



**WEB ACCESS:** <http://www.yorkville.com>

**WORLD HEADQUARTERS  
CANADA**

**Yorkville Sound**  
550 Granite Court  
Pickering, Ontario  
L1W-3Y8 CANADA

Voice: (905) 837-8481  
Fax: (905) 837-8746

**U.S.A.**

**Yorkville Sound Inc.**  
4625 Witmer Industrial Estate  
Niagara Falls, New York  
14305 USA

Voice: (716) 297-2920  
Fax: (716) 297-3689



**Quality and Innovation Since 1963**

Printed in Canada



**SERVICE MANUAL  
MANUEL DE SERVICE**

Before operating this unit, please read this manual thoroughly, and retain it for reference.  
Veillez lire ce manuel attentivement avant d'utiliser l'appareil et le conserver pour consultations ultérieures

Printed in Canada  
Revised / Révisé 09/00  
s-300k.pdf

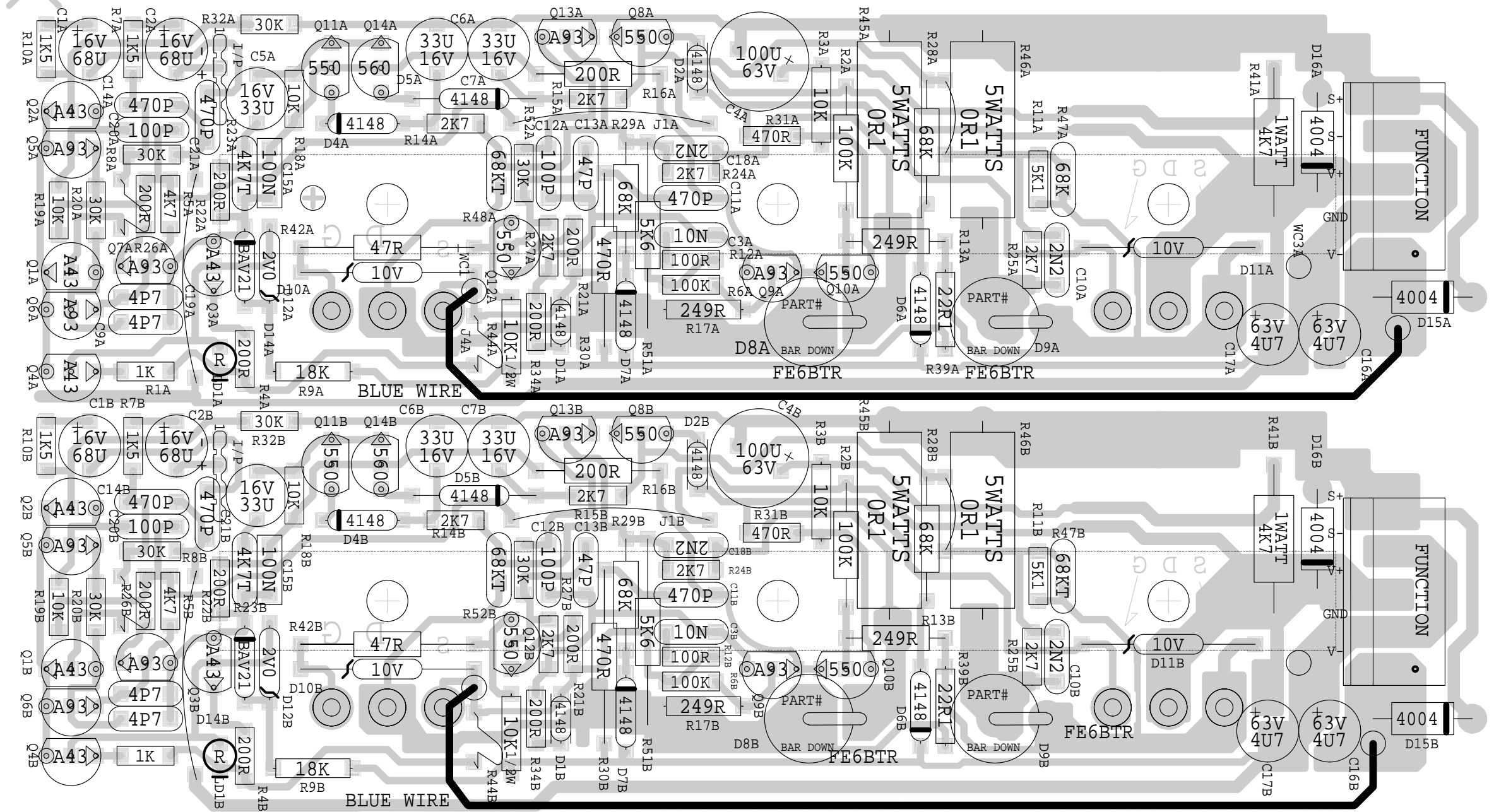


ASSEMBLY M513-1.20

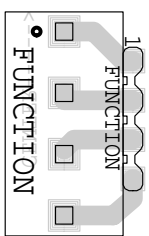
PCB MECH M513-1.20



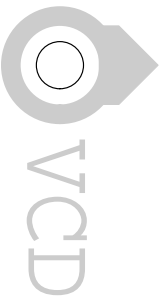
00.1-312M



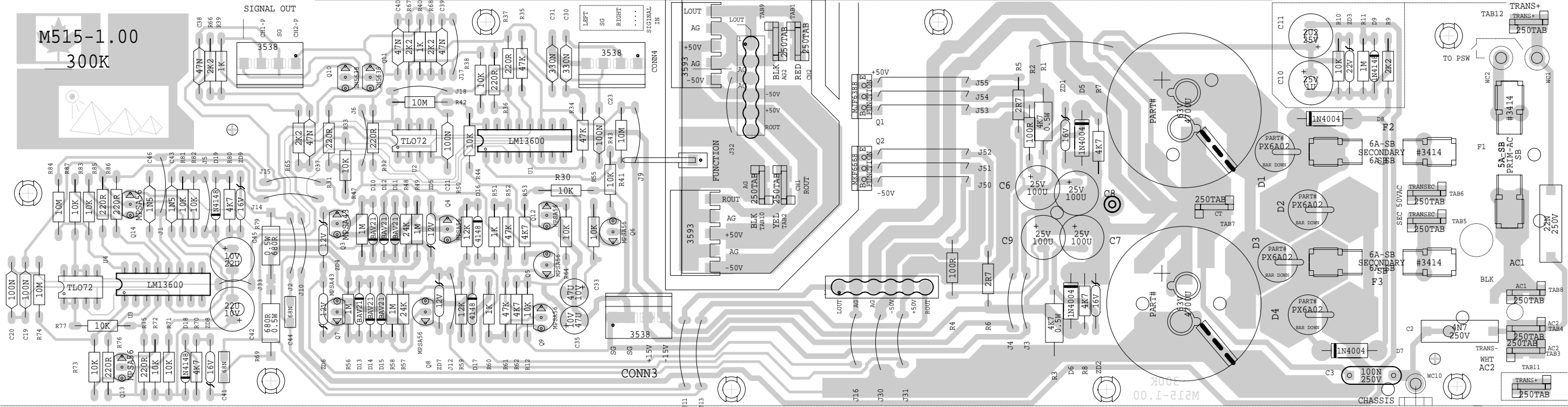
00.1-312M SOLDERSIDE M513-1.00



