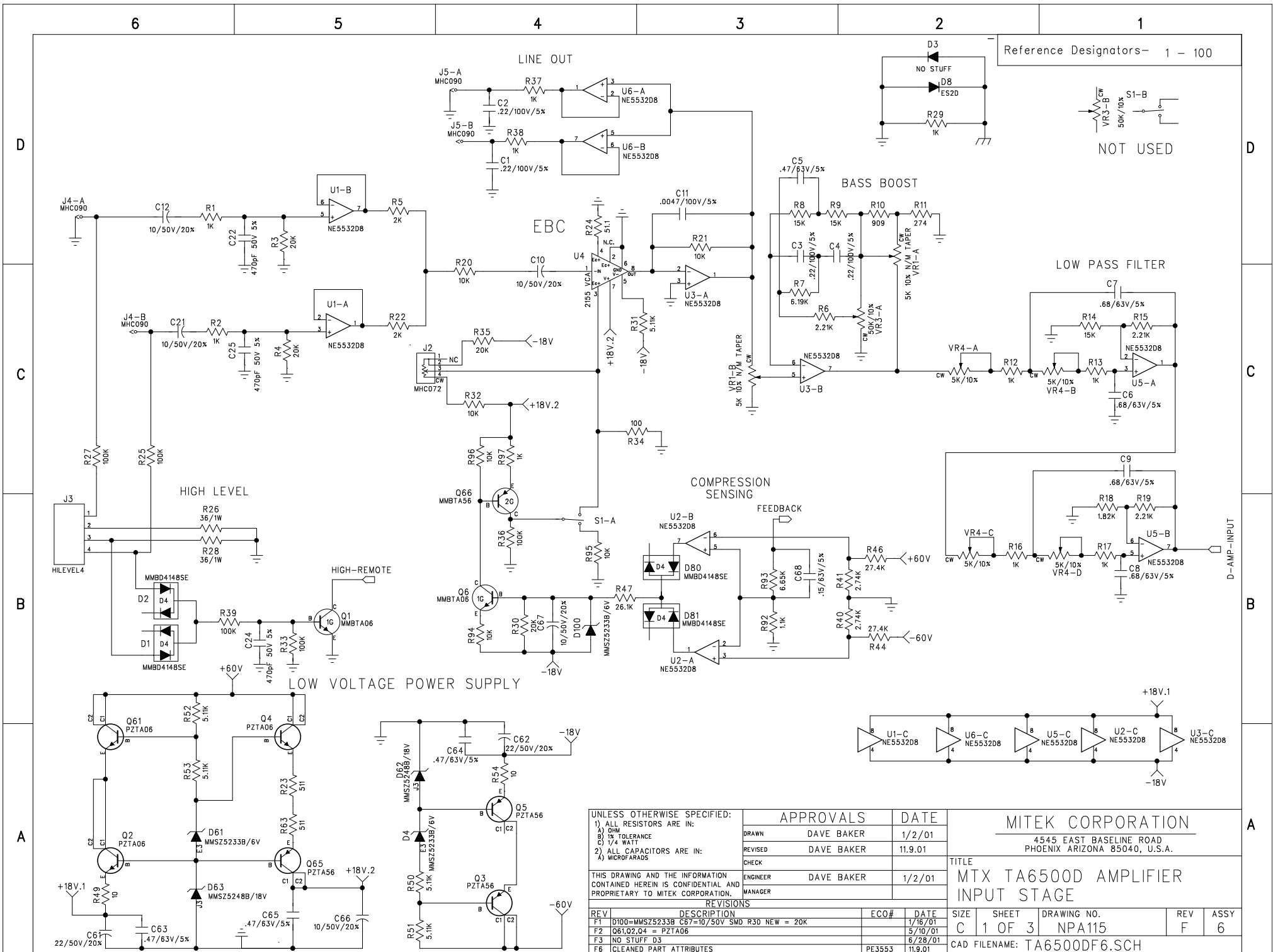


Product:	THUNDER6500D				
Revision:	F6				
Created	11/9/2001 10:50:32 AM				
Engineer:	PHOENIX R&D				
File Name	T6500DF6.sch				
Insertion	Part Number	Part Description	Qty	RefDes	Value
HAND	MAE059	CAP ELEC SNAP 2200 MFD 25V 0.4LS	2	C623, C624	2200/25V/20%
HAND	MAE067	CAP ELEC SNAP 5600 MFD 63V	4	C653, C654, C655, C656	5600/63V/20%
HAND	MBP046	POT 50K 10% DUAL MOLDED CCW VERT	1	VR3	50K/10%
HAND	MBP048	DUAL 5K POT, 10%, N/M TAPER, MOLDED	1	VR1	5K 10% N/M TAPER
HAND	MBP049	5K POT, 10%, 4 GANG, MOLDED	1	VR4	5K/10%
HAND	MBT002	THERMISTOR NTC 10K 10% (HANG OFF)	3	TH601, TH602, TH603	10K/NTC/10%-B
HAND	MCU013	INDUCTOR W/HEADER TA4250D/TA6500D	1	L101	175UF
HAND	MDD006	DIODE MUR1620 DUAL COMMON CATHODE	1	REC601	MUR1620/AKA
HAND	MDD007	DIODE MUR1620CTR DUAL COMMON ANODE	1	REC602	MUR1620/KAK
