

Leach Amp 4.5 clone 5 output pairs

| Device | Value / Ref | Dim / Size / Case | Pitch | Description | Qty | Mouser ID |
|--------------------------|---------------------|-------------------|-----------------------------------|---|-----|---------------------|
| Capacitors | | | | | | |
| C1,C3,C10,C14 | 100u/63V | d8x11-15mm | 5mm | Electrolytic Pol Cap | 4 | 667-EEU-EB1J101B |
| C2,C4,C11,C15 | 100n/100V | max ~3x~7.5mm | 5mm | Film Cap | 4 | 75-MKT1817410015W |
| C5 | 47p | max ~3x~7.6mm | 5mm | Cap Ceramic/MLCC, 5% or better | 1 | 80-C317C470FAG5TA |
| C6 | 1u | ~5x~12mm | 5 or 7.5mm | Film Cap (PP/PS preferred), 5% or better | 1 | (80-R66DD4100Z37AJ) |
| C7 | 1m/6V3 | d12.5x25mm | 5mm | Electrolytic Bi-Pol Cap (Audio preferred) | 1 | 647-UES0J102MHM |
| C8 | 390p | max ~3x~7.6mm | 5mm | Cap Ceramic/MLCC, 5% or better | 1 | 581-SR211A391GAR |
| C9 | 180p | max ~3x~7.6mm | 5mm | Cap Ceramic/MLCC, 5% or better | 1 | 581-SR211A181GARTR1 |
| C12 | 4m7/6V3 | d16x31.5mm | 7.5mm | Electrolytic Bi-Pol Cap (Audio preferred) | 1 | 667-ECE-A0JN472U |
| C13 | 100n | ~5x~12mm | 5 or 7.5mm | Film Cap (PP/PS preferred), 5% or better | 1 | (80-R82DC3100SH50J) |
| C16,C20 | 10p | max ~3x~7.6mm | 5mm | Cap Ceramic/MLCC, 5% or better | 2 | 581-SR595A100GARTR1 |
| C17-19 | 100n/ min50V | ~2.5x~7.5mm | 5mm | Film Cap/MLCC, 5% or better | 3 | 80-R82EC3100AA70J |
| C21,C27 | 6m8-10m/ min75V | d40mm max | 10mm | Electrolytic Pol Cap (low ESR) | 2 | |
| C22-26,C28-32,C34 | 100n/ min100V | max ~5x13mm | 10mm | Cap Ceramic/MLCC, 10-20% | 11 | 80-C350C104K2G5TA |
| C33 | 1u / min63V | max ~7x~18mm | 15mm | Film Cap (PP preferred), 5% or better | 1 | 710-890273325009CS |
| Semi | | | | | | |
| D1,D2 | 1N4007 (4004) | Axial DO-41 | Bent 10mm | | 6 | |
| D9-12 | | | Bent 10mm (cut, see instructions) | | | |
| D3-8,D17-18 | 1N4148 (1N914) | Axial DO-35 | Bent 10mm | Diode signal | 8 | |
| D13-16 | 1N4004 | DO214AC | SMT | SMD Rectifier Diode | 4 | 583-FM4004 |
| DZ1-4 | 20V/0.5W | Axial DO-35 | 10mm | Zener Diode (2% or better) | 4 | 78-BZX55B20 |
| T1-3,T10-11,T15 | MPSA42 | TO92 | | NPN Small Signal Transistor | 6 | |
| T4-7,T12 | MPSA92 | TO92 | | PNP Small Signal Transistor | 5 | |
| T8,T13 | MJE350 | TO126 | | PNP Power Transistor | 2 | |
| T9,T14 | MJE340 | TO126 | | NPN Power Transistor | 2 | |
| T16-20 | MJL4281 | TO264 | | NPN Power Transistor | 5 | |
| T23-27 | MJL4302 | TO264 | | PNP Power Transistor | 5 | |