"256.7X"000.4

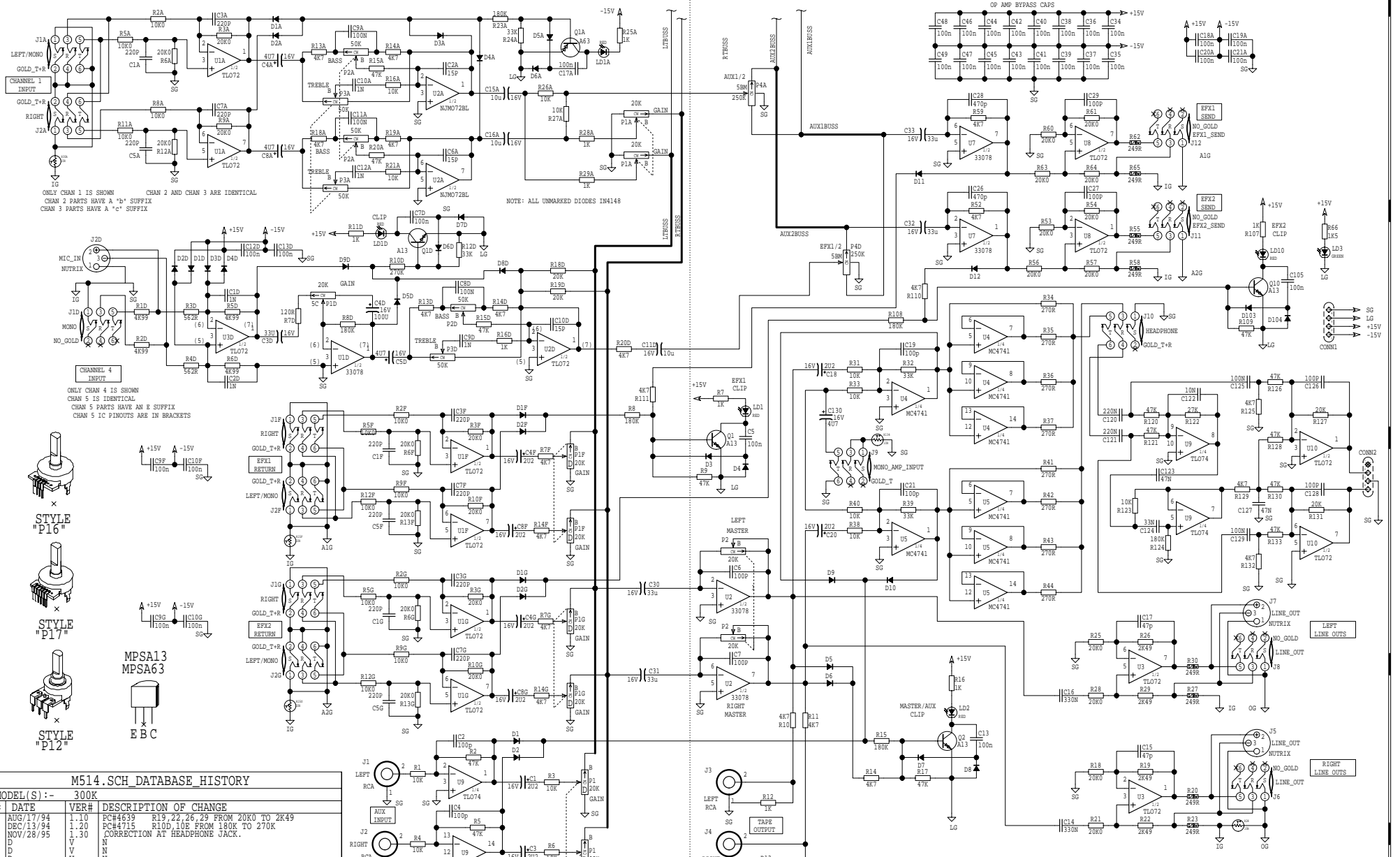


M515-1.00  
300K



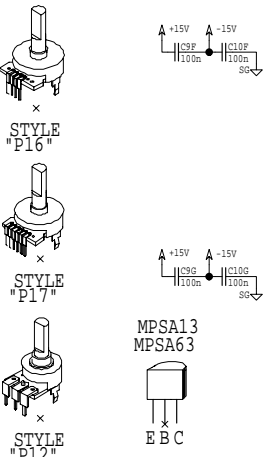
M515-1.00  
300K

CHASSIS



ONLY CHAN 1 IS SHOWN  
 CHAN 2 AND CHAN 3 ARE IDENTICAL  
 CHAN 2 PARTS HAVE A "b" SUFFIX  
 CHAN 3 PARTS HAVE A "c" SUFFIX

ONLY CHAN 4 IS SHOWN  
 CHAN 5 IS IDENTICAL  
 CHAN 5 PARTS HAVE AN E SUFFIX  
 CHAN 5 IC PINOUTS ARE IN BRACKETS

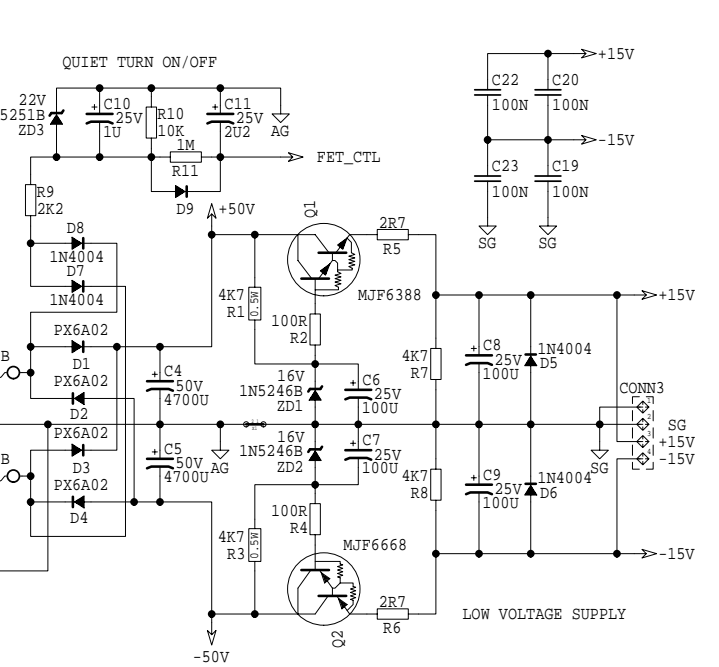
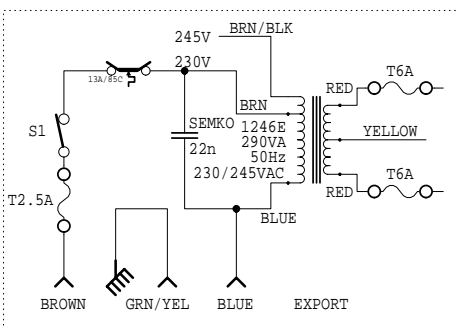


