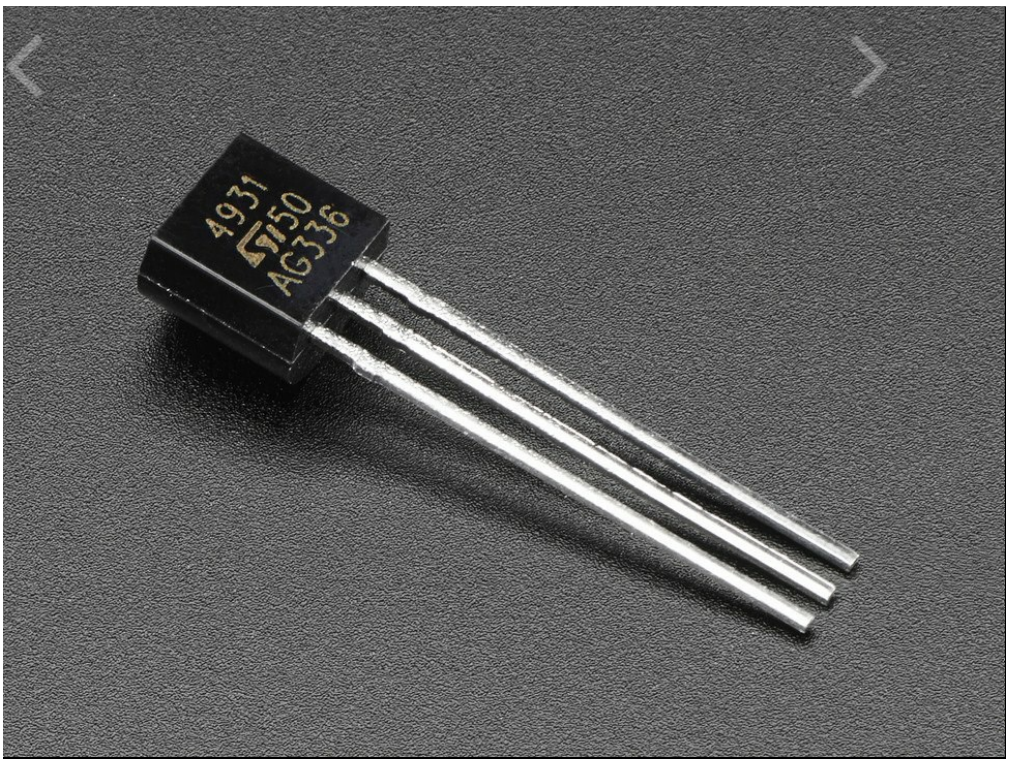
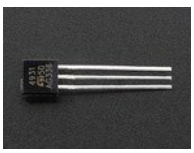




5.0V 250mA Linear Voltage Regulator - L4931-5.0 TO-92

PRODUCT ID: 2236

IN STOCK

1 ADD TO CART

☐ **Also include 1 x 0.1uF ceramic capacitors - 10 pack ()**

☐ **Also include 1 x 10uF 50V Electrolytic Capacitors - Pack of 10 ()**

1-9

10-99

100+

ADD TO WISHLIST

DESCRIPTION

TECHNICAL DETAILS

DESCRIPTION

Need a nice little 5V regulator? We rather like the very-low-dropout L4931 from ST! This little guy will help you get your 5.5-20V battery or wall adapter down to a nice clean 5V with 2% regulation. Perfect for just about all electronics! This is a TO-92 package version, with up to 300mA current capability, and has internal current limiting + thermal shut-down protection which makes it sturdy and pretty much indestructible - at least electronics-wise (we're pretty sure a hammer might work...)

This regulator has a very low 0.4V linear drop-out, way better than the 780X series' 2V. That

means you must give it at least 5.4V to get a clean 5V out. This regulator is often used to get a 9V power supply or battery to get a clean 5V. There is a constant 'quiescent' current draw of 1mA (which increases up to 5mA as you draw 250mA) so it's good for portable and battery-powered projects

This regulator can provide up to 300mA peak as long as you do not overheat the package. The higher your input voltage and output current, the more heat it will generate. Without an extra heatsink, you can burn off up to 0.6W. We like this calculator for determining your heat sink requirements. It's a TO-92 package, so use 200°C/Watt junction-to-air thermal resistance. The wattage of your set up is = (InputVoltage - 5V) * AverageCurrentInAmps. E.g. a 9V battery and 0.2 Amp of average output current means the regulator is burning off (9 - 5)*0.2 = 0.8 Watts! That's too much for the little package, it will overheat. Instead, reduce your average current to 0.1A (for 0.4W) or you could use 4 AA batteries, for 6V in (6-5)*0.2 = 0.2W, both of which would not require a heatsink.

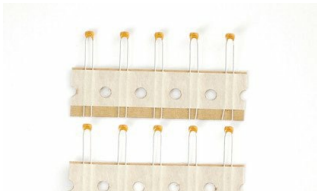
This regulator requires at least 2.2uF electrolytic capacitors on both input and output for stability, 10uF will do the job nicely.

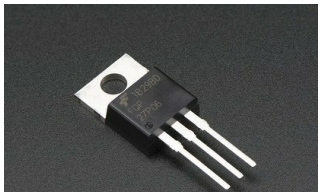
TECHNICAL DETAILS

- Datasheet
- 4mm x 5mm / 0.16" x 0.2"
- Pin Length: 14mm / 0.55"

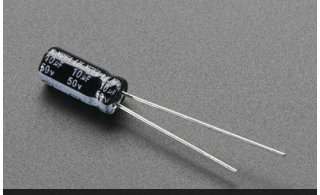
RoHS

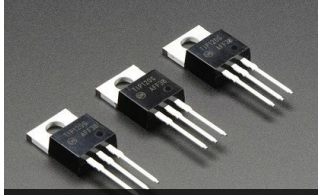
MAY WE ALSO SUGGEST...

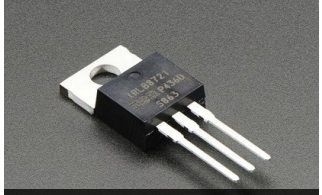

0.1uF ceramic capacitors -

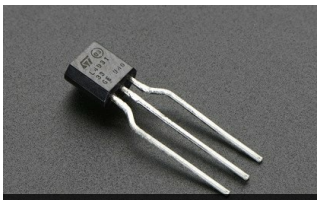

P-channel Power MOSFET -

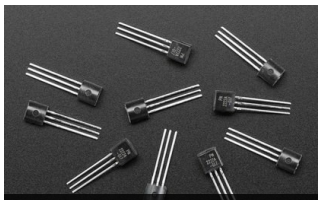

5V 1.5A Linear Voltage

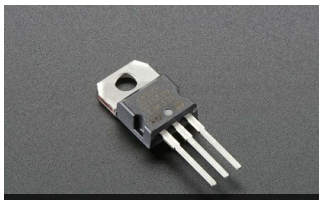

10uF 50V Electrolytic

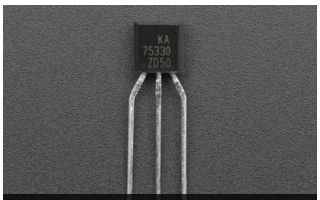

TIP120 Power Darlington


N-channel power MOSFET


3.3V 250mA Linear Voltage


NPN Bipolar Transistors


3.3V 800mA Linear Voltage


Reset / Enable Controller -

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"This good fun, explore, explore, explore, that's what science is, exploration, finding out new things, so have a good time with it" - Charles Townes