| T21 | MJE15032 | TO220 | | NPN Power Transistor | 1 | |
| T22 | MJE15033 | TO220 | | PNP Power Transistor | 1 | |
| Resistors | | | | | | |
| P1 | 2k | T93YB | | Trimmer 20turns | 1 | |
| R1,R23 | 82 / 1W | res 1W | 12mm | Metal Film Resistor | 2 | |
| R2,R21,R32 | 1k2 / 1/2W / 1% | res 1/2W | 10mm | Metal Film Resistor 1% | 3 | |
| R3,R22 | 2k2 / 1W / 1% | res 1W | 12mm | Metal Film Resistor 1% | 2 | |
| R4 | 10 / 1/4W | res 1/4W | 10mm | Metal Film Resistor | 1 | |
| R5,R20 | 12k / 1/2W / 1% | res 1/2W | 10mm | Metal Film Resistor 1% | 2 | |
| R6-7,R9-10,R14-15,R18-19 | 300 / 1/4W / 1% | res 1/4W | 10mm | Metal Film Resistor 1% | 8 | |
| R8 | 22k / 1/4W / 1% | res 1/4W | 10mm | Metal Film Resistor 1% | 1 | |
| R11 | 2k / 1/4W | res 1/4W | 10mm | Metal Film Resistor | 1 | |
| R12-13 | 11k / 1/4W / 1% | res 1/4W | 10mm | Metal Film Resistor 1% | 2 | |
| R16 | 1k1 / 1/4W / 1% | res 1/4W | 10mm | Metal Film Resistor 1% | 1 | |
| R17 | 20k / 1/4W / 1% | res 1/4W | 10mm | Metal Film Resistor 1% | 1 | |
| R24,R35 | 30 / 1/2W / 1% | res 1/2W | 10mm | Metal Film Resistor 1% | 2 | |
| R25,R33 | 360 / 1/2W / 1% | res 1/2W | 10mm | Metal Film Resistor 1% | 2 | |
| R26,R34 | 3k9 / 1W | res 1W | 12mm | Metal Film Resistor | 2 | |
| R27,R31 | 330 / 1/2W / 1% | res 1/2W | 10mm | Metal Film Resistor 1% | 2 | |
| R28,R30 | 270 / 1/2W / 1% | res 1/2W | 10mm | Metal Film Resistor 1% | 2 | |
| R29 | 1k / 1/4W | res 1/4W | 10mm | Metal Film Resistor | 1 | |
| R36-40,R63-67 | 10 / 1W | res 1W | 12mm | Metal Film Resistor | 10 | |
| R41-45,R58-62 | 680 / 1/2W / 1% | res 1/2W | 10mm | Metal Film Resistor 1% | 10 | |
| R46-50,R52-56 | 0.22 / 5W | max ~7x~28mm | 30.5mm | Power Resistor (non-inductive preferred) | 10 | |
| R51 | 220 / 1/2W | res 1/2W | 15mm | Metal Film Resistor | 1 | |
| R57 | 10 / 5W | max ~7x~28mm | 30.5mm | Power Resistor | 1 | |
| Connectors / Fuse | | | | | | |
| Input,THxx | | | 2.54mm | 2 pins header | 3 | |
| Fuse Holder | | ~10x~25mm | 22.5mm | 5x20mm Fuse Holder PCB mount | 2 | |
| Output,V+,V- | Terminal Block | | 5mm | PCB mount term blk | 3 | |
| L1 (L//R) | 10-11turns on 5Wres | Res d~8mm | ~17.8mm(.7") | wind copper wire on power Res | 1 | 756-WHS5-10RJTO75 |
| | | | | enameled wire ~1.2-1.5mm (14-16ga) | | |
| | | | | use a cylindrical shaft ~8mm dia to wind | | |
| | | | | ~11turns of wire then slip over power res | | |
| | | | | and join leads with power res | | |