M514.SCH DATABASE HISTORY

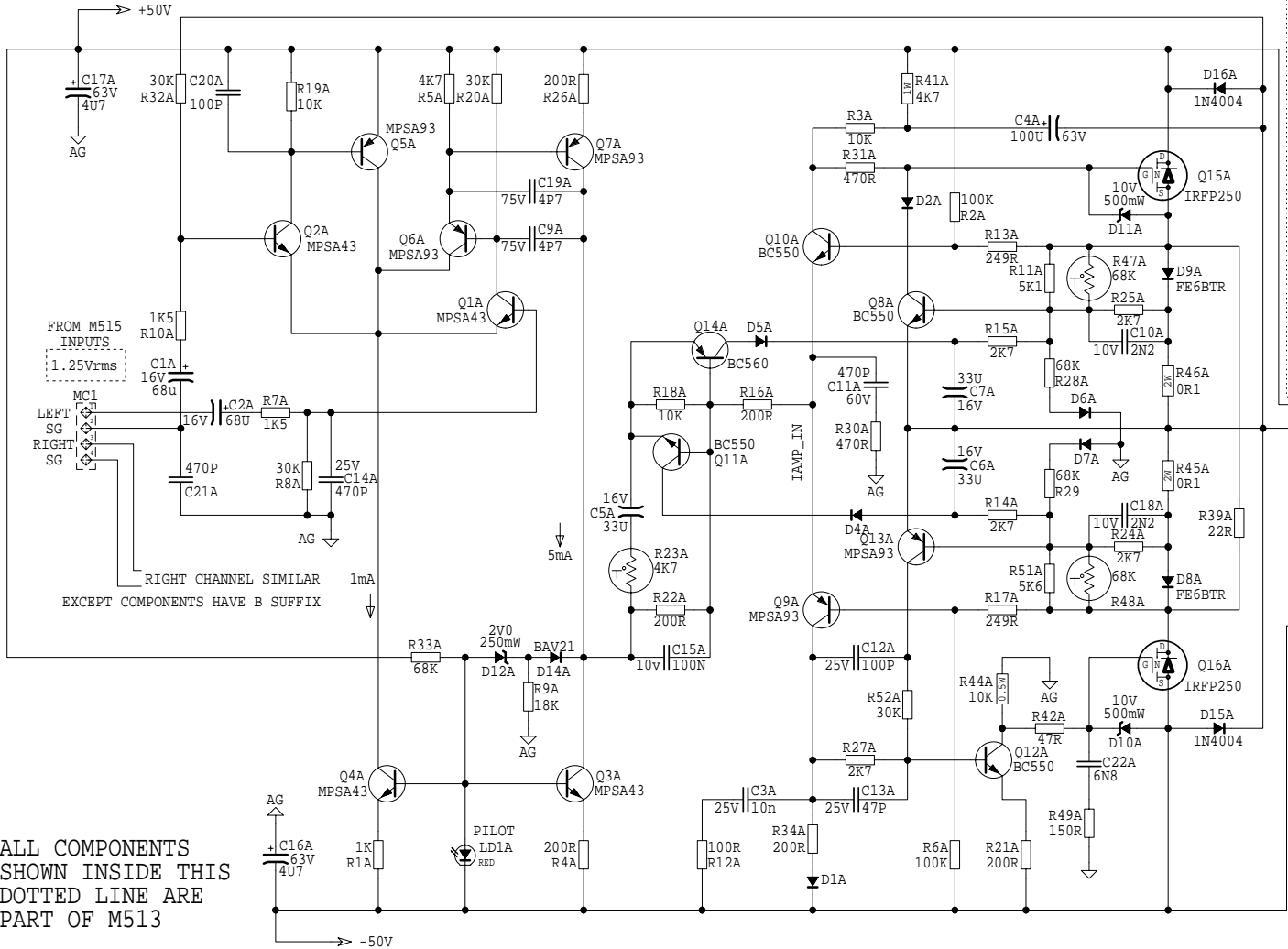
MODEL(S) :- 300K			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG/17/94	1.10	PC#4639 R19,22,26,29 FROM 20K TO 2K49
2	DEC/13/94	1.20	PC#4715 R10D,10E FROM 180K TO 270K
3	NOV/28/95	1.30	CORRECTION AT HEADPHONE JACK.
4	D	V	N
5	D	V	N
6	D	V	N
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N