HAND	MDF017	MOSFET N CHANNEL 45N20A	4	FET101, FET102, FET103, FET104	SSP45N20A
HAND	MDF019	MOSFET N CHANNEL 70N06 TO 220AB	4	FET601, FET602, FET603, FET604	MTP70N06
HAND	MEL055	IC VCA 2155 THAT CHIP	1	U4	2155 VCA
HAND	MHC059	CHASSIS GROUND LUG	1	P602	GND LUG
HAND	MHC072	CONN EBC MODULAR JACK 90 DEG MINI BLK	1	J2	20K
HAND	MHC076	CONN MOLEX 4 POSITION	1	J3	MHC076
HAND	MHC084	CONN 4 POS TERM BLOCK PINS BENT DOWN	1	P101	MHC084
HAND	MHC085	CONN TERM BLOCK 3 POS PINS BENT DOWN	1	P601	MHC085
HAND	MHC090	CONN RCA JACK 2 POS NICKEL PLATED WHITE ON TOP	2	J4, J5	MHC090
HAND	MJP001	MJP001, 2 POLE 2 THROW	1	S1	
HAND	MLT046	TA6500D DRIVE XFORMER ON HEADER	1	T601	MLT046
HAND	MLT060	TA6500D TRANSFORMER ON HEADER REPLACES MLT047	1	T602	MLT060
HAND	MPC011	FUSE CLIP SNAP ATO 3GANG LOADED	1	F601	25A
RADIAL	MAE075	CAP ELEC HF 470MFD 63V 20% 0.2LS	6	C139, C140, C141, C142, C143, C144	470/63V/20%

