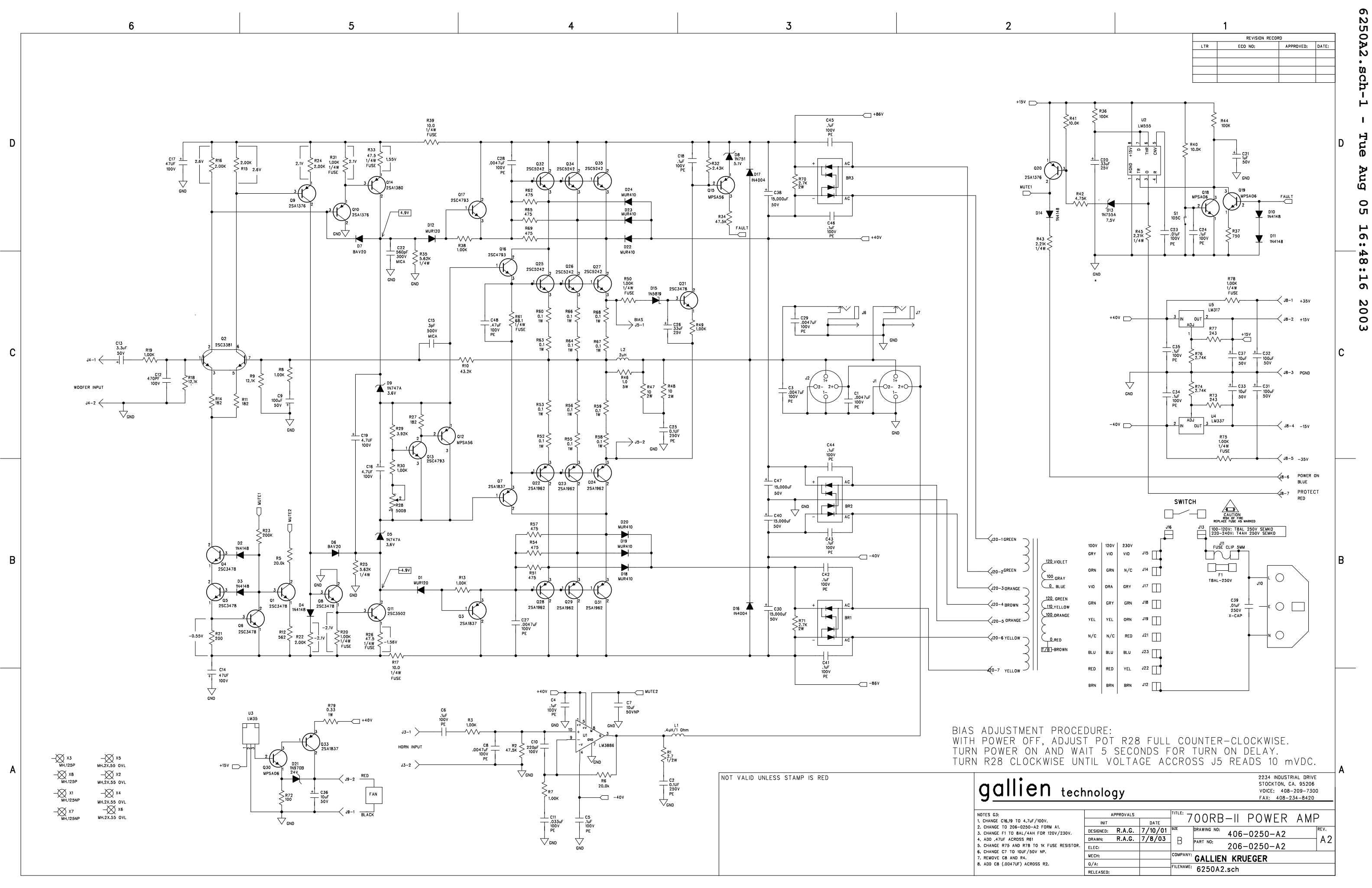
GALLIEN-KRUEGER

700RB-II Power Amp 206-0250-A1

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-2060-0	U2	LM555, TIMER	NATIONAL	LM555CN
001-3886-0	U1	LM3886 ,68W AUDIO POWER AMP	NATIONAL	LM3886T
010-0000-0	Q2	2SC3381BL,NPNX2,80V,100MA,2-10M1B	TOSHIBA	2SC3281BL
010-0001-0	Q1 Q4-6 Q8 Q21	2SC3478, NPN,180V,100MA,TO-92	NEC	2SC3478-K
010-0003-0	Q11	2SC3502-F,NPN,200V,100MA,TO-126	TOSHIBA	2SC3502
010-0012-0	Q18-19 Q30	MPSA06, NPN,80V,500MA,TO-92	MOTOROLA	MPS-A06
010-0035-0	U3	LM35DT, TEMPERATURE SENSOR, TO-220	NATIONAL	LM35DT
010-1002-0	Q9-10 Q20	2SA1376, PNP,180V,100MA,TO-92	NEC	2SA1376-K
010-1003-0	Q14	2SA1380-F,PNP,200V,100MA,TO-126	SANYO/TOSHIBA	2SA1380-F/E
010-1013-0	Q12 Q15	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
012-0002-0	Q13 Q16-17	2SC4793,NPN,200V,1.5A,2-10R1A	TOSHIBA	2SC4793
012-0003-0	Q25-27 Q32 Q34-35	2SC5242,NPN,230V,15A,2-16C1A	TOSHIBA	2SC5242-O
012-1002-0	Q3 Q7 Q33	2SA1837,PNP,200V,1.5A,2-10R1A	TOSHIBA	2SA1837
012-1003-0	Q22-24 Q28-29 Q31	2SA1962,PNP,230V,15A,2-16C1A	TOSHIBA	2SA1962
014-0070-0	U5	LM317	NATIONAL	LM317
014-1072-0	U4	LM337	NATIONAL	LM337
020-0004-0	D13	1N755A, ZENER,7.5V,500MW ,D035	TAITRON	1N755A
020-0036-0	D5 D9	1N747A, ZENER, 3.6V, 5%, 400MW, DO-35	TAITRON	1N747A
020-0050-0	D8	1N751, ZENER,5.1V,10%,400MW,DO-35	NATIONAL	1N751
020-0240-0	D21	1N970B, ZENER, 24V, 5%, 500MW, DO-35	TAITRON	1N970B
020-1000-0	D2-4 D10-11 D14	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
020-1022-0	D6-7	BAV20, RECT, 200V, DO-35	NATIONAL	BAV20
020-1104-0	D15	SHOTTKY, 1A, 40V, 10NS, DO-41	MOTOROLA	1N5819
020-1120-0	D1 D12	MUR120,RECT-FAST, 1A, 200V, 25NS, 59-04	MOTOROLA	MUR120
020-1122-0	D18-20 D22-24	MUR410, RECT-FAST, 4A, 100V	MOTOROLA	MUR410
020-2106-0	D16-17	1N4004,RECT,1A,400V,DO-41	TAITRON	1N4004
023-0112-0	BR1-3	BRIDGE, 25A, 200V, VERT, PC, MO25S-02	CHENG-YI	MP25-02S
031-1336-0	C20 C26	CAP,ELEC,RAD,336,20%,25V	UNITED CHEMI-CON	SRG25VB33RM5X7LL
031-2105-0	C21	CAP,ELEC,RAD, 105, 20%, 50V	UNITED CHEMI-CON	C440C105M5U5CA
031-2106-0	C7,33,36,37	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2107-0	C9 C31-32	CAP,ELEC,RAD,107, 20%, 50V	UNITED CHEMI-CON	SMG50VB101M8X11LL
031-2159-0	C30 C38 C40 C47	CAP, ELEC, RAD, 159, 20%, 50V	UNITED CHEMI-CON	SMH50VN153M35X45T2
031-2335-0	C13	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
031-4475-0	C16,19	CAP,ELEC,RAD,475,-10%+50%,100V	UNITED CHEMI-CON	SMG100VB4R7M5X11LL
031-4476-0	C14 C17	CAP,ELEC,RAD,476,-10%+50%,100V	UNITED CHEMI-CON	SMG100VB47RM10X12LL
032-4103-0	C23	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C4-6,18,24,34,35,41-46	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4333-0	C11	CAP,PE,333,5%,100V,	PANASONIC	ECQV1333JM
032-4472-0	C1 C3 C27-29	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
032-4474-0	C48	CAP,PE,474,10%, 100V	PANASONIC	ECQV1474JM
032-7104-0	C2 C25	CAP,PE,104,10%, 250V	ILLINOIS CAPACITOR	104MSR250K
034-4221-0	C10	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4470-0	C8	CAP,MCR,47PF,5%,100V,NPO	TAITRON	TMRS470J100NPOB
034-4471-0	C12	CAP,MCR,470pF,5%,100V,	TAITRON	TMRS471J100NPOB
034-7103-0	C39	CAP, CERMIC DISK, 103, 10%, X-250V	PANASONIC	ECK-DRS103ZV
035-8030-0	C15	CAP MICA AXIAL , 3pF, 10%, 500V	CORNELL	CD10CD030D03
035-8561-0	C22	CAP MICA RADIAL, 561, 5%, 300V	CORNELL	CD15FC561J103
052-2212-0	R43 R45	RES,METAL FILM,2.21k,1/4W,1%	ECI	M2F1AK002.21
052-5622-0	R25 R35	RES,METAL FILM,5.62K,1/4W,1%	ECI	M5F1AK005.62
053-0270-0	R1	RES ,CARBON FILM,2.7 ,1/2W,5%	ECI	R5J3AJ002.70
054-.100-0	R52,53,55,56,58,60,63 R64,66-68	RES, METAL OXIDE, 0.1, 1W, 5%	ECI	MO10J3AJ000.10
054-.330-0	R79	RES, METAL OXIDE, 0.33, 1W, 5%	ECI	MO10J3AJ000.33
055-0101-0	R47-48	RES, METAL OXIDE, 10, 2W, 5%	ECI	MOM20J3AJ010.00
055-2702-0	R70-71	RES, METAL OXIDE, 2.7K, 2W, 5%	ECI	MOM20J3AK002.70
056-0100-0	R46	RES, CERAMIC WW, 1.0, 5W, 10%	ECI	WWC50J3AJ001.00
059-1000-0	R17 R39	RES,MF,FUSE, 10.0, 1/4W,1%	JUKN.OHM	FR25-10.0
059-1002-0	R20 R31 R50	RES,MF,FUSE, 1.00K,1/4W,1%	JUKN.OHM	FR25-1.00K
059-4750-0	R26 R33	RES,MF,FUSE, 47.5, 1/4W,1%	JUKN.OHM	FR25-47.5
059-6810-0	R61	RES,MF,FUSE, 68.1, 1/4W,1%	JUKN.OHM	FR25-68.1
060-1001-0	R72	RES, METAL FILM, 100, 1/8W, 1%	ECI	M1F1AJ100.00
060-1002-0	R3,7,8,13,19,30,38,49 R75 R78	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R40-41	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R36 R44	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1213-0	R9 R18	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10
060-1821-0	R11 R14 R27	RES,METAL FILM, 182, 1/8W, 1%	ECI	M1F1AJ182.00

