

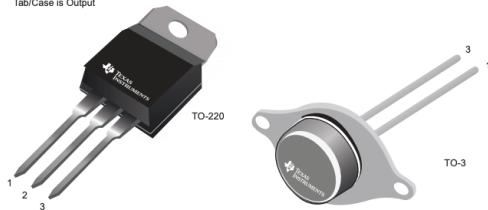
# LM338 Voltage Regulator

## Overview

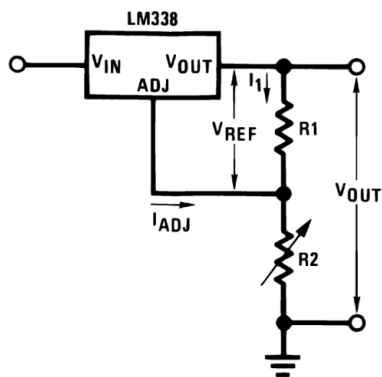
The LM338 series of adjustable 3-terminal positive voltage regulators is capable of supplying in excess of 5 A over a 1.2-V to 32-V output range. They are exceptionally easy to use and require only 2 resistors to set the output voltage. Careful circuit design has resulted in outstanding load and line regulation, comparable to many commercial power supplies. The LM138 family is supplied in a standard 3-lead transistor package.

### Available Packages

Pin 1, Adjustment  
2, Output  
3, Input  
Tab/Case is Output

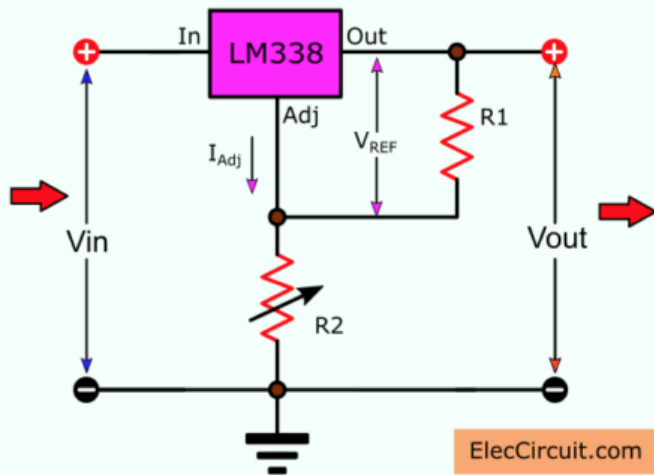


### Typical Application Circuit



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## Wiring



LM338

$$V_o = 1.25V \times \left[ 1 + \frac{R_2}{R_1} \right] + I_{adj} \times R_2$$

## References

References	URL
LM138 and LM338 5-Amp Adjustable Regulators	<a href="https://www.ti.com/lit/ds/symlink/lm338.pdf">https://www.ti.com/lit/ds/symlink/lm338.pdf</a>
LM338   Datasheet   Adjustable Power Supply 5A and 10A	<a href="https://www.eleccircuit.com/adjustable-power-supply-1-2-30v-5a-using-lm338/">https://www.eleccircuit.com/adjustable-power-supply-1-2-30v-5a-using-lm338/</a>