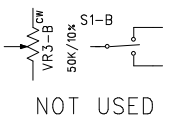
RADIAL	MAE079	ELEC, 10/100V, 20%	3	C112, C114, C125	10/100V
RADIAL	MAF002	CAP FILM 0.022 100V 0.2LS	2	C601, C603	.022/100V/5%
RADIAL	MAF003	CAP FILM 0.1 MFD 100V 0.2 LS	3	C133, C607, C609	.1/100V/5%
RADIAL	MAF004	CAP FILM 1000 PF 0.001 MFD 100V 0.2 LS	4	C113, C606, C611, C612	.001/100V/5%
RADIAL	MAF005	CAP FILM 0.0068 MFD 100V 0.2 LS	2	C192, C608	.0068/100V/5%
RADIAL	MAF007	CAP FILM 0.01 MFD 100V 5%	1	C109	.01/100V/5%
RADIAL	MAF011	CAP FILM 0.0047 MFD 100V 0.2LS	2	C11, C121	.0047/100V/5%
RADIAL	MAF013	CAP FILM 0.015 MFD 100V 5%	1	C614	.015/100V/5%
RADIAL	MAF015	CAP FILM 0.033 MFD 100V 5% 0.2 LS	1	C20	.033/100V/5%
RADIAL	MAF028	CAP FILM .22 MFD 100V 0.2 LS	9	C1, C2, C3, C4, C119, C120, C122, C123, C130	.22/100V/5%
RADIAL	MAF029	CAP FILM 0.47 MFD 63V 0.2LS	9	C5, C63, C64, C65, C135, C136, C625, C626, C657	.47/63V/5%
RADIAL	MAF031	CAP FILM .068 MFD 100V 5% .2LS	2	C107, C108	.068/100V/5%
RADIAL	MAF034	CAP 0.15 MFD 63V 0.2LS	1	C68	.15/63V/5%
RADIAL	MAM003	MONO-FILM, 4.7/50V, .2LS	1	C19	4.7/50V
RADIAL	MFL018	T 1 3/4 UltraBright LED Color RED	1	LED601	MFL018/Ultrabright
RADIAL	NO STUFF	NO STUFF	1	C630	NO STUFF
SMD	MAB003	CAP CRMC 100PF 100V 5% SMD 0805	1	C106	100PF/100V/5%
SMD	MAB006	CAP CRMC 470PF 50V 5% SMD 0805	3	C22, C24, C25	470pF 50V 5%
SMD	MAB008	CAP CRMC 0.1UF X7R 50V 10% SMD 1206	4	C132, C191, C604, C667	.1/50V/10%
SMD	MAD002	CAP ELEC 10MFD 50V 20% SMD 6.3MM	8	C10, C12, C21, C66, C67, C602, C610, C618	10/50V/20%
SMD	MAD004	CAP ELEC 22MFD 50V 20% SMD 6.3MM	5	C61, C62, C131, C134, C680	22/50V/20%
SMD	MAD006	CAP ELEC .47MFD 50V 20% SMD 4.0 x 5.4MM	1	C617	.47/50V/20%
SMD	MBB001	RESISTOR SMD 1.00K 1/10W 1% 0805	22	R1, R2, R12, R13, R16, R17, R29, R37, R38, R97, R105, R111, R121, R123, R124, R132, R147, R148, R158, R627, R659, R660	1K
SMD	MBB004	RESISTOR SMD 10.0K 1/10W 1% 0805	17	R20, R21, R32, R94, R95, R96, R115, R116, R119, R193, R194, R606, R611, R613, R617, R632, R658	10K
SMD	MBB006	RESISTOR SMD 2K 1/10W 1% 0805	3	R5, R22, R623	2K
SMD	MBB009	RESISTOR SMD 10 1/10W 1% 0805	4	R49, R54, R625, R626	10
SMD	MBB012	RESISTOR SMD 3.32K 1/10W 1% SMD 0805	6	R110, R189, R190, R191, R192, R643	3.32K
SMD	MBB013	RESISTOR SMD 20K 1/10W 1% SMD 0805	6	R3, R4, R30, R35, R42, R610	20K