Customer Name:	Gallien-Krueger	Current Rev #:	A1	New ECO Rev #:	A2
Model:	700RB-II	Distribute To:		Page:	1
Assembly Description:	700RB-II power amp board	Originator:	R.A.G.		
Assembly Numbers:	206-0250-A 145-0250-A	Approved by:			
		Effective Date:	7/8/2003		
Effective		Document Update		Date	Initials
<input type="checkbox"/>	All in Process	<input checked="" type="checkbox"/>	Next Buy		
<input type="checkbox"/>	All in Service	<input type="checkbox"/>	Next Production Run		
<input type="checkbox"/>	All in Stock	<input type="checkbox"/>			
Beginning Serial Number:		<input checked="" type="checkbox"/>	BOM		
Reason For Change					
Update for CSA requirements C16,19,F1,C7.					
Incorporate changes from A1 into layout.					
Roll off signal to horn amp at 30kHz with C8.					
Add C48 to improve high freq dist from comutation.					
Make R75 and R78 fuse resistors.					
		<input type="checkbox"/>	Control Form		
		<input type="checkbox"/>	Costing		
		<input type="checkbox"/>	Fab Drawing		
		<input type="checkbox"/>	Inspection Proc.		
		<input checked="" type="checkbox"/>	Part Master File		
		<input checked="" type="checkbox"/>	Schematic		
		<input type="checkbox"/>	Service Manual		
		<input type="checkbox"/>	Test Procedure		
		<input type="checkbox"/>			
		<input type="checkbox"/>			
Other Affected Assemblies					
<input type="checkbox"/>	Continued on ECO Supplement Page				
Description Of Change		Distribution		Date	Initials
Change parts and indicated below, and update layout to A2.		<input type="checkbox"/>	Accounting		
		<input type="checkbox"/>	Assembly		
		<input type="checkbox"/>	Customer		
		<input checked="" type="checkbox"/>	Engineering		
		<input checked="" type="checkbox"/>	Incoming Q.C.		
		<input type="checkbox"/>	Planning		
		<input checked="" type="checkbox"/>	Production Eng.		
		<input checked="" type="checkbox"/>	Purchasing		
		<input type="checkbox"/>	Q.A.		
		<input type="checkbox"/>	Receiving		
		<input type="checkbox"/>	Service		
		<input checked="" type="checkbox"/>	Test		
		<input type="checkbox"/>	Vendor		
		<input type="checkbox"/>			
		<input type="checkbox"/>			
<input type="checkbox"/>	Continued on ECO Supplement Page				
<input type="checkbox"/>	Drawing(s) attached				
Part Number	Description	Parts Added		Parts Deleted	
		Qty	Ref. Designator	Qty	Ref. Designator
031-4475-0	4.7uF/100V	2	C16,19		
032-4474-0	.47uF/100V	1	C48		
031-2106-a	10uF/50V-NP	1	C7		
032-4472-0	.0047uF/100V	1	C8		
091-0016-0	Fuse T10AL/250V	1	F1		
059-1002-0	1.00K,1/4W fuse	2	R75,78		
031-2106-0	10uF/50V			3	C7,16,19
034-4470-0	47pF/100V			1	C8
060-1002-0	1.00K,1/8W			2	R75,78
060-2003-0	20.0K,1/8W			1	R4
091-0028-0	Fuse T8AL/250V			1	F1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



BIAS ADJUSTMENT PROCEDURE:
 WITH POWER OFF, ADJUST POT R28 FULL COUNTER-CLOCKWISE.
 TURN POWER ON AND WAIT 5 SECONDS FOR TURN ON DELAY.
 TURN R28 CLOCKWISE UNTIL VOLTAGE ACROSS J5 READS 10 mVDC.

NOT VALID UNLESS STAMP IS RED

gallien technology

2234 INDUSTRIAL DRIVE
 STOCKTON, CA. 95206
 VOICE: 408-209-7300
 FAX: 408-234-8420

NOTES C3:		APPROVALS		TITLE: 700RB-II POWER AMP	
1. CHANGE C16,19 TO 4.7uF/100V.		INIT	DATE	REV	
2. CHANGE TO 206-0250-A2 FORM A1.		DESIGNED: R.A.G.	7/10/01	SIZE	B
3. CHANGE F1 TO 8A/4AH FOR 120V/230V.		DRAWN: R.A.G.	7/8/03	DRAWING NO:	406-0250-A2
4. ADD .47UF ACROSS R81		ELEC:		PART NO:	206-0250-A2
5. CHANGE R75 AND R78 TO 1K FUSE RESISTOR.		MECH:		COMPANY:	GALLIEN KRUEGER
6. CHANGE C7 TO 10UF/50V NP.		Q/A:		FILENAME:	6250A2.sch
7. REMOVE C8 AND R4.		RELEASED:			
8. ADD C8 (.0047UF) ACROSS R2.					

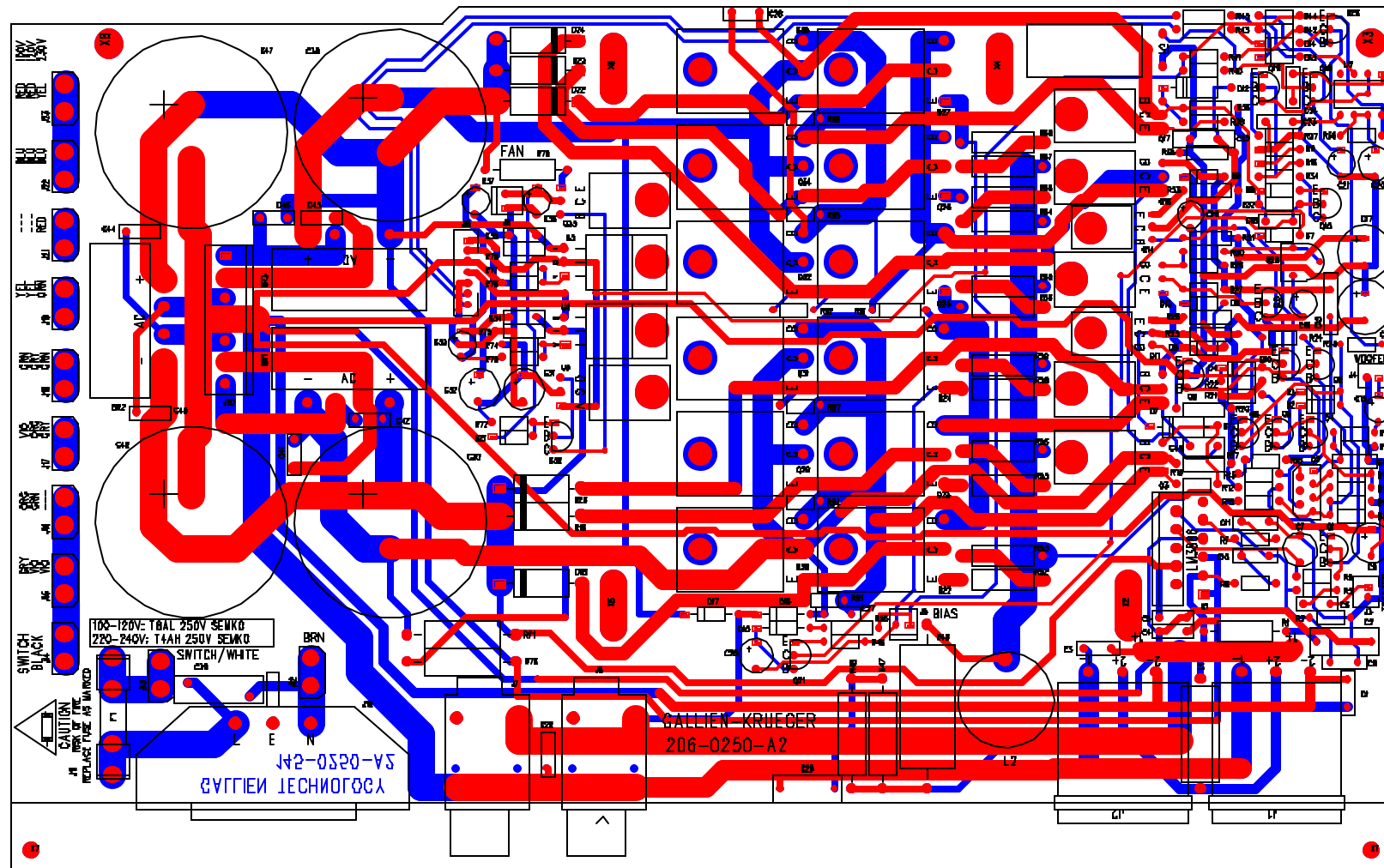
- X3 MH.125P
- X4 MH.125NP
- X5 MH.2X.55 OVL
- X6 MH.2X.55 OVL
- X7 MH.125NP
- X8 MH.125P
- X9 MH.125NP
- X10 MH.2X.55 OVL
- X11 MH.2X.55 OVL
- X12 MH.2X.55 OVL
- X13 MH.2X.55 OVL
- X14 MH.2X.55 OVL
- X15 MH.2X.55 OVL
- X16 MH.2X.55 OVL
- X17 MH.2X.55 OVL
- X18 MH.2X.55 OVL
- X19 MH.2X.55 OVL
- X20 MH.2X.55 OVL
- X21 MH.2X.55 OVL
- X22 MH.2X.55 OVL
- X23 MH.2X.55 OVL
- X24 MH.2X.55 OVL
- X25 MH.2X.55 OVL

