AnTek Inc.
www.antekinc.com

DM-xxx 3A Voltage Regulator Kit





The transformer is not included in this kit and must be purchased separately. Please select and order the appropriate transformer from our website.

DM-xxx Adjustable Voltage Regulator Kit

The DM-xxx is an adjustable voltage regulator board designed with chassis for reliable and stable DC power supply applications. Built around the LM350A voltage regulator IC, it provides an adjustable output voltage from 5V to 24V, with an output current capability of up to 3A. The output voltage can be easily adjusted using the onboard adjustment resistor, making it suitable for DIY projects, electronic equipment, and customized power supply applications.

Transformer Selection

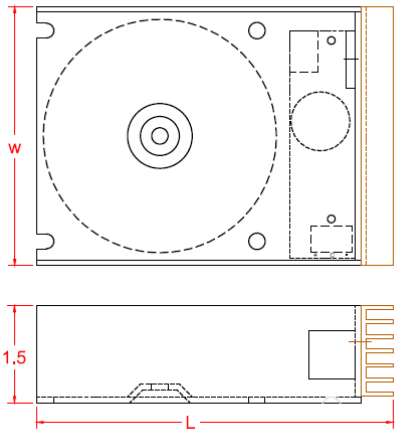
Select a suitable transformer with the appropriate AC output voltage and current rating for your desired DC output. Follow the instructions and transformer specifications shown in the diagram to ensure proper operation.

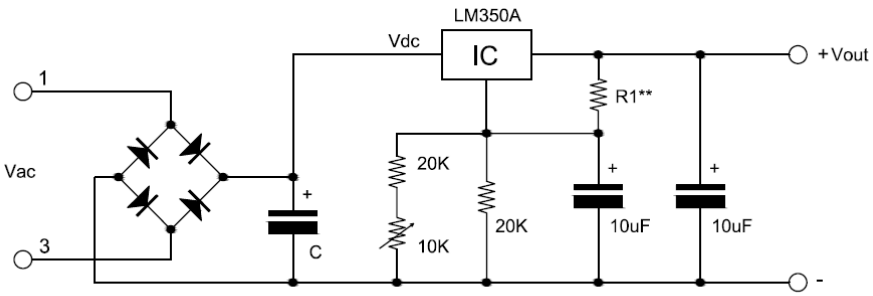
Installation and Safety Precautions

- **Heat Sink Isolation:** The IC's metal tab is electrically connected to Pin 2 (Vout). Insulated mica pad and heat sink compound are required in between the IC and heat sink.
- **Temperature Limit:** For safe and reliable operation, ensure the heat sink temperature does not exceed 75°C under full-load conditions.
- **Thermal Management:** Adequate heat dissipation is essential, especially when operating at high output current or with a large voltage difference between input and output.

Specifications

- Regulator IC: LM350A
- Adjustable output voltage: 5–24V DC
- Maximum output current: 3A
- Maximum Vdc 35V
- Operating temp. range(°C) -40 to 100





Model	W x L	Vout	Transformer Selection	Estimate Transformer power rating *
DM-050	4" x 5.5"	5-24Vdc	50VA > Vout x Iout x 2	5V x 3A x 2 = 30VA or 24V x 1A x 2 = 48VA
DM-100	4.5" x 6.0"	9-24Vdc	100VA > Vout x Iout x 2	9V x 3A x 2 = 54VA or 24V x 2A x 2 = 96VA
DM-200	5" x 6.5"	16-24Vdc	200VA > Vout x Iout x 2	16V x 3A x 2 = 96VA or 24V x 3A x 2 = 144VA

* Suggest voltage drop in IC (Vac x 1.4 - 2 - Vout) > 6V and < 12V. The maximum power dissipate on IC is 20W (Vdrop x Iout).
** Output voltage adjust range: Vout = 1.25(1+Radj/R1) where Radj = 10KΩ mininum and 12KΩ maximum. If R1 = 1KΩ, Vout = 1.25(1+ 10K/1K) = 13.75V minimum and Vout = 1.25(1+12K/1K) = 16.25V maximum.

29 Ewing Ave.
N. Arlington, NJ 07031

Tel: 201-991-3300
sales@antekinc.com