PANSON AUDIO LABS

Initial Power Amplifier Series

Universal Power Board rev 2.0
Component list for non-ThermalTrak power BJTs

Ref	Value	Misc.
C1	0.1 uF	WIMA MKP10, 400 V or equivalent
C2	0.1 uF	WIMA MKP10, 400 V or equivalent
C3	0.1 uF	WIMA MKP4, 250 V or equivalent
C4	0.1 uF	WIMA MKP4, 250 V or equivalent
C5	10000 uF, 80 V	ELAN Audio Use, lead space 10 mm or equivalent
C6	10000 uF, 80 V	ELAN Audio Use, lead space 10 mm or equivalent
C+1	DNP	Lead space 7.5 mm electroytic capacitor if C5 is not assembled
C+2	DNP	Lead space 7.5 mm electroytic capacitor if C5 is not assembled
C+3	DNP	Lead space 7.5 mm electroytic capacitor if C5 is not assembled
C+4	DNP	Lead space 7.5 mm electroytic capacitor if C5 is not assembled
C-1	DNP	Lead space 7.5 mm electroytic capacitor if C6 is not assembled
C-2	DNP	Lead space 7.5 mm electroytic capacitor if C6 is not assembled
C-3	DNP	Lead space 7.5 mm electroytic capacitor if C6 is not assembled
C-4	DNP	Lead space 7.5 mm electroytic capacitor if C6 is not assembled
L1	output coil	
P1	pin header	
P2	pin header	
P3	pin header	
P4	AGND	
P5	+Vcc1	
P6	-Vee1	
P7	+Vcc	
P8	-Vee	
P9	+OUT	
P10	-OUT	
P11	GND	

P12	GND	
Q1	MJE15030	or equivalent rating
Q2	MJE15031	or equivalent rating
Q3	NPN power BJT	e.g. Sanken 2SC3624, ON Semi MJL21194
Q4	PNP power BJT	e.g. Sanken 2SA1925, ON Semi MJL21193
Q5	NPN power BJT	e.g. Sanken 2SC3624, ON Semi MJL21194
Q6	PNP power BJT	e.g. Sanken 2SA1925, ON Semi MJL21193
Qtt1	DNP	
Qtt2	DNP	
Qtt3	DNP	
Qtt4	DNP	
R1	short	
R2	short	
R3	180 R	1 W, metal film
R4	10 R	Dale 0.5 W, 1 %, metal film or equivalent
R5	10 R	Dale 0.5 W, 1 %, metal film or equivalent
R6	0.22 R	5 W, non-inductive; 0.22 R is suggested value
R7	0.22 R	5 W, non-inductive; 0.22 R is suggested value
R8	DNP	in parallel with R6 if 5 W resistor not available
R9	DNP	in parallel with R7 if 5 W resistor not available
R10	10 R	Dale 0.5 W, 1 %, metal film or equivalent
R11	10 R	Dale 0.5 W, 1 %, metal film or equivalent
R12	0.22 R	5 W, non-inductive; 0.22 R is suggested value
R13	0.22 R	5 W, non-inductive; 0.22 R is suggested value
R14	DNP	in parallel with R12 if 5 W resistor not avaliable
R15	DNP	in parallel with R13 if 5 W resistor not available
R16	1 R	3 W, 5 %
R17	10 R	5 W, 5 %
R+1	10 R	Dale 0.5 W, 1 %, metal film or equivalent
R-1	10 R	Dale 0.5 W, 1 %, metal film or equivalent
Rtt1	DNP	
Rtt2	DNP	
Rtt3	DNP	
Rtt4	DNP	