700RB-II Power Amp 206-0250-A2

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-2060-0	U2	LM555, TIMER	NATIONAL	LM555CN
001-3886-0	U1	LM3886 ,68W AUDIO POWER AMP	NATIONAL	LM3886T
010-0000-0	Q2	2SC3381BL,NPNX2,80V,100MA,2-10M1B	TOSHIBA	2SC3281BL
010-0001-0	Q1 Q4-6 Q8 Q21	2SC3478, NPN,180V,100MA,TO-92	NEC	2SC3478-K
010-0003-0	Q11	2SC3502-F,NPN,200V,100MA,TO-126	TOSHIBA	2SC3502
010-0012-0	Q18-19 Q30	MPSAO6, NPN,80V,500MA,TO-92	MOTOROLA	MPS-A06
010-0035-0	U3	LM35DT, TEMPERATURE SENSOR, TO-220	NATIONAL	LM35DT
010-1002-0	Q9-10 Q20	2SA1376, PNP,180V,100MA,TO-92	NEC	2SA1376-K
010-1003-0	Q14	2SA1380-F,PNP,200V,100MA,TO-126	SANYO/TOSHIBA	2SA1380-F/E
010-1013-0	Q12 Q15	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
012-0002-0	Q13 Q16-17	2SC4793,NPN,200V,1.5A,2-10R1A	TOSHIBA	2SC4793
012-0003-0	Q25-27 Q32 Q34-35	2SC5242,NPN,230V,15A,2-16C1A	TOSHIBA	2SC5242-O
012-1002-0	Q3 Q7 Q33	2SA1837,PNP,200V,1.5A,2-10R1A	TOSHIBA	2SA1837
012-1003-0	Q22-24 Q28-29 Q31	2SA1962,PNP,230V,15A,2-16C1A	TOSHIBA	2SA1962
014-0070-0	U5	LM317	NATIONAL	LM317
014-1072-0	U4	LM337	NATIONAL	LM337
020-0004-0	D13	1N755A, ZENER,7.5V,500MW ,D035	TAITRON	1N755A
020-0036-0	D5 D9	1N747A, ZENER, 3.6V, 5%, 400MW,	TAITRON	1N747A
020-0050-0	D8	1N751, ZENER,5.1V,10%,400MW,DO-35	NATIONAL	1N751
020-0240-0	D21	1N970B, ZENER, 24V, 5%, 500MW,	TAITRON	1N970B
020-1000-0	D2-4 D10-11 D14	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
020-1022-0	D6-7	BAV20, RECT, 200V, DO-35	NATIONAL	BAV20
020-1104-0	D15	SHOTTKY, 1A, 40V, 10NS, DO-41	MOTOROLA	1N5819
020-1120-0	D1 D12	MUR120,RECT-FAST, 1A, 200V, 25NS,	MOTOROLA	MUR120
020-1122-0	D18-20 D22-24	MUR410, RECT-FAST, 4A, 100V	MOTOROLA	MUR410
020-2106-0	D16-17	1N4004,RECT,1A,400V,DO-41	TAITRON	1N4004
023-0112-0	BR1-3	BRIDGE, 25A, 200V, VERT, PC,	CHENG-YI	MP25-Q2S
031-1336-0	C20 C26	CAP,ELEC,RAD,336,20%,25V	UNITED CHEMI-CON	SRG25VB33RM5X7LL
031-2105-0	C21	CAP,ELEC,RAD, 105, 20%, 50V	UNITED CHEMI-CON	C440C105M5U5CA
031-2106-0	C33 C36-37	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2106-A	C7	CAP,ELEC,RAD, 106, 20%, 50VNP	UNITED CHEMI-CON	SMEBP50VB10RM6X11LL
031-2107-0	C9 C31-32	CAP,ELEC,RAD,107, 20%, 50V	UNITED CHEMI-CON	SMG50VB101M8X11LL
031-2159-0	C30 C38 C40 C47	CAP, ELEC, RAD, 159, 20%, 50V	UNITED CHEMI-CON	SMH50VN153M35X45T2
031-2335-0	C13	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
031-4475-0	C16 C19	CAP,EL-R,4.7UF/100V, M	UNITED CHEMI-CON	SMG100VB4R7M5X11LL
031-4476-0	C14 C17	CAP,ELEC,RAD,476,-10%+50%,100V	UNITED CHEMI-CON	SMG100VB47RM10X12LL
032-4103-0	C23	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C4-6,18,24,34,35,41-46	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4333-0	C11	CAP,PE,333,5%,100V,	PANASONIC	ECQV1333JM
032-4472-0	C1 C3 C8 C27-29	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
032-4474-0	C48	CAP,PE,474,5%,100V,	PANASONIC	ECQV1474JM
032-7104-0	C2 C25	CAP,PE,104,10%, 250V	ILLINOIS CAPACITOR	104MSR250K
034-4221-0	C10	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4471-0	C12	CAP,MCR,470pF,5%,100V,	TAITRON	TMRS471J100NPOB
034-7103-0	C39	CAP, CERMIC DISK, 103, 10%, X-250V	PANASONIC	ECK-DRS103ZV
035-8030-0	C15	CAP MICA AXIAL , 3pF, 10%, 500V	CORNELL	CD10CD030D03
035-8561-0	C22	CAP MICA RADIAL, 561, 5%, 300V	CORNELL	CD15FC561J103
052-2212-0	R43 R45	RES,METAL FILM,2.21k,1/4W,1%	ECI	M2F1AK002.21
052-5622-0	R25 R35	RES,METAL FILM,5.62K,1/4W,1%	ECI	M5F1AK005.62
053-0270-0	R1	RES ,CARBON FILM,2.7 ,1/2W,5%	ECI	R5J3AJ002.70
054-.100-0	R52,53,55,56,58-60,63 R64,66-68	RES, METAL OXIDE, 0.1 Ohm, 1W, 5%	ECI	MO10J3AJ000.10
054-.330-0	R79	RES, METAL OXIDE, 0.33 OHM, 1W, 5%	ECI	MO10J3AJ000.33
055-0101-0	R47-48	RES, METAL OXIDE, 10 OHM, 2W, 5%	ECI	MOM20J3AJ010.00
055-2702-0	R70-71	RES, METAL OXIDE, 2.7K OHM, 2W, 5%	ECI	MOM20J3AK002.70
056-0100-0	R46	RES, CERAMIC WW, 1.0 OHM, 5W, 10%	ECI	WWC50J3AJ001.00
059-1000-0	R17 R39	RES,MF,FUSE,10.0, 1/4W,1%	JUKN.OHM	FR25-10.0
059-1002-0	R20 R31 R50 R75 R78	RES,MF,FUSE,1.00K,1/4W,1%	JUKN.OHM	FR25-1.00K
059-4750-0	R26 R33	RES,MF,FUSE,47.5, 1/4W,1%	JUKN.OHM	FR25-47.5
059-6810-0	R61	RES,MF,FUSE,68.1, 1/4W,1%	JUKN.OHM	FR25-68.1
060-1001-0	R72	RES, METAL FILM, 100, 1/8W, 1%	ECI	M1F1AJ100.00
060-1002-0	R3,7,8,13,19,30,38,49	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R40-41	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R36 R44	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1213-0	R9 R18	RES,METAL FILM, 12.1K, 1/8W,1%	ECI	M1F1AK012.10

700RB-II Power Amp 206-0250-A2

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
060-1821-0	R11 R14 R27	RES,METAL FILM, 182, 1/8W, 1%	ECI	M1F1AJ182.00
060-2001-0	R21	RES,METAL FILM, 200, 1/8W, 1%	ECI	M1F1AJ200.00
060-2002-0	R15-16 R22 R24	RES,METAL FILM, 2.00K, 1/8W, 1%	ECI	M1F1AK002.00
060-2003-0	R5-6	RES,METAL FILM, 20.0K, 1/8W, 1%	ECI	M1F1AK020.00
060-2004-0	R23	RES,METAL FILM, 200K, 1/8W, 1%	ECI	M1F1AK200.00
060-2431-0	R73 R77	RES,METAL FILM, 243, 1/8W, 1%	ECI	M1F1AJ243.00
060-2432-0	R32	RES,METAL FILM, 2.43K, 1/8W, 1%	ECI	M1F1AK002.43
060-2742-0	R74 R76	RES,METAL FILM, 2.74K, 1/8W, 1%	ECI	M1F1AK002.74
060-3922-0	R29	RES,METAL FILM, 3.92K, 1/8W, 1%	ECI	M1F1AK003.92
060-4323-0	R10	RES,METAL FILM, 43.2K, 1/8W, 1%	ECI	M1F1AK043.20
060-4751-0	R51,54,57,62,65,69	RES,METAL FILM, 475, 1/8W, 1%	ECI	M1F1AJ475.00
060-4752-0	R42	RES,METAL FILM, 4.75K, 1/8W, 1%	ECI	M1F1AK004.75
060-4753-0	R2 R34	RES,METAL FILM, 47.5K, 1/8W, 1%	ECI	M1F1AK047.50
060-5621-0	R12	RES,METAL FILM, 562, 1/8W, 1%	ECI	M1F1AJ562.00
060-7501-0	R37	RES,METAL FILM, 750, 1/8W, 1%	ECI	M1F1AJ750.00
070-0520-0	R28	POT,500B TRIM, 200mW	SONG HUEI	SH-655MCL-500B
081-0032-0	L1	INDUCTOR .4UH/1 OHM 2W RESISTOR	SCHONBERG	081-0032-0
081-0055-0	L2	INDUCTOR,2UH,20A,AIR CORE	SCHONBERG	081-0055-0
091-0028-0	F1	FUSE,5mm,T8AL,250V,SEMKO	LITTLE FUSE	218-008
091-1002-0	S1	THRM BRKR, 105C +/-5.0-DIFF, PC	KLIXON	7AM-028-A5
092-0001-0	J10	CON, IECX3, 10A, 250V, PC TERM	DIHTAIN	DTS-0045
092-0066-0	J12-19 J21-23	FASTON, M, PC, .250"	KEYSTONE	1021
092-0070-0	J1-2	JACK,SPEAKON,PC MOUNT, NEUTRIK	SWITCHCRAFT	HPCP41RA
092-0082-0	J6-7	JACK,1/4",MONO,PC, GROUNDING	NEUTRIK	S102-84G
093-0025-0	J5 J9	HDR,,1X2,VERT,MALE,LOCK,GOLD	AMP	641126-2
093-0051-0	J3-4	HDR, 2MMX2, VERT, LOCK	JST	B2B-PH-K-S
093-1010-0	J20	HDR,,156X7,VERT,MALE,LOCK,SQUARE	MOLEX	26-60-4070
093-2005-0	J8	HDR, 2MMX7, VERT, SHROUDED	JST	B7B-PH-K-S
094-0004-0	J11	FUSE CLIP, 5MM, 15A, P.C.	MOUSER	44FH052
145-0250-A2		700RB-II POWER AMP BOARD		
086-0000-0		FAN, 24VDC, 160MA, 80X80MM	ADDA	08-24-HB-A70GL
093-0506-0		HSG, .1X2, LOCKING, CRIMP 093-0909	MOLEX	22-01-3027
093-0909-0		TERM, CRIMP, .1, 22GA	MOLEX	08-50-0113
095-0006-0		HEAT SHRINK 3/16"		
104-0003-0	INDUCTOR	SPACER,NYLON,#4X.2X.2D		
105-0014-0		INSULATOR TAPE 4"X7MIL	THERMALLOY	SILPAD 400AC
111-7017-0	REG, LM35,LM3886	WASHER, SHOULDER,#4 NYLON		
117-0097-0	TO-220,LM3886	BOLT,M3X9,M1,PHP/SW/PW,CHROME		
117-0127-0	POWER TRAN	BOLT,M3X12,M1,PHP/SW/PW,CHROME		
117-0357-0	FAN	BOLT,M3X35,M1,PHP/SW/PW,CHROME		
117-7002-1	FAN	WASHER,M3,PLAIN, CHROME		
132-0024-F1	HEATSINK	700RB HEATSINK		
153-0105-0		LABEL, BLANK,,9"X.25"		
202-6000-A	CHASSIS GND	WIRE ASSY,14GA,GRN/YEL,4",GND		



