

LV30P-3A/5A Voltage Regulator User Manual Analog Metric

www.analogmetric.com

sales@analogmetric.com

Copyright© 2012 All Rights Reserved



FEATURES

- Maximum input-output voltage difference is 29V.
- Maximum output current is 3A for input-output difference <5V.
- The maximum output voltage is 50V.
- Accept both AC and DC voltage source.
- Connect two modules in series to double the output voltage, 100V or +/-50V DC
- Connect two in parallel to double output current, 6A for LV30P-3A and 10A for LV30P-5A.
- Use of low dropout regulator LM1085-ADJ /LM1084-ADJ with line regulation of 0.015% (typical), load regulation of 0.1% (typical).
- Big reservoir capacitor with 30mm diameter.
- PCB dimension: 100mm x 43mm
- PCB thickness 2.4mm and 2oz copper

PROCEDURES

1. Solder the components according to the part list. Notice the polarities of the electrolytic capacitors C1 and C3. There is no polarity of the thin film capacitors.
2. Before soldering the regulator U1, mount it onto the heat sink TO22P by the provided screw and cap, where the silica insulator is placed in between.
3. Apply AC voltage to the connector (AC IN) or DC voltage to the connector (DC IN). The output voltage is obtained from connector (DC OUT) can be adjusted by the resistor trimmer VR1.

Notice: maximum input-output voltage difference < 29V DC and minimum load current is 5mA (typical). For output current >3A, the recommended input-output voltage difference < 5V DC.

4. To increase the power efficiency of the regulator, the input-output voltage difference should be minimized. Otherwise, the excess voltage will be dissipated as heat.



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