

Saws v2 karltrn.com/saws 2022-01-20

| Step | Qty | Reference(s) | Value | Footprint | note |
|------|-----|--------------------------------|------------|-----------------------------|--|
| 1 | 3 | C1, C7, C12 | 2n2 | `0805 | integrator cap could be c0g, important theyre the same |
| 2 | 2 | C2, C14 | 1u | `0805 | additional decoupling, not critical |
| 3 | 5 | C3, C6, C10, C11, C15 | 100n | `0805 | chip decoupling, important |
| 4 | 3 | C4, C9, C13 | 220n | `0805 | ac coupler, value not critical |
| 5 | 2 | C5, C8 | 10u | `0805 | |
| 6 | 2 | D1, D2 | S1JL | `0805 | reverse power protection optional, you could jumper with wire. |
| 7 | 3 | D3, D4, D5 | 1N4148 | FDLL4148 | |
| 8 | 3 | J1, J2, J3 | JACK_2P | europi:Thonkiconn | |
| 9 | 1 | J4 | Conn_02x05 | 2x5 power header (shrouded) | |
| 10 | 3 | Q1, Q3, Q5 | 2N3904 | | Package_TO_SOT_SMD:SOT-23 |
| 11 | 3 | Q2, Q4, Q6 | 2N3906 | | Package_TO_SOT_SMD:SOT-23 |
| 12 | 4 | R1, R12, R21, R24 | 1M | `0805 | 1004 |
| 13 | 4 | R2, R14, R25, R30 | 100R | `0805 | marked "1000" or "101" |
| 14 | 3 | R3, R13, R19 | 330K | `0805 | marked 3303 |
| 15 | 6 | R4, R5, R15, R16, R27, R28 | 47K | `0805 | marked 473 or 4702 |
| 16 | 7 | R6, R7, R9, R10, R11, R20, R22 | 10K | `0805 | |
| 17 | 5 | R8, R17, R18, R23, R29 | 100K | `0805 | |
| 18 | 1 | R26 | 3K3 | `0805 | sets output level |
| 19 | 5 | RV1, RV3, RV4, RV6, RV7 | B100K | | THT:Potentiometer_Alpha_RD901F-40-00D_Single_Vertical |
| 20 | 3 | RV2, RV5, RV8 | B2K | | THT:Potentiometer_Bourns_3296W_Vertical |
| 21 | 3 | SW1, SW2, SW3 | SPDT | | Button_Switch_THT:SPDT_Tayda-A5111 |
| 22 | 2 | U1, U2 | TL074 | | SOIC-14_3.9x8.7mm_P1.27mm |
| 23 | 1 | U3 | 40106 | | SOIC-14_3.9x8.7mm_P1.27mm_CD40106BMT |