PCB WORK INSTRUCTIONS

DWG 420-0250-A2

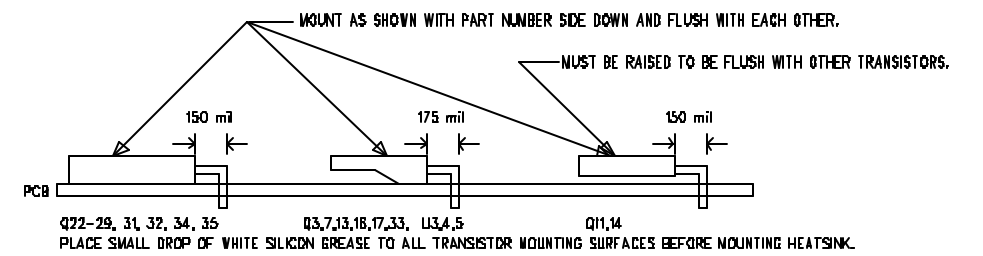
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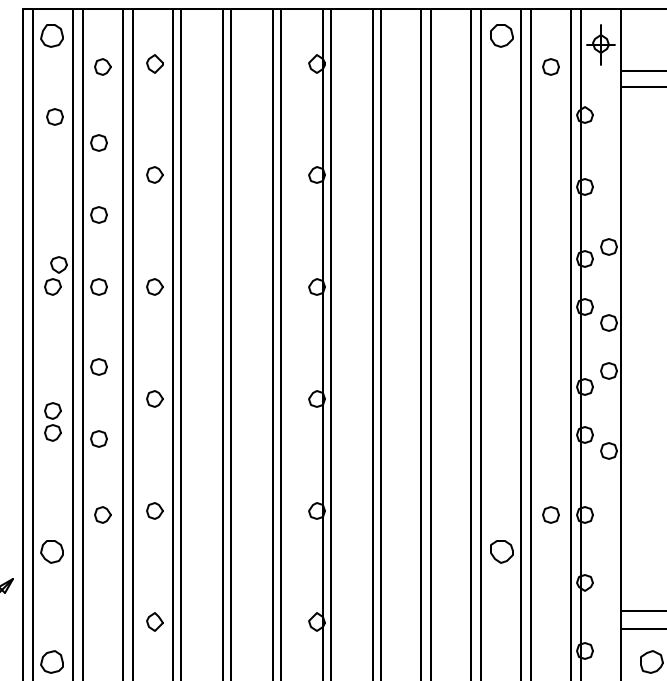
1. SQUARE PADS ON THRU HOLE PARTS (i.e. CONNECTORS, DPS, SIPS, LEADS) DENOTE PIN 1.
2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTION.
3. ALL BOARDS MUST BE BARE BOARD TESTED.
4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.

LOADING

5. SEE FORMING AND LOADING INSTRUCTIONS BELOW FOR INSTALLING SPECIFIED COMPONENTS.
6. CHECK THAT R52,53,55,56,58,59,60,63,64,66,67,68 & 51 ARE FLUSH TO BOARD.
7. CHECK THAT ALL CONNECTORS AND JACKS ARE FLUSH WITH PCB.
8. MAKE CERTAIN ALL POWER TRANSISTOR MOUNTING HOLES ARE PROPERLY ALIGNED FOR HEAT SINK.



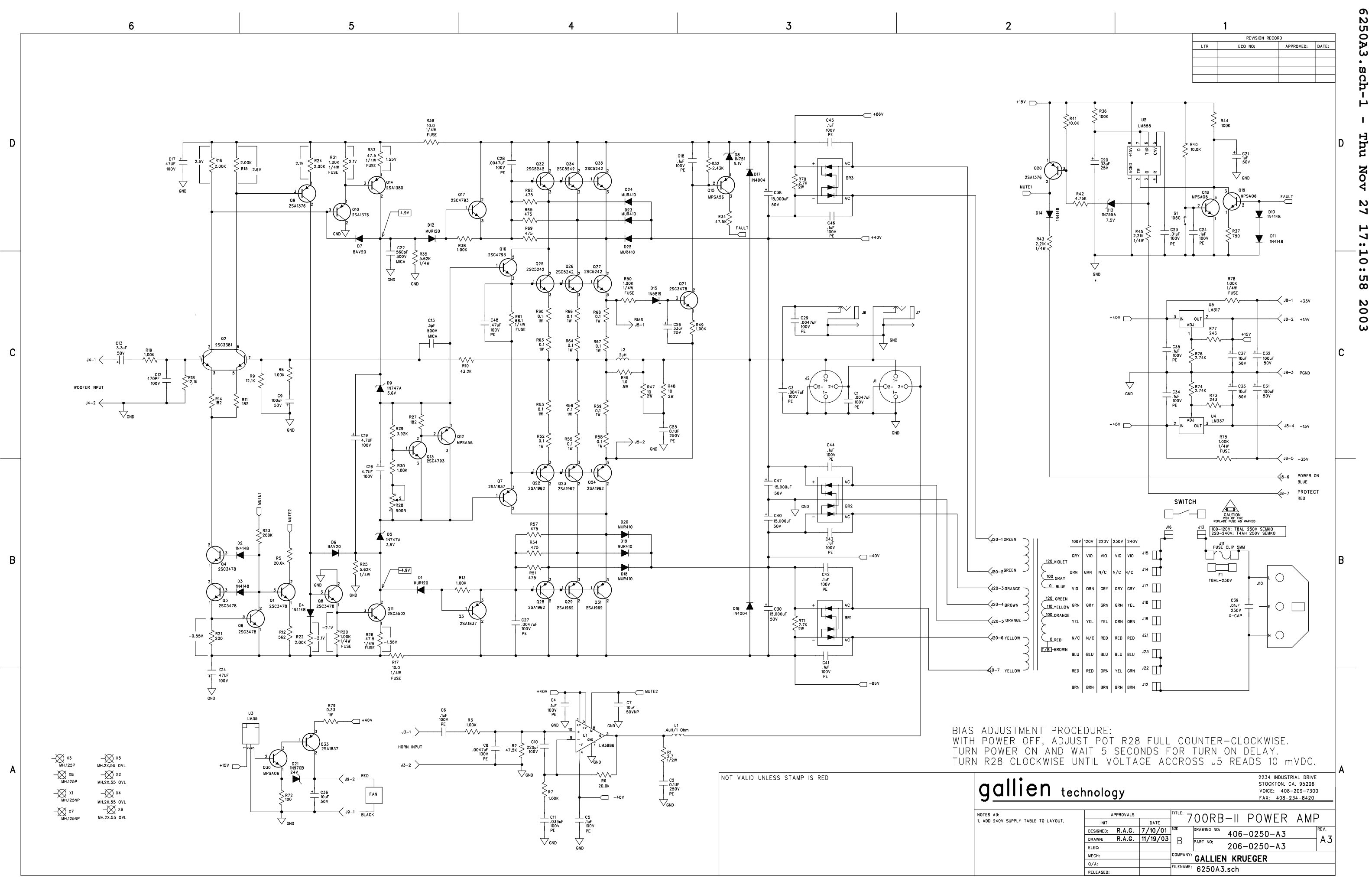
HEAT SINK ASSEMBLY



NOT VALID UNLESS STAMP IS RED		gallien technology		2234 INDUSTRIAL DRIVE STOUGHTON CA, 95206 VOICE: 708-234-7300 FAX: 708-234-0129	
APPROVALS			TITLE: 700RB-II POWER AMP BD		
INIT	DATE	SIZE	DRAWING NO:	REV.	
DESIGNED: R.A.G.	7/16/01	B	405-0250-A2	A2	
DRAWN: R.A.G.	7/08/03		PART NO:		
ELEC:			145-0250-A2		
LAYER DESCRIPTION:			COMPANY: GALLIEN-KRUEGER		
SOUR SOURCE ENLBSCTROWIN			FILENAME: 5250A2		
MECH:			GERBER FILE NAME: sst01289pbo		

Customer Name:	Gallien-Krueger		Current Rev #:	A2	New ECO Rev #:	A3		
Model:	700RB-II		Distribute To:		Page:	1	Of:	1
Assembly Description:	700RB-II power amp board		Originator:	R . A . G .				
Assembly Numbers:	206-0250-A		Approved by:					
	145-0250-A		Effective Date:					
Effective			Document Update		Date	Initials		
<input type="checkbox"/>	All in Process	<input checked="" type="checkbox"/>	Next Buy	<input type="checkbox"/>	Artwork			
<input type="checkbox"/>	All in Service	<input type="checkbox"/>	Next Production Run	<input type="checkbox"/>	Assembly Dwg.			
<input type="checkbox"/>	All in Stock	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Board Artwork			
Beginning Serial Number:				<input checked="" type="checkbox"/>	BOM			
Reason For Change				<input type="checkbox"/>	Control Form			
Add 240V supply table to board and schematic.				<input type="checkbox"/>	Costing			
				<input type="checkbox"/>	Fab Drawing			
				<input type="checkbox"/>	Inspection Proc.			
				<input checked="" type="checkbox"/>	Part Master File			
				<input checked="" type="checkbox"/>	Schematic			
				<input type="checkbox"/>	Service Manual			
				<input type="checkbox"/>	Test Procedure			
				<input type="checkbox"/>				
				<input type="checkbox"/>				
Other Affected Assemblies								
<input type="checkbox"/> Continued on ECO Supplement Page								
Description Of Change			Distribution		Date	Initials		
			<input type="checkbox"/>	Accounting				
			<input type="checkbox"/>	Assembly				
			<input type="checkbox"/>	Customer				
			<input checked="" type="checkbox"/>	Engineering				
			<input checked="" type="checkbox"/>	Incoming Q.C.				
			<input type="checkbox"/>	Planning				
			<input checked="" type="checkbox"/>	Production Eng.				
			<input checked="" type="checkbox"/>	Purchasing				
			<input type="checkbox"/>	Q.A.				
			<input type="checkbox"/>	Receiving				
			<input type="checkbox"/>	Service				
			<input checked="" type="checkbox"/>	Test				
			<input type="checkbox"/>	Vendor				
			<input type="checkbox"/>					
			<input type="checkbox"/>					
<input type="checkbox"/> Continued on ECO Supplement Page			<input type="checkbox"/>	Drawing(s) attached				
Part Number	Description	Parts Added		Parts Deleted				
		Qty	Ref. Designator	Qty	Ref. Designator			

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



BIAS ADJUSTMENT PROCEDURE:
 WITH POWER OFF, ADJUST POT R28 FULL COUNTER-CLOCKWISE.
 TURN POWER ON AND WAIT 5 SECONDS FOR TURN ON DELAY.
 TURN R28 CLOCKWISE UNTIL VOLTAGE ACROSS J5 READS 10 mVDC.