NOTE: ALL UNMARKED DIODES IN4148  
 THE 300K BY A.WILSON AND C.CHU

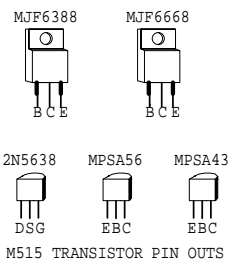
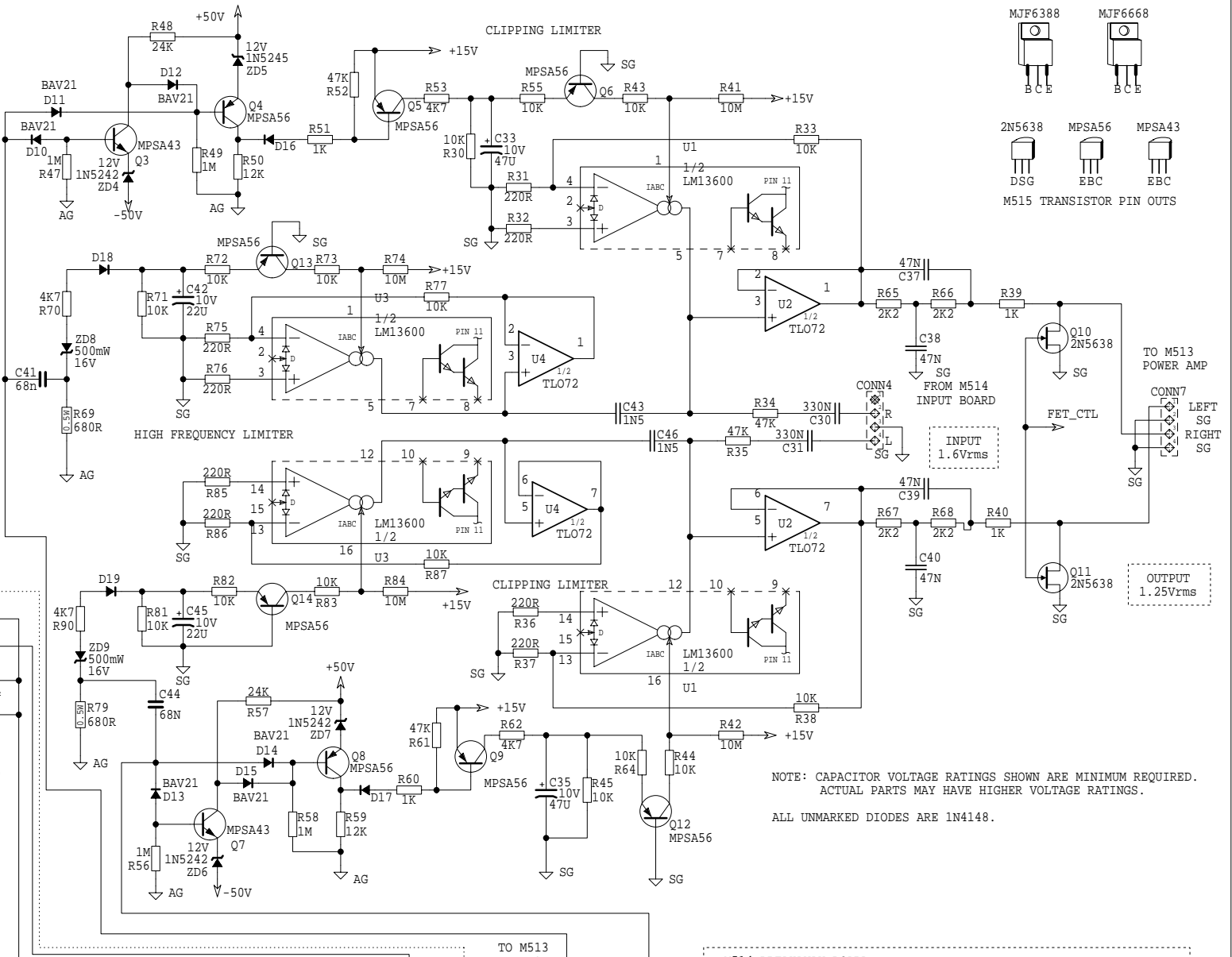




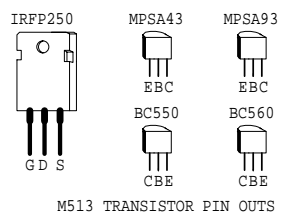
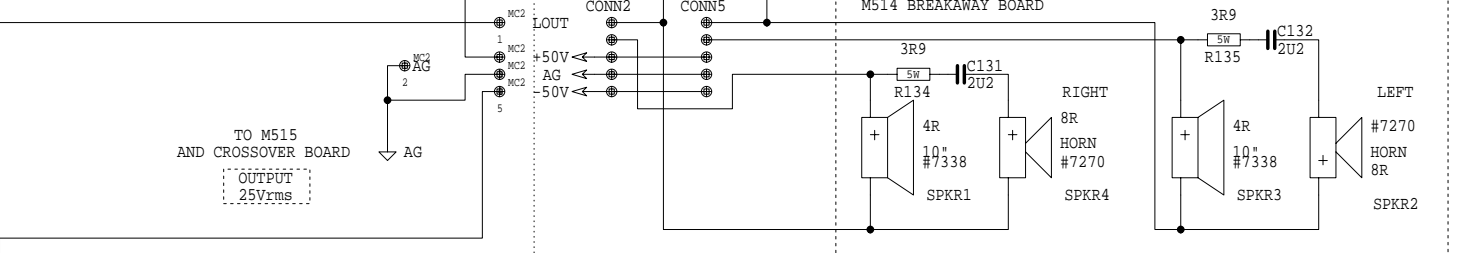
CAPACITOR RATINGS SHOWN ARE THE MINIMUM REQUIRED  
ACTUAL PARTS MAY HAVE HIGHER VOLTAGE RATINGS.  
ALL UNMARKED DIODES ARE 1N4148