SMD	MBB014	RESISTOR SMD 100 1/10W 1% 0805	3	R34, R112, R117	100
SMD	MBB015	RESISTOR SMD 4.75K 1/10W 1% 0805	1	R616	4.75K
SMD	MBB016	RESISTOR SMD 12.7K 1/10W 1% 0805	1	R107	12.7K
SMD	MBB017	RESISTOR SMD 22.1 1/10W 1% 0805	3	R137, R146, R657	22.1
SMD	MBB018	RESISTOR SMD 475 1/10W 1% 0805	2	R140, R142	475
SMD	MBB021	RESISTOR SMD 332 1/10W 1% 0805	4	R157, R601, R602, R603	332
SMD	MBB022	RESISTOR SMD 100K 1/10W 1% 0805	12	R25, R27, R33, R36, R39, R122, R134, R608, R609, R614, R621, R680	100K
SMD	MBB023	RESISTOR SMD 61.9K 1/10W 1% 0805	1	R612	61.9K
SMD	MBB024	RESISTOR SMD 47.5 1/10W 1% 0805	2	R628, R629	47.5
SMD	MBB025	RESISTOR SMD 1.5K 1/10W 1% 0805	1	R120	1.5K
SMD	MBB026	RESISTOR 15K 1/10W 1% SMD 0805	3	R8, R9, R14	15K
SMD	MBB027	RESISTOR 909 1/10W 1% SMD 0805	3	R10, R133, R141	909
SMD	MBB028	RESISTOR 274 1/10W 1% SMD 0805	1	R11	274
SMD	MBB030	RESISTOR SMD 5.11K 1/10W 1% 0805	5	R31, R50, R51, R52, R53	5.11K
SMD	MBB031	RESISTOR 6.19K 1/10W 1% SMD 0805	1	R7	6.19K
SMD	MBB032	RESISTOR 2.21K 1/10W 1% SMD 0805	3	R6, R15, R19	2.21K
SMD	MBB034	RESISTOR 221 1/10W 1% SMD 0805	2	R139, R149	221
SMD	MBB035	RESISTOR 3.92K 1/10W 1% SMD 0805	3	R633, R634, R635	3.92K
SMD	MBB037	RESISTOR SMD 13K 1/10W 1% 0805	1	R106	13K
SMD	MBB041	RESISTOR SMD 51.1 1/10W 1% 0805	1	R24	51.1
SMD	MBB044	RESISTOR 1.1K 1/10W 1% SMD 0805	1	R92	1.1K
SMD	MBB047	RESISTOR SMD 3.01K 1/10W 1% 0805	1	R113	3.01K
SMD	MBB048	RESISTOR 27.4K 1/10W 1% SMD 0805	2	R44, R46	27.4K
SMD	MBB049	RESISTOR 2.74K 1/10W 1% SMD 0805	2	R40, R41	2.74K
SMD	MBB052	RESISTOR SMD 10.0K 1/10W 1% 0805	1	R47	26.1K
SMD	MBB058	RESISTOR SMD 1.82K 1/10W 1% 0805	2	R18, R624	1.82K
SMD	MBB059	RESISTOR SMD 511 1/10W 1% 0805	2	R23, R63	511
SMD	MBB064	RESISTOR SMD 1 1/10W 1% 0805	1	R153	1
SMD	MBB065	RESISTOR SMD 6.65K 1/10W 1% 0805	1	R93	6.65K
SMD	MBB066	RESISTOR SMD 200K 1/10W 1% 0805	2	R618, R620	200K
SMD	MBB067	RESISTOR SMD 8.25K 1/10W 1% 0805	3	R195, R619, R622	8.25K