NOT VALID UNLESS STAMP IS RED

gallien technology

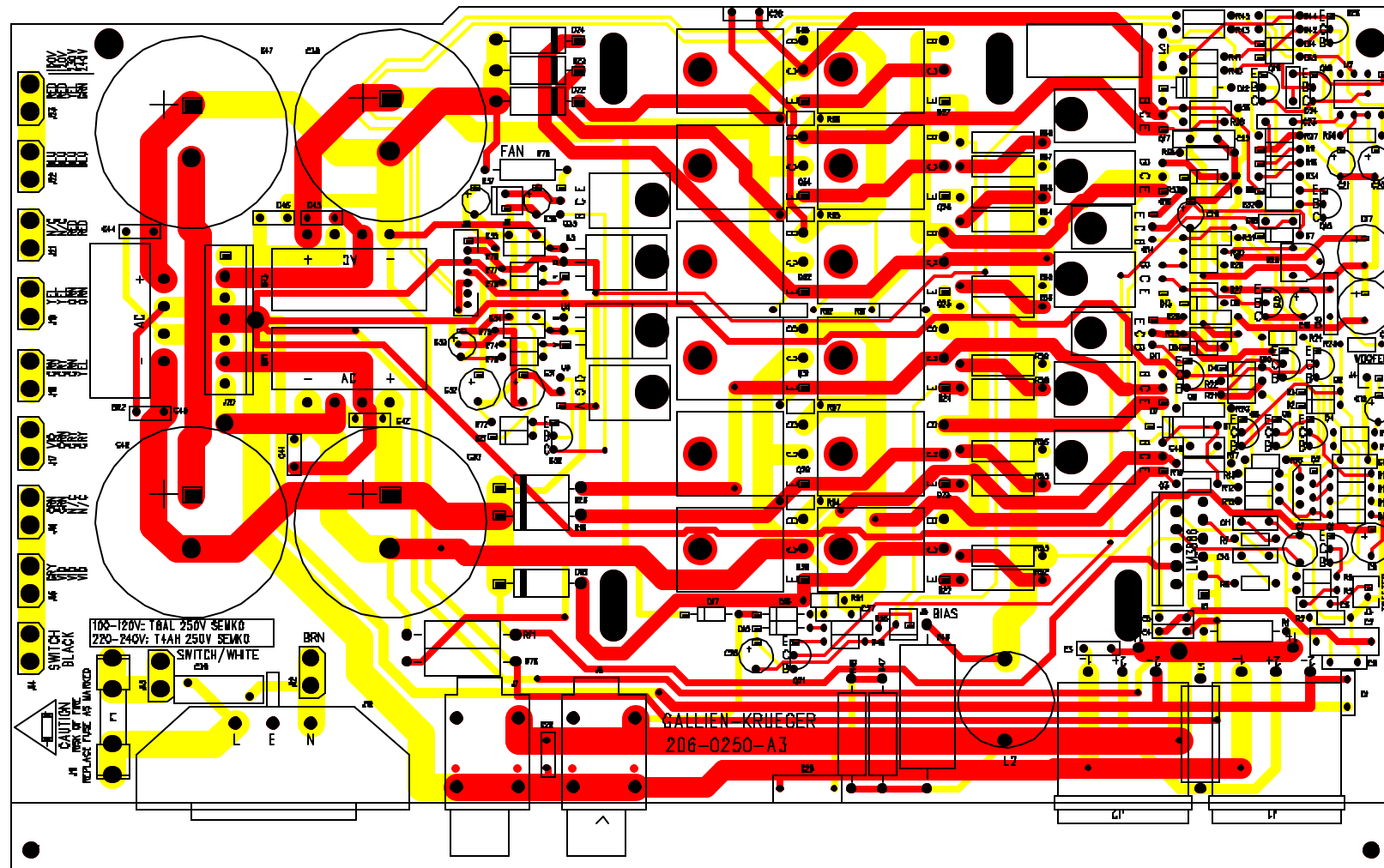
2234 INDUSTRIAL DRIVE
 STOCKTON, CA. 95206
 VOICE: 408-209-7300
 FAX: 408-234-8420

NOTES A3: 1. ADD 240V SUPPLY TABLE TO LAYOUT.	APPROVALS	TITLE: 700RB-II POWER AMP	REV. A3
	INIT	DATE	SIZE
	DESIGNED: R.A.G.	7/10/01	DRAWING NO: 406-0250-A3
	DRAWN: R.A.G.	11/19/03	PART NO: 206-0250-A3
	ELEC:		COMPANY: GALLIEN KRUEGER
	MECH:		FILENAME: 6250A3.sch
	Q/A:		
	RELEASED:		

- X3 MH.125P
- X5 MH.2X.55 OVL
- X8 MH.125P
- X2 MH.2X.55 OVL
- X1 MH.125NP
- X4 MH.2X.55 OVL
- X7 MH.125NP
- X6 MH.2X.55 OVL

700RB-II Power Amp 206-0250-A3

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-2060-0	U2	LM555, TIMER	NATIONAL	LM555CN
001-3886-0	U1	LM3886 ,68W AUDIO POWER AMP	NATIONAL	LM3886T
010-0000-0	Q2	2SC3381BL,NPNX2,80V,100MA,2-10M1B	TOSHIBA	2SC3281BL
010-0001-0	Q1 Q4-6 Q8 Q21	2SC3478, NPN,180V,100MA,TO-92	NEC	2SC3478-K
010-0003-0	Q11	2SC3502-F,NPN,200V,100MA,TO-126	TOSHIBA	2SC3502
010-0012-0	Q18-19 Q30	MPSAO6, NPN,80V,500MA,TO-92	MOTOROLA	MPS-A06
010-0035-0	U3	LM35DT, TEMPERATURE SENSOR, TO-220	NATIONAL	LM35DT
010-1002-0	Q9-10 Q20	2SA1376, PNP,180V,100MA,TO-92	NEC	2SA1376-K
010-1003-0	Q14	2SA1380-F,PNP,200V,100MA,TO-126	SANYO/TOSHIBA	2SA1380-F/E
010-1013-0	Q12 Q15	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
012-0002-0	Q13 Q16-17	2SC4793,NPN,200V,1.5A,2-10R1A	TOSHIBA	2SC4793
012-0003-0	Q25-27 Q32 Q34-35	2SC5242,NPN,230V,15A,2-16C1A	TOSHIBA	2SC5242-O
012-1002-0	Q3 Q7 Q33	2SA1837,PNP,200V,1.5A,2-10R1A	TOSHIBA	2SA1837
012-1003-0	Q22-24 Q28-29 Q31	2SA1962,PNP,230V,15A,2-16C1A	TOSHIBA	2SA1962
014-0070-0	U5	LM317	NATIONAL	LM317
014-1072-0	U4	LM337	NATIONAL	LM337
020-0004-0	D13	1N755A, ZENER,7.5V,500MW ,D035	TAITRON	1N755A
020-0036-0	D5 D9	1N747A, ZENER, 3.6V, 5%, 400MW,	TAITRON	1N747A
020-0050-0	D8	1N751, ZENER,5.1V,10%,400MW,DO-35	NATIONAL	1N751
020-0240-0	D21	1N970B, ZENER, 24V, 5%, 500MW,	TAITRON	1N970B
020-1000-0	D2-4 D10-11 D14	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
020-1022-0	D6-7	BAV20, RECT, 200V, DO-35	NATIONAL	BAV20
020-1104-0	D15	SHOTTKY, 1A, 40V, 10NS, DO-41	MOTOROLA	1N5819
020-1120-0	D1 D12	MUR120,RECT-FAST, 1A, 200V, 25NS,	MOTOROLA	MUR120
020-1122-0	D18-20 D22-24	MUR410, RECT-FAST, 4A, 100V	MOTOROLA	MUR410
020-2106-0	D16-17	1N4004,RECT,1A,400V,DO-41	TAITRON	1N4004
023-0112-0	BR1-3	BRIDGE, 25A, 200V, VERT, PC,	CHENG-YI	MP25-Q2S
031-1336-0	C20 C26	CAP,ELEC,RAD,336,20%,25V	UNITED CHEMI-CON	SRG25VB33RM5X7LL
031-2105-0	C21	CAP,ELEC,RAD, 105, 20%, 50V	UNITED CHEMI-CON	C440C105M5U5CA
031-2106-0	C33 C36-37	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2106-A	C7	CAP,ELEC,RAD, 106, 20%, 50VNP	UNITED CHEMI-CON	SMEBP50VB10RM6X11LL
031-2107-0	C9 C31-32	CAP,ELEC,RAD,107, 20%, 50V	UNITED CHEMI-CON	SMG50VB101M8X11LL
031-2159-0	C30 C38 C40 C47	CAP, ELEC, RAD, 159, 20%, 50V	UNITED CHEMI-CON	SMH50VN153M35X45T2
031-2335-0	C13	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
031-4475-0	C16 C19	CAP,EL-R,4.7UF/100V, M	UNITED CHEMI-CON	SMG100VB4R7M5X11LL
031-4476-0	C14 C17	CAP,ELEC,RAD,476,-10%+50%,100V	UNITED CHEMI-CON	SMG100VB47RM10X12LL
032-4103-0	C23	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C4-6,18,24,34,35,41-46	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4333-0	C11	CAP,PE,333,5%,100V,	PANASONIC	ECQV1333JM
032-4472-0	C1 C3 C8 C27-29	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
032-4474-0	C48	CAP,PE,474,5%,100V,	PANASONIC	ECQV1474JM
032-7104-0	C2 C25	CAP,PE,104,10%, 250V	ILLINOIS CAPACITOR	104MSR250K
034-4221-0	C10	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4471-0	C12	CAP,MCR,470pF,5%,100V,	TAITRON	TMRS471J100NPOB
034-7103-0	C39	CAP, CERMIC DISK, 103, 10%, X-250V	PANASONIC	ECK-DRS103ZV
035-8030-0	C15	CAP MICA AXIAL , 3pF, 10%, 500V	CORNELL	CD10CD030D03
035-8561-0	C22	CAP MICA RADIAL, 561, 5%, 300V	CORNELL	CD15FC561J103
052-2212-0	R43 R45	RES,METAL FILM,2.21k,1/4W,1%	ECI	M2F1AK002.21
052-5622-0	R25 R35	RES,METAL FILM,5.62K,1/4W,1%	ECI	M5F1AK005.62
053-0270-0	R1	RES ,CARBON FILM,2.7 ,1/2W,5%	ECI	R5J3AJ002.70
054-.100-0	R52,53,55,56,58-60,63 R64,66-68	RES, METAL OXIDE, 0.1 Ohm, 1W, 5%	ECI	MO10J3AJ000.10
054-.330-0	R79	RES, METAL OXIDE, 0.33 OHM, 1W, 5%	ECI	MO10J3AJ000.33
055-0101-0	R47-48	RES, METAL OXIDE, 10 OHM, 2W, 5%	ECI	MOM20J3AJ010.00
055-2702-0	R70-71	RES, METAL OXIDE, 2.7K OHM, 2W, 5%	ECI	MOM20J3AK002.70
056-0100-0	R46	RES, CERAMIC WW, 1.0 OHM, 5W, 10%	ECI	WWC50J3AJ001.00
059-1000-0	R17 R39	RES,MF,FUSE,10.0, 1/4W,1%	JUKN.OHM	FR25-10.0
059-1002-0	R20 R31 R50 R75 R78	RES,MF,FUSE,1.00K,1/4W,1%	JUKN.OHM	FR25-1.00K
059-4750-0	R26 R33	RES,MF,FUSE,47.5, 1/4W,1%	JUKN.OHM	FR25-47.5
059-6810-0	R61	RES,MF,FUSE,68.1, 1/4W,1%	JUKN.OHM	FR25-68.1
060-1001-0	R72	RES, METAL FILM, 100, 1/8W, 1%	ECI	M1F1AJ100.00
060-1002-0	R3,7,8,13,19,30,38,49	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R40-41	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R36 R44	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1213-0	R9 R18	RES,METAL FILM, 12.1K, 1/8W,1%	ECI	M1F1AK012.10