ALL COMPONENTS SHOWN INSIDE THIS DOTTED LINE ARE PART OF M513



NOTE: CAPACITOR VOLTAGE RATINGS SHOWN ARE MINIMUM REQUIRED.  
ACTUAL PARTS MAY HAVE HIGHER VOLTAGE RATINGS.  
ALL UNMARKED DIODES ARE 1N4148.



M513/M515.SCH DATABASE HISTORY

MODEL(S) :- 300K			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG/29/94	1.10	PC#4612 M513 MR821->FE6BTR
2	SEP/06/94	1.20	PC#4664 M513 R3A/B 4K7->10K C3A/B 680P->10N MYLAR R12A/B 200R->100R
3	.	.	ADD 6N8 IN SERIES WITH 150R FROM
4	.	.	GATE OF Q16A/B TO GROUND
5	JUN/16/97	1.30	PC#5381 ADD 68K (R33A)
6	FEB/02/99	1.40	XFMR_WIRE_COLOURS_UPDATED
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N

YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
3562	16 PIN SOCKET W3116T WINSLOW	1	3460	RCA DUAL PCB MT VERT GOLD .475"	2	4844	1/4W 1M 5% T&R RES	5
6405	RED 3MM LED 1V7 5MA BRT	8	3453	XLR MALE PCB MT VERT	2	4809	1/4W 10M 5% T&R RES	4
6411	RED 3MM LED 1V9 5MA BRT	2	3657	XLR FEMLE PCB MT HORZ NO SHELL	2	3678	14" 4C-26AWG RIBBON CABLE 0.1"	1
6408	GRN 3MM LED 1V9 5MA FROSTED	1	3451	EYELET SMALL 0.089 OD PLATED	14	3609	6" 5C-26AWG RIBBON CABLE 0.1"	1
6425	BAV21 200V 0A25 DIODE T&R	8	3414	INTERNATIONAL PC MOUNT FUSEHOLDER	6	3675	6" 6C-22AWG RIBBON CABLE 156	1
6825	1N4148 75V 0A45 DIODE T&R	71	2427	5.0 AMP SLO-BLO .25X1.25 FUSE	1	3673	12" 16C-28AWG DIP HDR CABLE .05"	1
6438	1N4004 400V 1A0 DIODE T&R	8	2428	6.0 AMP SLO-BLO .25X1.25 FUSE	2	9010	16GA COLD ROLLED STEEL 4X8" SHEET	4
6434	6A2 200V 6A0 DIODE	4	3501	B5220F006 COMP WASH #4 SMALL	2	9562	300K/MM-4/BETA-150/EQ HEATSINK	0.269
6890	FE6BTR 100V 6A0 DIODE FASREC	4	3563	TRANSISTOR MOUNTING BRACKET	2	8877	4-40 X 1/4 FILLISTER PH MS ZN	4
5121	MZ4615RL 2V0 W25 ZENER 5% T&R	2	3806	RECTANGULAR WASHER FOR TRANS SUPPRT	2	8865	4-40 X 5/16 PAN PH MS JS500	18
6461	1N5240BRL 10V0 0W5 ZENER 5% T&R	4	3795	#8 GROUND LUG ZIERICK 505-169	1	8742	4-40 X 3/8 PAN PH TAPTITE JS500	2
6450	1N5242B 12V0 0W5 ZENER 5% T&R	4	3810	4" NYLON CABLE TIE	14	8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	4
6824	1N5246B 16V0 0W5 ZENER 5% T&R	4	8706	ROTARY KNOB BLACK W/BLUE POINTER	24	8801	6-32 X 3/8 PAN PH TAPTITE JS500	2
6463	1N5251BRL 22V0 0W5 ZENER 5% T&R	1	3481	#3 1/8 SUT AC LINE CORD 250 CLIPS	1	8747	6-32 X 1/2 HEX ND MS ZINC	2
5101	BC550C TO92 NPN TRAN T&R TB	8	3834	HEYCO #1214 STRAIN RELIEF	1	8834	6-32 X 5/8 T-STUD	4
5102	BC560C TO92 PNP TRAN T&R TB	2	3538	24 PIN BREAKAWAY LOCK .156	0.917	8823	6-32 X 1 PAN PH TAPTITE JS500	11
5104	MPSA56 TO92 PNP TRAN T&R TA	8	5104	SIDE ENTRY PCB CONN .156 4POS	3	8744	6-32 X 1 1/4 HH MS UD ZINC	2