SMD	MBK002	RESISTOR SMD 10 1W 1% 2512	1	R630	10/1W
SMD	MBK005	RESISTOR SMD .22 1W 5% 2512	12	R150, R151, R152, R154, R155, R156, R180, R181, R182, R184, R186, R188	.22/1W/5%
SMD	MBK006	RESISTOR SMD 1K 1W 1% 2512	2	R615, R670	1K/1W
SMD	MBK009	RESISTOR SMD 36 1W 5% 2512	2	R26, R28	36/1W
SMD	MBK011	RESISTOR SMD 3.9K 1W 5% 2512	2	R118, R160	3.9K 1W

SMD	MDA001	DIODE MMBD4148SE SMD CATH-ANODE	11	D1, D2, D80, D81, D116, D120, D121, D602, D603, D604, D606	MMBD4148SE
SMD	MDA002	ZENER MMSZ5233B 6V SMD SOD-123	4	D4, D61, D100, D108	MMSZ5233B/6V
SMD	MDA004	RECTIFIER ES2D 2A 200V SMD SMB	5	D8, D113, D114, D115, D601	ES2D
SMD	MDA005	ZENER MMSZ5248B 18V SMD SOD-123	5	D62, D63, D118, D119, D605	MMSZ5248B/18V
SMD	MDA006	ZENER MMSZ5242B 12V SMD SOD-123	1	D112	MMSZ5242B/12V
SMD	MDB001	TRANSISTOR NPN MMBTA42 SMD SOT-23	1	Q673	MMBTA42
SMD	MDB002	TRANSISTOR NPN PZTA42 SMD SOT-223	7	Q109, Q117, Q120, Q123, Q124, Q126, Q128	PZTA42
SMD	MDB003	TRANSISTOR PNP MMBT5401 SMD SOT-23	4	Q102, Q115, Q116, Q119	MMBT5401
SMD	MDB004	TRANSISTOR PNP MMBA56 SMD SOT-23	9	Q66, Q114, Q118, Q121, Q122, Q125, Q603, Q604, Q605	MMBTA56
SMD	MDB005	TRANSISTOR PNP PZTA92 SMD SOT-223	1	Q127	PZTA92
SMD	MDB006	TRANSISTOR PNP PZTA56 SMD SOT-223	5	Q3, Q5, Q65, Q625, Q626	PZTA56
SMD	MDB007	TRANSISTOR NPN MMBTA06 SMD SOT-23	8	Q1, Q6, Q101, Q107, Q110, Q601, Q602, Q671	MMBTA06
SMD	MDB008	TRANSISTOR NPN PZTA06 SMD SOT-223	3	Q2, Q4, Q61	PZTA06
SMD	MDB009	TRANSISTOR PNP MMBA92 SMD SOT-23	1	Q672	MMBTA92
SMD	MES001	IC NE5532D8 SMD OP AMP DUAL SO1C-8	6	U1, U2, U3, U5, U6, U100	NE5532D8
SMD	MES002	IC LM339M SMD COMPARATOR QUAD SO1C-14	1	U601	LM339M
SMD	MES003	IC TL494CD VM PWM SMD SO1C-16	1	U602	TL494CD
SMD	MES006	IC LM311M COMPARATOR SINGLE SMD SO1C-8	1	U102	LM311M
SMD	NO STUFF	NO STUFF	1	D3	NO STUFF
	MAF030	CAP FILM 0.68 MFD 63V 10% .2LS	4	C6, C7, C8, C9	.68/63V/5%
			9	MT1, MT2, T2, MT3, F4, MT4, F6, ,	