PCB WORK INSTRUCTIONS

DWG 420-0250-A3

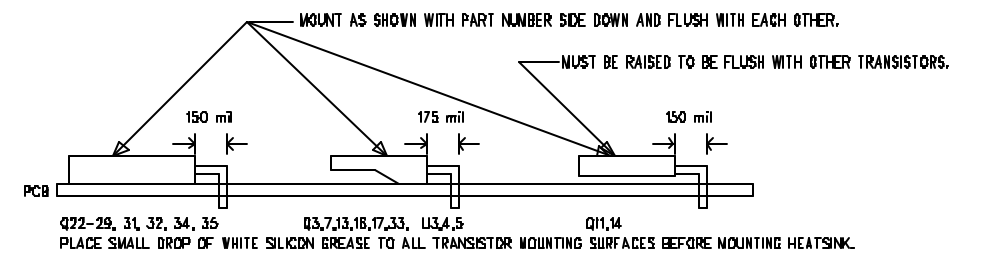
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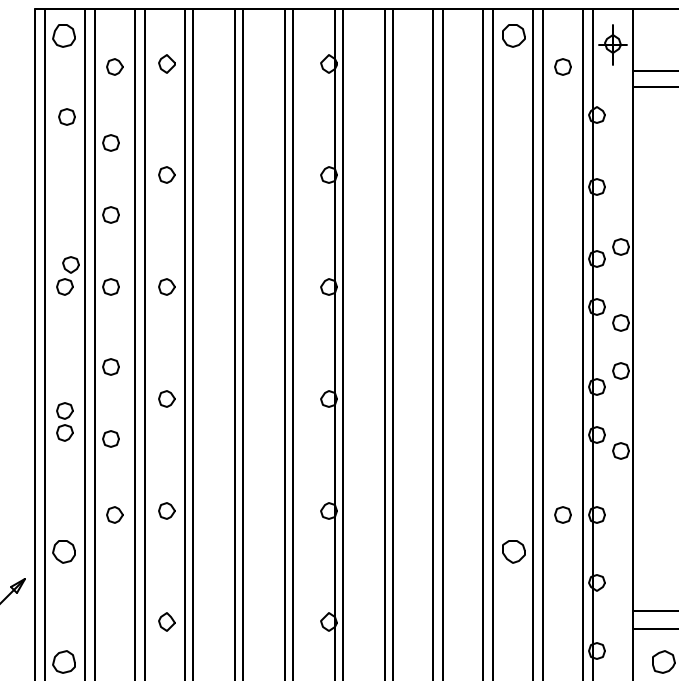
1. SQUARE PADS ON THRU HOLE PARTS (i.e. CONNECTORS, DPS, SIPS, LEADS) DENOTE PIN 1.
2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTION.
3. ALL BOARDS MUST BE BARE BOARD TESTED.
4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.

LOADING

5. SEE FORMING AND LOADING INSTRUCTIONS BELOW FOR INSTALLING SPECIFIED COMPONENTS.
6. CHECK THAT R52,53,55,56,58,60,63,64,66,67,68 & 51 ARE FLUSH TO BOARD.
7. CHECK THAT ALL CONNECTORS AND JACKS ARE FLUSH WITH PCB.
8. MAKE CERTAIN ALL POWER TRANSISTOR MOUNTING HOLES ARE PROPERLY ALIGNED FOR HEAT SINK.



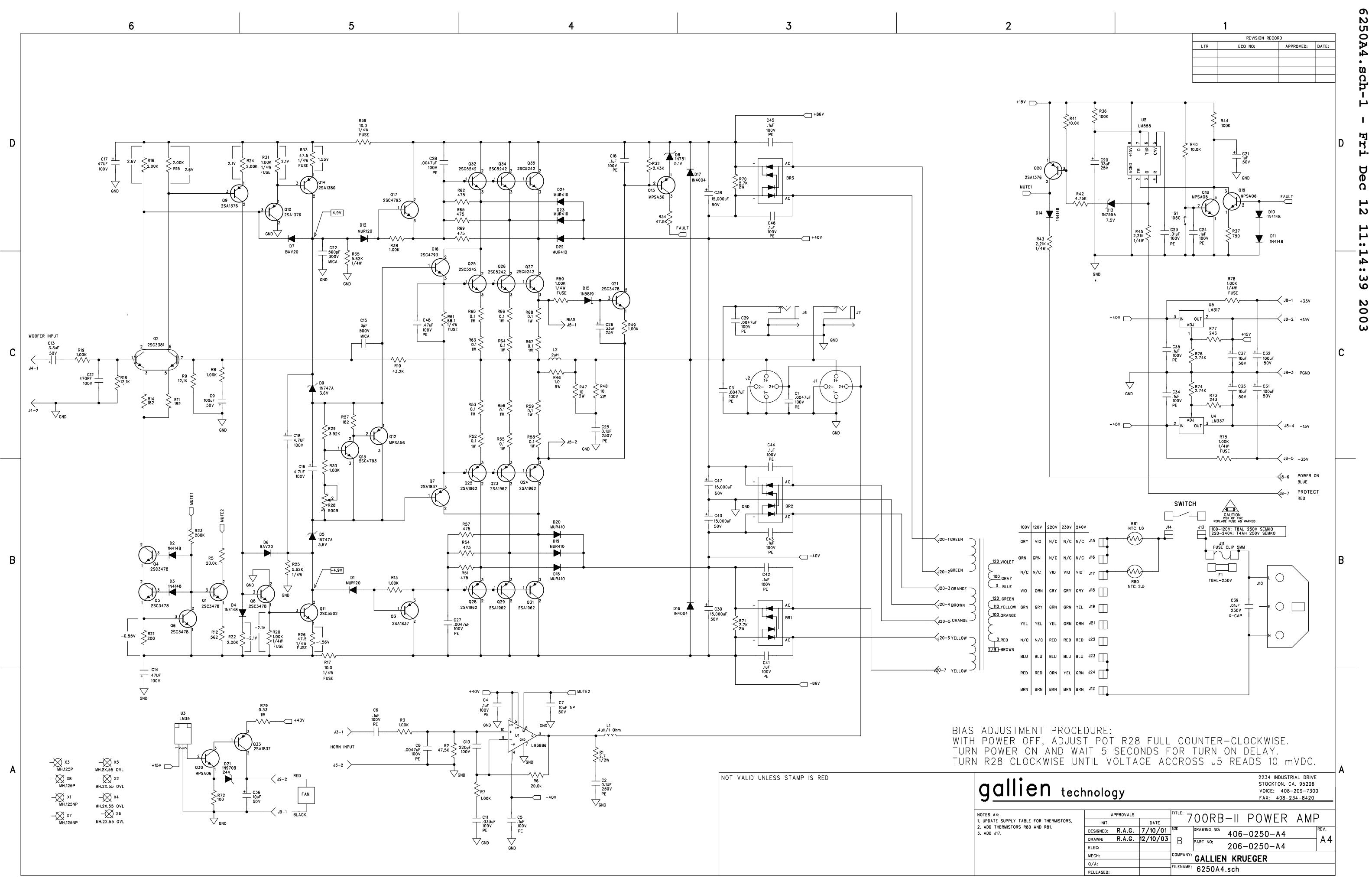
HEAT SINK ASSEMBLY



NOT VALID UNLESS STAMP IS RED		gallien technology		2234 INDUSTRIAL DRIVE STOCKTON, CA, 95206 VOICE: 209-234-7300 FAX: 209-234-0129	
APPROVALS			TITLE: 700RB-II POWER AMP BD		
INIT	DATE	SIZE	DRAWING NO:	REV.	
DESIGNED: R.A.G.	7/16/01	B	405-0250-A3	A3	
DRAWN: R.A.G.	11/19/03		PART NO:		
ELEC:			145-0250-A3		
LAYER DESCRIPTION:		COMPANY: GALLIEN-KRUEGER			
SOLID CORE ENLARGED		GERBER FILE NAME: sst0120ppbo			
		FILENAME: 5250A3			

Customer Name:		Gallien-Krueger		Current Rev #:	A3	New ECO Rev #:	A4
Model:		700RB-II		Distribute To:		Page:	1 Of: 1
Assembly Description:		700RB-II power amp board		Originator:	R.A.G.		
Assembly Numbers:		206-0250-A 145-0250-A		Approved by:			
				Effective Date:	12/14/2003		
Effective				Document Update		Date	Initials
<input checked="" type="checkbox"/>	All in Process	<input checked="" type="checkbox"/>	Next Buy	<input type="checkbox"/>	Artwork		
<input type="checkbox"/>	All in Service	<input type="checkbox"/>	Next Production Run	<input type="checkbox"/>	Assembly Dwg.		
<input type="checkbox"/>	All in Stock	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Board Artwork		
Beginning Serial Number:				<input checked="" type="checkbox"/>	BOM		
Reason For Change				<input type="checkbox"/>	Control Form		
Prevent fuse failure due to inrush current at turn on. An improvement to A3 which was not put into production.				<input checked="" type="checkbox"/>	Costing		
				<input type="checkbox"/>	Fab Drawing		
				<input type="checkbox"/>	Inspection Proc.		
				<input checked="" type="checkbox"/>	Part Master File		
				<input checked="" type="checkbox"/>	Schematic		
				<input type="checkbox"/>	Service Manual		
				<input type="checkbox"/>	Test Procedure		
				<input type="checkbox"/>			
				<input type="checkbox"/>			
Other Affected Assemblies							
<input type="checkbox"/> Continued on ECO Supplement Page							
Description Of Change				Distribution		Date	Initials
Add NTC thermistors to the primary side of the transformer. One for 120V and another for 230V. An additional primary terminal is added to accommodate the wiring.				<input type="checkbox"/>	Accounting		
For current production a thermistor of the proper value will be added to the bottom of the board.				<input type="checkbox"/>	Assembly		
For 220V-240V use NTC-2.5R/6A.				<input type="checkbox"/>	Customer		
For 100V-120V use NTC-1R/10A.				<input checked="" type="checkbox"/>	Engineering		
				<input checked="" type="checkbox"/>	Incoming Q.C.		
				<input type="checkbox"/>	Planning		
				<input checked="" type="checkbox"/>	Production Eng.		
				<input checked="" type="checkbox"/>	Purchasing		
				<input type="checkbox"/>	Q.A.		
				<input type="checkbox"/>	Receiving		
				<input checked="" type="checkbox"/>	Service		
				<input type="checkbox"/>	Test		
				<input type="checkbox"/>	Vendor		
				<input type="checkbox"/>			
				<input type="checkbox"/>			
<input type="checkbox"/> Continued on ECO Supplement Page				<input type="checkbox"/>	Drawing(s) attached		
Part Number	Description	Parts Added		Parts Deleted			
		Qty	Ref. Designator	Qty	Ref. Designator		
022-3002-0	THR NTC-1R/10A	1	R81				
022-3004-0	THR NTC-2.5R/6A	1	R80				
092-0066-0	FASTON	1	J24				

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



BIAS ADJUSTMENT PROCEDURE:
 WITH POWER OFF, ADJUST POT R28 FULL COUNTER-CLOCKWISE.
 TURN POWER ON AND WAIT 5 SECONDS FOR TURN ON DELAY.
 TURN R28 CLOCKWISE UNTIL VOLTAGE ACROSS J5 READS 10 mVDC.