5109	MPSA43 TO92 NPN TRAN TA	10	3593	PCB CONN 90 5 CIR .156	2	8749	10-32 X 1/2 QDX PH TAPTITE JS500	4
5110	MPSA93 TO92 PNP TRAN TA	10	8793	4-40 HEX NUT ZINC	2	8765	1/4-20 X 2 1/2 HEX HD MS JS500 BLK	1
5105	MPSA13 TO92 NPN DARL T&R TA	5	8800	6-32 KEPS NUT ZINC	21	3742	250 SPACER ID.170 OD.31 ALUMINUM	4
5106	MPSA63 TO92 PNP DARL T&R TA	3	8854	6-32 X 1/4 HEX NUT ZINC	2	8629	10-32 X 1/4 SPACER PHENOLIC	4
5119	2N5638 TO92 NCH JFET T&R TC	2	8788	1/4-20 KEPS NUT ZINC	1	3744	SNAP IN .375 SPACER RICHO	4
6915	TIP102 TO220 NPN TRAN DARL TE	1	8890	1/4-20 CAGE NUT C7988142027	5	3743	SNAP ON 0.5" SPACER RICHO	11
6916	TIP107 TO220 PNP TRAN DARL TE	1	3830	TO218 PREGREASED MICA 56-78-2AP	4	8580	CUSTOM .625 SPACER	9
6928	IRFP250 TO247 NCH MFET TM	4	4597	22AWG STRAN TC WIR JMP	110	3858	3/4 PLASTIC HEX SPACER #4	7
6754	NJM072BL IC DUAL OPAMP INLINE	3	4599	22AWG SOLID SC WIR T&R JMP	112	8667	SHOULDER WASHER SWS-229 LENGTH 1/8	2
6798	MC4741CP IC QUAD OP AMP	2	5299	24AWG SOLID SC WIR RAD JMP	4	8485	#6 SPLIT WASHER ZINC	2
6840	MC33078P IC DUAL OP AMP	3	4722	5.0W 0R1 10%GREEN BLK RES	4	8853	#6 TEFLON FLAT WASHER 0.0316 THICK	4
6882	TL072CP IC FET DUAL OP AMP	12	4905	1/4W 2R7 5% T&R RES	2	8820	#8 FLAT WASHER JS500	4
6889	TLO74CN IC QUAD O/A T.I ONLY	1	4734	5.0W 3R9 5% BLK RES	2	3587	DPDT ROKR SW QUIK 250°AC/PWR ON-OFF	1
6745	LM13600N IC XCONDUCTANCE AMP	2	4591	1/8W 22R1 1%FLAME PROOF T&R RES	2	3399	THERMO/BRKR:N/CLOSED OPEN@96C	1
6472	4K7 3% 0W0 THERMISTOR	2	4600	1/8W 47R 5% T&R RES	2	1246	300K T&R TRD	1
6473	68K 3% 0W0 THERMISTOR	4	4852	1/4W 100R 5% T&R RES	2	M708P	ANNODIZE BLAC-H/S FOR 300K/BETA-150	1
6474	10R 3% 0W0 PTC THERMISTOR	7	4921	1/4W 100R 5% .2"U T&R RES	2			
5198	4P7 100V 2%CAP T&R RAD CER.2"NPO	4	4987	1/4W 120R 5%MINI T&R RES	2			
5402	15P 100V 10%CAP T&R BEAD NPO	8	4859	1/4W 150R 5% T&R RES	2			
5203	47P 100V 2%CAP T&R RAD CER.2"NPO	2	4909	1/4W 200R 5% T&R RES	2			
5408	47P 100V 10%CAP T&R BEAD NPO	2	4932	1/4W 200R 5% .2"U T&R RES	10			
5199	100P 100V 2%CAP T&R RAD CER.2"NPO	6	4857	1/4W 220R 5% T&R RES	8			
5410	100P 100V 10%CAP T&R BEAD NPO	8	4606	1/8W 249R 2%FLAME PROOF T&R RES	12			
5412	220P 100V 10%CAP T&R BEAD NPO	20	4986	1/4W 270R 5%MINI T&R RES	8			
5201	470P 100V 5%CAP T&R RAD CER.2"NPO	6	4821	1/4W 470R 5% T&R RES	2			
5416	470P 50V 10%CAP T&R BEAD NPO	2	4933	1/4W 470R 5% .2"U T&R RES	2			
5206	1N 400V 5%CAP T&R RAD .2"FLM	4	4799	1/4W 562R 1% T&R RES	4			
5422	1N 50V 10%CAP T&R BEAD NPO	8	4673	1/2W 680R 5% T&R RES	2			