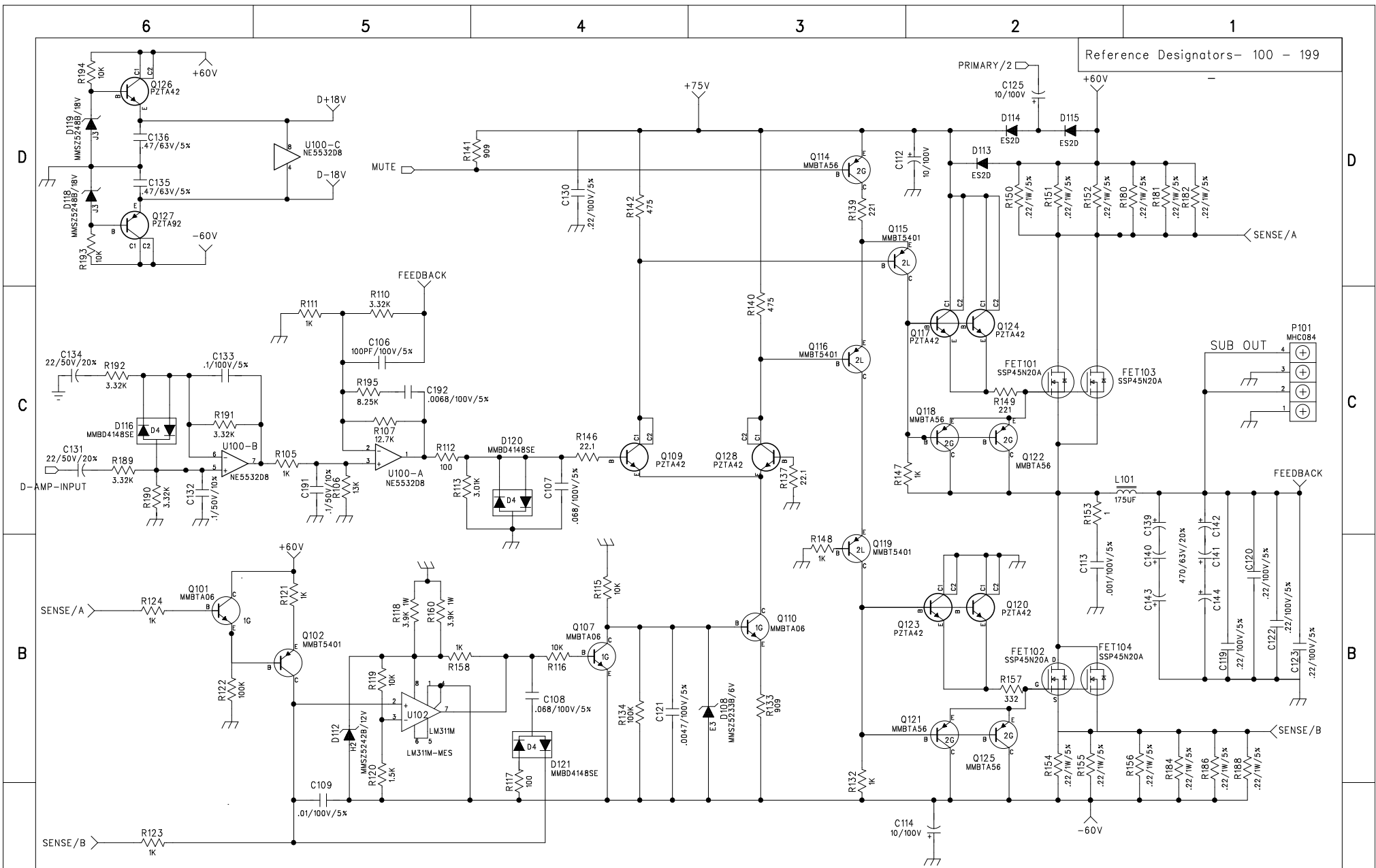


Reference Designators- 1 - 100



UNLESS OTHERWISE SPECIFIED:		APPROVALS		DATE	
1) ALL RESISTORS ARE IN:		DRAWN	DAVE BAKER	1/2/01	
A) OHM		REVISD	DAVE BAKER	11.9.01	
B) 1% TOLERANCE		CHECK			
C) 1/4 WATT		ENGINEER	DAVE BAKER	1/2/01	
2) ALL CAPACITORS ARE IN:		MANAGER			
A) MICROFARADS					
THIS DRAWING AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPRIETARY TO MITEK CORPORATION.					
REVISIONS					
REV	DESCRIPTION	ECO#	DATE	SIZE	SHEET
F1	D100=MMS25233B C67=10/50V SMD R30 NEW = 20K		1/16/01		
F2	Q61,Q2,Q4 = PZTA06		5/10/01		
F3	NO STUFF D3		6/28/01		
F6	CLEANED PART ATTRIBUTES		11.9.01		

MITEK CORPORATION					
4545 EAST BASELINE ROAD PHOENIX ARIZONA 85040, U.S.A.					
TITLE					
MTX TA6500D AMPLIFIER INPUT STAGE					
SIZE	SHEET	DRAWING NO.	REV	ASSY	
C	1 OF 3	NPA115	F	6	
CAD FILENAME: TA6500DF6.SCH					



Reference Designators- 100 - 199

UNLESS OTHERWISE SPECIFIED:
 1) ALL RESISTORS ARE IN:
 A) OHM
 B) 1% TOLERANCE
 C) 1/4 WATT
 2) ALL CAPACITORS ARE IN:
 A) MICROFARADS