NOT VALID UNLESS STAMP IS RED

gallien technology

2234 INDUSTRIAL DRIVE
 STOCKTON, CA. 95206
 VOICE: 408-209-7300
 FAX: 408-234-8420

TITLE: **700RB-II POWER AMP**

DESIGNED: R.A.G. 7/10/01
 DRAWN: R.A.G. 12/10/03
 ELEC:
 MECH:
 Q/A:
 RELEASED:

APPROVALS: [Signature]
 DATE: 12/10/03

FILENAME: 6250A4.sch

DRAWING NO: 406-0250-A4
 PART NO: 206-0250-A4
 COMPANY: **GALLIEN KRUEGER**

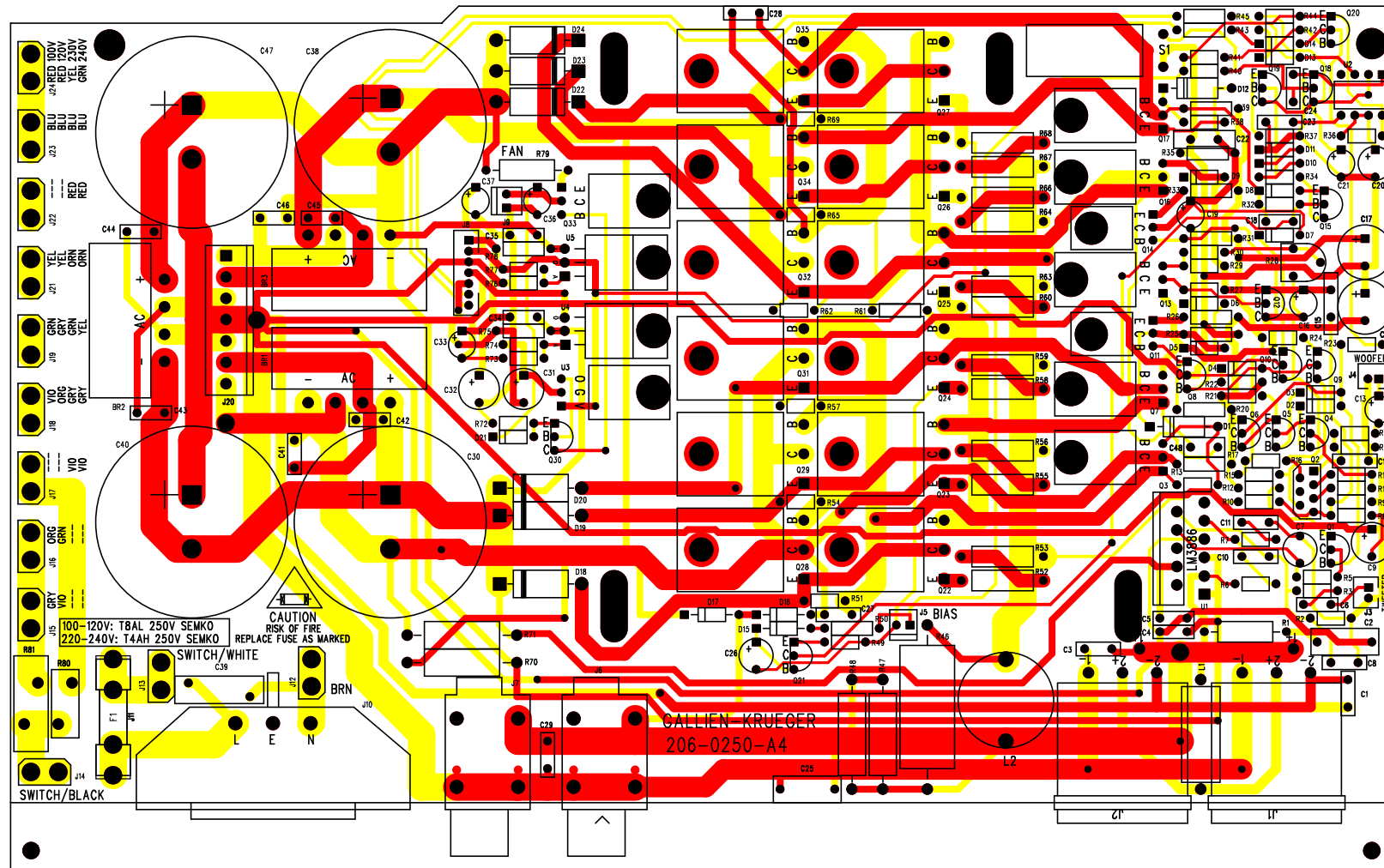
REV. A4

- X3 MHL125P
- X4 MHL2X.55 OVL
- X5 MHL2X.55 OVL
- X6 MHL2X.55 OVL
- X7 MHL125NP
- X8 MHL125NP
- X9 MHL2X.55 OVL
- X10 MHL2X.55 OVL
- X11 MHL2X.55 OVL
- X12 MHL2X.55 OVL
- X13 MHL125NP
- X14 MHL2X.55 OVL
- X15 MHL2X.55 OVL
- X16 MHL2X.55 OVL
- X17 MHL125NP
- X18 MHL2X.55 OVL
- X19 MHL2X.55 OVL
- X20 MHL2X.55 OVL
- X21 MHL2X.55 OVL
- X22 MHL2X.55 OVL
- X23 MHL2X.55 OVL
- X24 MHL2X.55 OVL
- X25 MHL2X.55 OVL
- X26 MHL2X.55 OVL
- X27 MHL2X.55 OVL
- X28 MHL2X.55 OVL
- X29 MHL2X.55 OVL
- X30 MHL2X.55 OVL
- X31 MHL2X.55 OVL
- X32 MHL2X.55 OVL
- X33 MHL2X.55 OVL
- X34 MHL2X.55 OVL
- X35 MHL2X.55 OVL
- X36 MHL2X.55 OVL
- X37 MHL2X.55 OVL
- X38 MHL2X.55 OVL
- X39 MHL2X.55 OVL
- X40 MHL2X.55 OVL
- X41 MHL2X.55 OVL
- X42 MHL2X.55 OVL
- X43 MHL2X.55 OVL
- X44 MHL2X.55 OVL
- X45 MHL2X.55 OVL
- X46 MHL2X.55 OVL
- X47 MHL2X.55 OVL
- X48 MHL2X.55 OVL
- X49 MHL2X.55 OVL
- X50 MHL2X.55 OVL

GK GALLIEN-KRUEGER

700RB-II Power Amp 206-0250-A4

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-2060-0	U2	LM555, TIMER	NATIONAL	LM555CN
001-3886-0	U1	LM3886 ,68W AUDIO POWER AMP	NATIONAL	LM3886T
010-0000-0	Q2	2SC3381BL,NPNX2,80V,100MA,2-10M1B	TOSHIBA	2SC3281BL
010-0001-0	Q1 Q4-6 Q8 Q21	2SC3478, NPN,180V,100MA,TO-92	NEC	2SC3478-K
010-0003-0	Q11	2SC3502-F,NPN,200V,100MA,TO-126	TOSHIBA	2SC3502
010-0012-0	Q18-19 Q30	MPSA06, NPN,80V,500MA,TO-92	MOTOROLA	MPS-A06
010-0035-0	U3	LM35DT, TEMPERATURE SENSOR, TO-220	NATIONAL	LM35DT
010-1002-0	Q9-10 Q20	2SA1376, PNP,180V,100MA,TO-92	NEC	2SA1376-K
010-1003-0	Q14	2SA1380-F,PNP,200V,100MA,TO-126	SANYO/TOSHIBA	2SA1380-F/E
010-1013-0	Q12 Q15	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
012-0002-0	Q13 Q16-17	2SC4793,NPN,200V,1.5A,2-10R1A	TOSHIBA	2SC4793
012-0003-0	Q25-27 Q32 Q34-35	2SC5242,NPN,230V,15A,2-16C1A	TOSHIBA	2SC5242-O
012-1002-0	Q3 Q7 Q33	2SA1837,PNP,200V,1.5A,2-10R1A	TOSHIBA	2SA1837
012-1003-0	Q22-24 Q28-29 Q31	2SA1962,PNP,230V,15A,2-16C1A	TOSHIBA	2SA1962
014-0070-0	U5	LM317	NATIONAL	LM317
014-1072-0	U4	LM337	NATIONAL	LM337
020-0004-0	D13	1N755A, ZENER,7.5V,500MW ,D035	TAITRON	1N755A
020-0036-0	D5 D9	1N747A, ZENER, 3.6V, 5%, 400MW,	TAITRON	1N747A
020-0050-0	D8	1N751, ZENER,5.1V,10%,400MW,DO-35	NATIONAL	1N751
020-0240-0	D21	1N970B, ZENER, 24V, 5%, 500MW,	TAITRON	1N970B
020-1000-0	D2-4 D10-11 D14	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
020-1022-0	D6-7	BAV20, RECT, 200V, DO-35	NATIONAL	BAV20
020-1104-0	D15	SHOTTKY, 1A, 40V, 10NS, DO-41	MOTOROLA	1N5819
020-1120-0	D1 D12	MUR120,RECT-FAST, 1A, 200V, 25NS,	MOTOROLA	MUR120
020-1122-0	D18-20 D22-24	MUR410, RECT-FAST, 4A, 100V	MOTOROLA	MUR410
020-2106-0	D16-17	1N4004,RECT,1A,400V,DO-41	TAITRON	1N4004
022-3002-0	R81	THERMISTOR, NTC,1 OHM 10 AMP.	UEI	N20SP001M
022-3004-0	R80	THERMISTOR, NTC,2.5 OHM 6 AMP.	UEI	N13SP2R5M
023-0112-0	BR1-3	BRIDGE, 25A, 200V, VERT, PC,	CHENG-YI	MP25-02S
031-1336-0	C20 C26	CAP,ELEC,RAD,336,20%,25V	UNITED CHEMI-CON	SRG25VB33RM5X7LL
031-2105-0	C21	CAP,ELEC,RAD, 105, 20%, 50V	UNITED CHEMI-CON	C440C105M5U5CA
031-2106-0	C33 C36-37	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2106-A	C7	CAP,ELEC,RAD, 106, 20%, 50VNP	UNITED CHEMI-CON	SMEBP50VB10RM6X11LL
031-2107-0	C9 C31-32	CAP,ELEC,RAD,107, 20%, 50V	UNITED CHEMI-CON	SMG50VB101M8X11LL
031-2159-0	C30 C38 C40 C47	CAP, ELEC, RAD, 159, 20%, 50V	UNITED CHEMI-CON	SMH50VN153M35X45T2
031-2335-0	C13	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
031-4475-0	C16 C19	CAP,EL-R,4.7UF/100V, M	UNITED CHEMI-CON	SMG100VB47RM5X11LL
031-4476-0	C14 C17	CAP,ELEC,RAD,476,-10%+50%,100V	UNITED CHEMI-CON	SMG100VB47RM10X12LL
032-4103-0	C23	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C4-6,18,24,34,35,41-46	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4333-0	C11	CAP,PE,333,5%,100V,	PANASONIC	ECQV1333JM
032-4472-0	C1 C3 C8 C27-29	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
032-4474-0	C48	CAP,PE,474,5%,100V,	PANASONIC	ECQV1474JM
032-7104-0	C2 C25	CAP,PE,104,10%, 250V	ILLINOIS CAPACITOR	104MSR250K
034-4221-0	C10	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4471-0	C12	CAP,MCR,470pF,5%,100V,	TAITRON	TMRS471J100NPOB
034-7103-0	C39	CAP, CERMIC DISK, 103, 10%, X-250V	PANASONIC	ECK-DRS103ZV
035-8030-0	C15	CAP MICA AXIAL , 3pF, 10%, 500V	CORNELL	CD10CD030D03
035-8561-0	C22	CAP MICA RADIAL, 561, 5%, 300V	CORNELL	CD15FC561J103
052-2212-0	R43 R45	RES,METAL FILM,2.21k,1/4W,1%	ECI	M2F1AK002.21
052-5622-0	R25 R35	RES,METAL FILM,5.62K,1/4W,1%	ECI	M5F1AK005.62
053-0270-0	R1	RES ,CARBON FILM,2.7 ,1/2W,5%	ECI	R5J3AJ002.70
054-.100-0	R52,53,55,56,58-60,63 R64,66-68	RES, METAL OXIDE, 0.1 Ohm, 1W, 5%	ECI	MO10J3AJ000.10
054-.330-0	R79	RES, METAL OXIDE, 0.33 OHM, 1W, 5%	ECI	MO10J3AJ000.33
055-0101-0	R47-48	RES, METAL OXIDE, 10 OHM, 2W, 5%	ECI	MOM20J3AJ010.00
055-2702-0	R70-71	RES, METAL OXIDE, 2.7K OHM, 2W, 5%	ECI	MOM20J3AK002.70
056-0100-0	R46	RES, CERAMIC WW, 1.0 OHM, 5W, 10%	ECI	WWC50J3AJ001.00
059-1000-0	R17 R39	RES,MF,FUSE,10.0, 1/4W,1%	JUKN.OHM	FR25-10.0
059-1002-0	R20 R31 R50 R75 R78	RES,MF,FUSE,1.00K,1/4W,1%	JUKN.OHM	FR25-1.00K
059-4750-0	R26 R33	RES,MF,FUSE,47.5, 1/4W,1%	JUKN.OHM	FR25-47.5
059-6810-0	R61	RES,MF,FUSE,68.1, 1/4W,1%	JUKN.OHM	FR25-68.1
060-1001-0	R72	RES, METAL FILM, 100, 1/8W, 1%	ECI	M1F1AJ100.00
060-1002-0	R3,7,8,13,19,30,38,49	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R40-41	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R36 R44	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1213-0	R9 R18	RES,METAL FILM, 12.1K, 1/8W,1%	ECI	M1F1AK012.10