5424	1N5 50V 10%CAP T&R BEAD Y5P	2	4823	1/4W 1K 5% T&R RES	4			
5274	2N2 200V 5%CAP T&R RAD CER.2"NPO	4	4934	1/4W 1K 5% .2"U T&R RES	2			
6451	4N7 250V 20%CAP BLK Y 10MM AC	1	4981	1/4W 1K 5%MINI T&R RES	18			
5272	6N8 100V 5%CAP T&R RAD .2"FLM	2	4935	1/4W 1K5 5% .2"U T&R RES	4			
5204	10N 100V 10%CAP T&R RAD .2"FLM	2	4988	1/4W 1K5 5%MINI T&R RES	1			
5300	10N 50V 10%CAP T&R BEAD X7R	1	4847	1/4W 2K2 5% T&R RES	5			
6435	22N 275V 20%CAP BLK X2' 15MM AC	1	6114	1/4W 2K49 1%MINI MF T&R RES	4			
5306	33N 50V 10%CAP T&R BEAD X7R	1	4936	1/4W 2K7 5% .2"U T&R RES	10			
5308	47N 50V 10%CAP T&R BEAD X7R	6	4627	1/2W 4K7 5% T&R RES	2			
5226	68N 100V 5%CAP T&R RAD .2"FLM	2	4681	1.0W 4K7 5% T&R RES	2			
5228	100N 100V 5%CAP T&R RAD .2"FLM	15	4827	1/4W 4K7 5% T&R RES	6			
5314	100N 50V 10%CAP T&R BEAD X7R	37	4943	1/4W 4K7 5% .2"U T&R RES	2			
5865	100N 250V 10%CAP BLK RAD POLY FLM	1	4982	1/4W 4K7 5%MINI T&R RES	32			
5318	220N 50V 10%CAP T&R BEAD X7R	1	4639	1/4W 4K99 1% T&R RES	4			
5320	330N 50V 10%CAP T&R BEAD X7R	4	6128	1/4W 4K99 1%MINI MF T&R RES	4			
5255	1U 63V 20%CAP T&R RAD .2"EL	1	4939	1/4W 5K1 5% .2"U T&R RES	2			
5257	2U2 63V 20%CAP T&R RAD .2"EL	9	4862	1/4W 5K6 5% T&R RES	4			
5932	2U2 100V 10%CAP BLK RAD POLY FLM	2	4829	1/4W 10K 5% T&R RES	17			
5259	4U7 63V 20%CAP T&R RAD .2"EL	13	4940	1/4W 10K 5% .2"U T&R RES	4			
5281	10U 16V 20%CAP T&R RAD .2"NP	8	4983	1/4W 10K 5%MINI T&R RES	23			
5260	22U 50V 20%CAP T&R RAD .2"EL	2	4989	1/2W 10K 5%MINI T&R RES	2			
5961	33U 16V 20%CAP T&R RAD .2"NP	12	6116	1/4W 10K0 1%MINI MF T&R RES	20			
5627	47U 10V 20%CAP BLK RAD NP	2	4856	1/4W 12K 5% T&R RES	2			
5265	68U 25V 20%CAP T&R RAD .2"EL	4	6125	1/4W 18K 5%MINI T&R RES	2			
5267	100U 25V 20%CAP T&R RAD .2"EL	6	6123	1/4W 20K0 1%MINI MF T&R RES	38			
5914	100U 63V 20%CAP BLK 10X13MM EL	2	4902	1/4W 24K 5% T&R RES	2			
5869	4700U 63V 20%CAP BLK 25X40MM ELS	2	6129	1/4W 27K 5%MINI T&R RES	1			
4559	20K 5C R/A 16MM P12	2	4941	1/4W 30K 5% .2"U T&R RES	8			
4564	20K 1B LIN 18MM STEREO P17	7	6122	1/4W 33K 5%MINI T&R RES	7			
4563	50K 1B LIN 16MM P12	4	4834	1/4W 47K 5% T&R RES	4			
4416	50K B LIN 18MM STEREO P17	6	6119	1/4W 47K 5%MINI T&R RES	19			
4414	250K 5B LIN 18MM CENTER TAP P16	5	4836	1/4W 68K 5% T&R RES	4			
3682	250 MALE PCB TAB BULK CARTRIGE	22	4838	1/4W 100K 5% T&R RES	2			
3498	1/4" JCK PCB MT HORZ	6	4942	1/4W 100K 5% .2"U T&R RES	2			
3523	1/4" JCK PCB MT HORZ GOLD T__	1	4796	1/4W 180K 5%MINI T&R RES	9			
3528	1/4" JCK PCB MT HORZ GOLD TR__	11	6135	1/4W 270K 5%MINI T&R RES	2			