PowerampC300

Source: E:/Poweramp/PowerampC300/PowerampC300.sch

Date: 10/16/2020 9:29:01 PM

Tool: Eeschema 4.0.7

Component Count: 110

Ref Value

C1 10 uF, 100 V polyproplyene capacitor C2 470 pF polypropylene or mica capacitor

C3 150 pF mica capacitor

C4 0.1 uF ceramic disc capacitor C5 0.1 uF ceramic disc capacitor

C6 NC

C7 1000 uF, 10 V electrolytic capacitor C8 1000 uF, 10 V electrolytic capacitor

C9 150 pF mica capacitor

C10 0.1 uF polypropylene capacitor C11 0.1 uF polypropylene capacitor C12 100 uF, 160 V electrolytic capacitor C13 0.1 uF polypropylene capacitor C14 100 uF, 160 V electrolytic capacitor C15 0.1 uF polypropylene capacitor C16 100 uF, 160 V electrolytic capacitor C17 100 uF, 160 V electrolytic capacitor C18 100 uF, 160 V electrolytic capacitor C19 100 uF, 160 V electrolytic capacitor C22 47 uF, 25 V electrolytic capacitor C23 0.1 uF polypropylene capacitor C24 0.1 uF polypropylene capacitor

C25 SHORT wire

D1 1N4752A, 33 V zener diode

D2 RED LED
D3 1N4148
D4 1N4148
D5 1N4007
D6 1N4007

D7 1N4755A, 44 V zener diode (optional)
D8 1N4755A, 44 V zener diode (optional)
D9 1N4755A, 44 V zener diode (optional)
D10 1N4755A, 44 V zener diode (optional)

J1 2 Position Terminal Block
J2 2 Position Terminal Block
J3 2 Position Terminal Block
J8 2 Position Terminal Block
J9 SMA straight PCB connector
JP1 2 pin header, 2.54 mm spacing
JP2 2 pin header, 2.54 mm spacing

L1 1 uH inductor, 15 turns around a 20 mm form

Q1 2N5551 Q2 2N5551 Q3 2N5401

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Q4
                  2N5401
Q5
                  2N5551
Q6
                  2N5551
Q7
                  2N5551
Q8
                  2N5401
Q10
                  MJE15033
Q11
                  MJE15032
Q12
                  MJE15032
Q13
                  2N5551
Q14
                  2N5401
Q15
                  MJE15032
Q16
                  MJE15033
Q17
                  MJL3281A
Q18
                  MJL1302A
Q19
                  MJL3281A
Q20
                  MJL1302A
Q21
                  MJL3281A
Q22
                  MJL1302A
Q23
                  MJL3281A
Q24
                  MJL1302A
R1
                  1k 1/4 watt
R2
                  10k 1/4 watt
R3
                  180R 1/4 watt
R4
                  180R 1/4 watt
R5
                  1k 1/4 watt
R6
                  100R 1/4 watt
R7
                  100R 1/4 watt
R8
                  56R 1/4 watt
R9
                  56R 1/4 watt
R10
                  100R 10 pin 3296W type trimmer potentiometer
R11
                  6k8 3 watt
                  200R 1/4 watt
R12
                  5k6 3 watt
R13
R14
                  10k 1/4 watt
R15
                  330R 1/4 watt
R16
                  6k8 1 watt
R17
                  1k 1/4 watt
R18
                  NC
R19
                  33R 1 watt
R21
                  390R 1/4 watt
R22
                  200R 10 pin 3296W type trimmer potentiometer
                  100R 1/4 watt
R23
R24
                  56R 1/4 watt
R25
                  3k3 3 watt
                  33R 1/4 watt
R26
R27
                  33R 1/4 watt
R28
                  3k3 3 watt
R29
                  120R 1/4 watt
R30
                  120R 1/4 watt
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R31	33R 3 watt
R32	33R 3 watt
R33	0R39 5 watt sandblock resistor
R34	0R39 5 watt sandblock resistor
R35	0R39 5 watt sandblock resistor
R36	0R39 5 watt sandblock resistor
R37	0R39 5 watt sandblock resistor
R38	0R39 5 watt sandblock resistor
R39	0R39 5 watt sandblock resistor
R40	0R39 5 watt sandblock resistor
R41	4R7 3 watt
R42	4R7 3 watt
R43	10k 3 watt

NP0/C0G ceramic capacitors may be subsituted for $\boldsymbol{\pi}$