PCB WORK INSTRUCTIONS

DWG 420-0250-A4

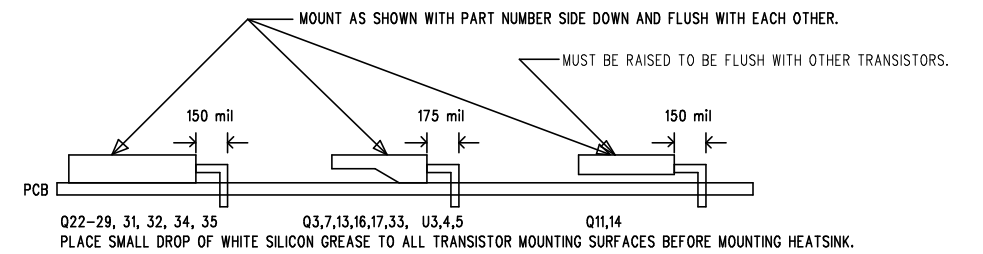
NOTES:

UNLESS OTHERWISE SPECIFIED:

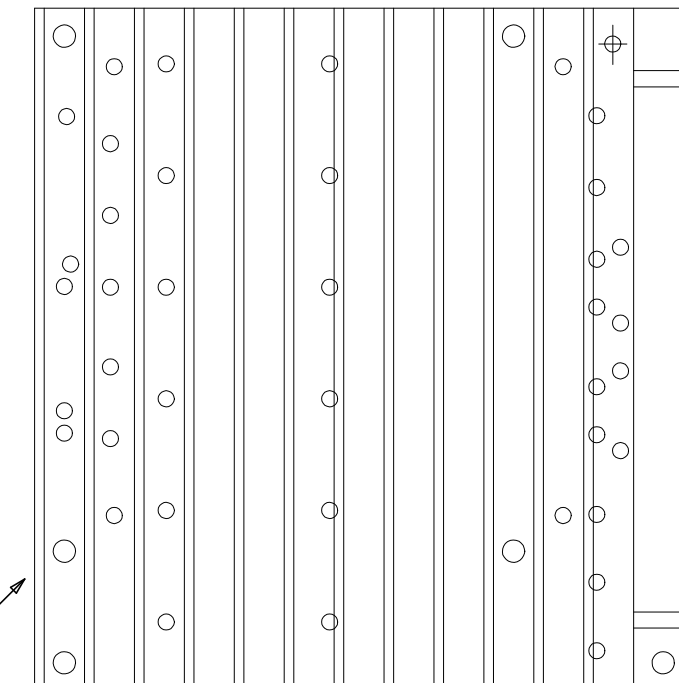
1. SQUARE PADS ON THRU HOLE PARTS (ie: CONNECTORS, DIPS, SIPS, LEDS) DENOTE PIN 1.
2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTION.
3. ALL BOARDS MUST BE BARE BOARD TESTED.
4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.

LOADING

5. SEE FORMING AND LOADING INSTRUCTIONS BELOW FOR INSTALLING SPECIFIED COMPONENTS.
6. CHECK THAT R52,53,55,56,58,60,63,64,66,67,68 & S1 ARE FLUSH TO BOARD.
7. CHECK THAT ALL CONNECTORS AND JACKS ARE FLUSH WITH PCB.
8. MAKE CERTAIN ALL POWER TRANSISTOR MOUNTING HOLES ARE PROPERLY ALIGNED FOR HEAT SINK.



HEAT SINK ASSEMBLY



NOT VALID UNLESS STAMP IS RED		2234 INDUSTRIAL DRIVE STOCKTON CA. 95206 VOICE: 209-234-7300 FAX: 209-234-8420	
gallien technology		TITLE: 700RB-II POWER AMP BD	
APPROVALS		SIZE: B	DRAWING NO: 405-0250-A4
INIT	DATE	REV. A4	PART NO: 145-0250-A4
DESIGNED: R.A.G.	7/16/01		
DRAWN: R.A.G.	12/10/03	COMPANY: GALLIEN-KRUEGER	
ELEC:		FILENAME: 5250A4	
MECH:		GERBER FILE NAME: sst01209pbo	
LAYER DESCRIPTION: SILKSCREEN			

This document is generated to address fuse failure due to excessive inrush current during turn on. It is applicable to 700RB-II power amp boards with part number 206-0250-A2 and 1001RB-II power amp boards with part number 206-0260-A2. To correct the problem, a thermistor with part number 022-3004-0 is soldered in series with the primary side of the transformer on 700RB-II power amp board or thermistor with part number 022-3008-0 on 1001RB-II power amp board.

The following is a guideline on how to modify the unit with the thermistor :

STEP I:

If the unit is a head version of 700RB-II or 1001RB-II remove the top cover then remove the power amp board from the chassis assembly.

If the unit is a combo version of 700RB-II and 1001RB-II, remove the chassis assembly from the cabinet, then remove the power amp board. Please see figure 1.



Chassis Assembly
figure 1

STEP II:

Locate J14 and J15 on the power amp board (figure 2a). Turn the power amp board over as per figure 2b.

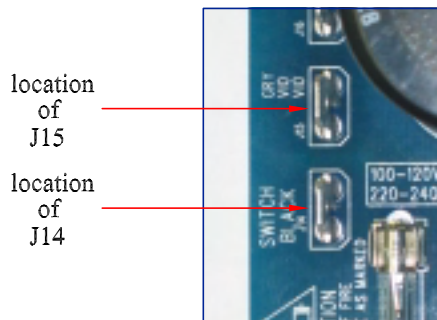


figure 2a



Power Amp Board
figure 2b

STEP III:

Locate J14 and J15 on the bottom/solder side of the board (figure 3a). Cut the trace between J14 and J15 as shown in figure 3b.

location of J14 and J15 on the bottom/solder side of the board

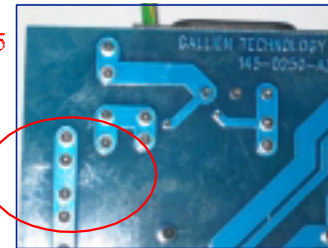


figure 3a

cut the trace here

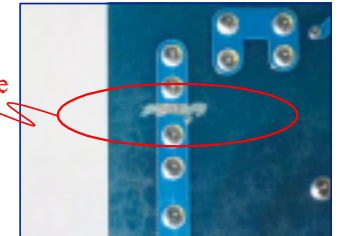


figure 3b

STEP IV:

Solder one lead of Thermistor (022-3004-0) to J14 and the other to J15 on the 700RB-II power amp board, or thermistor 022-3008-0 on 1001RB-II power amp board as shown in figure 4.

Note: Make sure that no portion or part of the thermistor is touching any terminal on the board except terminals J14 and J15.

Thermistor NTC 2.5 ohms, 6 amperes
P.N: 022-3004-0
for 700RB-II power amp board

or

Thermistor NTC 2 ohms, 8 amperes
P.N: 022-3008-0
for 1001RB-II power amp board

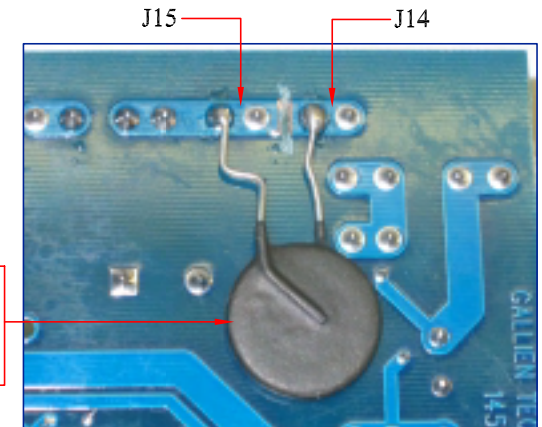


figure 4

PROPRIETARY		
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APPROVAL		
DEPT.	INITIAL	DATE
PRODUCTION	NOLLVALDZ	12/18/2003

gallien technology 2234 INDUSTRIAL DRIVE STOCKTON, CA, 95207	
TITLE THERMISTOR MODIFICATION	
FILE NAME	REV.
DOCUMENT NUMBER	SIZE
SCALE NOT TO SCALE	SHEET 1 OF 1