

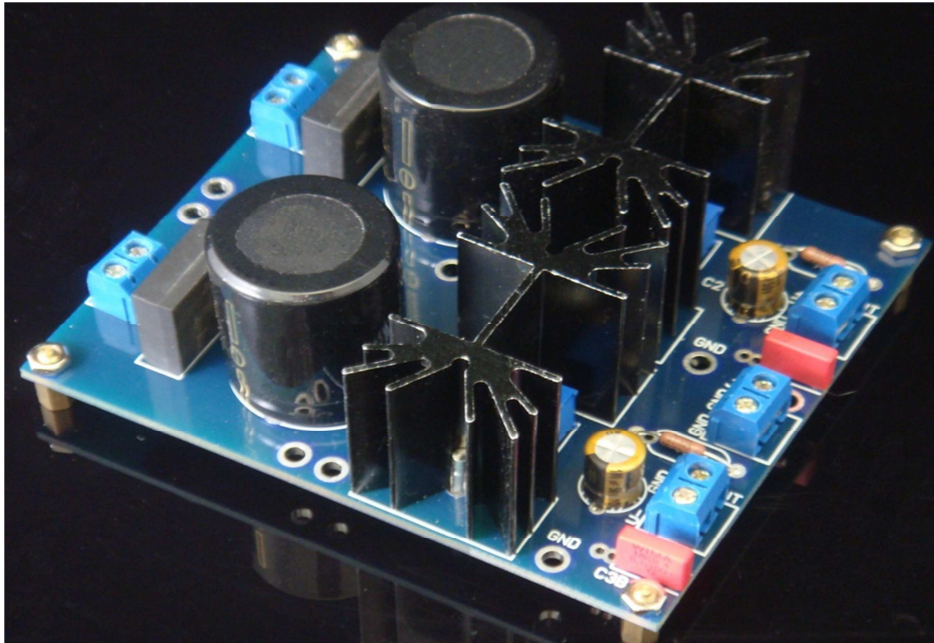
LV Bipolar Regulator User Manual

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INTRODUCTION

This kit provides both variable positive and negative DC output voltage up to 5A current. This often requires by solid-state power amplifiers or other amplifiers. Large heat sinks are used to dissipate the heat given by the regulator.

FEATURES

- Provide both positive and negative DC voltages up to 5A current from two independent AC power supply.
- Output voltages can be varied by the resistors trimmers.
- Maximum input and output difference is 29V.
- Use of low dropout regulator LM1084-ADJ with line regulation of 0.015% typical; load regulation of 0.1% typical; ripple rejection 75dB and RMS output noise 0.003%.
- Use of big reservoir capacitor with 30mm diameter.
- PCB dimension: 99.5 x 86.2 mm, 2.4mm thickness and 2oz copper

ASSEMBLY PROCEDURES

1. Solder the components according to the schematic and BOM. Notice to the direction of the electrolytic capacitors C1, C1B, C2 and C2B. There is no polarity of the thin film C3 and C3B.

2. Mount the regulators U1 and U2 (LM1084-ADJ) onto the sink by the 3mm screws where TO-22 silica insulator and insulating bead are in between.
3. Apply two independent AC voltages to AC IN.
4. Measure the positive and negative voltages at the output (+VE OUT & -VE OUT).
5. The output voltages can be varied by the resistor trimmers VR1 and VR2.
6. The maximum input-output voltage difference is 29V.

If you have any problem in assembly, please contact us by email to tech@analogmetric.com