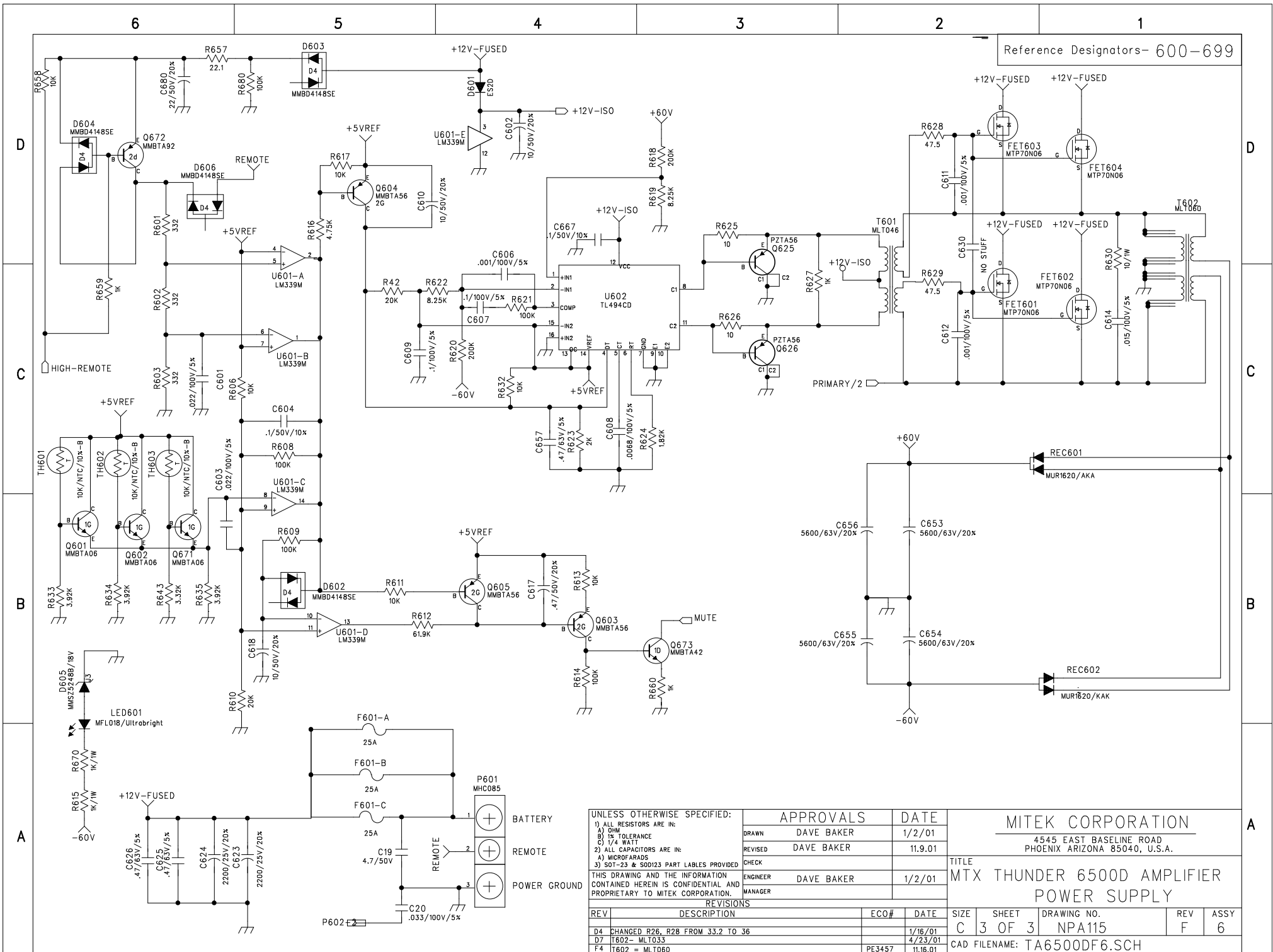
APPROVALS		DATE
DRAWN	DAVE BAKER	1/2/01
REVISED	DAVE BAKER	11.9.01
CHECK		
ENGINEER	DAVE BAKER	1/2/01
MANAGER		

MITEK CORPORATION
 4545 EAST BASELINE ROAD
 PHOENIX ARIZONA 85040, U.S.A.

REVISIONS			ECO#	DATE	SIZE	SHEET	DRAWING NO.	REV	ASSY
REV	DESCRIPTION								
D4	CHANGED R26, R28 FROM 33.2 TO 36			1/18/01					
D5	C139-C144: 470/50V->470/63V			2/5/01					
D6	R118 R160 = 3.9K 1W			4/3/01					
F5	L101 MCU009 TO MCU013		PE3480	12.10.01					

TITLE
 MTX THUNDER 6500D AMPLIFIER
 CLASS D AMPLIFIER

CAD FILENAME: TA6500DF6.SCH



Reference Designators- 600-699

UNLESS OTHERWISE SPECIFIED:

- ALL RESISTORS ARE IN:
 - OHM
 - 1% TOLERANCE
 - 1/4 WATT
- ALL CAPACITORS ARE IN:
 - MICROFARADS
 - SOT-23 & SOD123 PART LABELS PROVIDED

THIS DRAWING AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPRIETARY TO MITEK CORPORATION.

APPROVALS		DATE
DRAWN	DAVE BAKER	1/2/01
REVISED	DAVE BAKER	11.9.01
CHECK		
ENGINEER	DAVE BAKER	1/2/01
MANAGER		

REVISIONS		ECO#	DATE	SIZE	SHEET	DRAWING NO.	REV	ASSY
D4	CHANGED R26, R28 FROM 33.2 TO 36		1/16/01		C 3 OF 3	NPA115	F	6
D7	T602 - MLT033		4/23/01					
F4	T602 - MLT060	PE3457	11.16.01					

MITEK CORPORATION
 4545 EAST BASELINE ROAD
 PHOENIX ARIZONA 85040, U.S.A.

TITLE
 MTX THUNDER 6500D AMPLIFIER
 POWER SUPPLY

CAD FILENAME: TA6500DF6.SCH