

# Power Circuit Protection

## Using a Diode for Reverse Polarity Protection

[blocked URL](#)

This diode is used for reverse polarity protection (with a fuse placed before IN+). When reverse voltage is applied the diode conducts and blows the fuse.

## Using a Zener Diode for Over Voltage Protection

[blocked URL](#)

If we choose a zener with a breakdown voltage rating of 5V, then the load will received 5V when the zener receives 5V. After this amount, the zener will break down and conduct current to ground. Since its resistance has broken down and it is now conducting, its voltage drops dramatically, so the load in parallel does not receive this excess voltage.

## References

Reference	URL
What is a Protection Diode	<a href="http://www.learningaboutelectronics.com/Articles/What-is-a-protection-diode">http://www.learningaboutelectronics.com/Articles/What-is-a-protection-diode</a>
Over Voltage Protection	<a href="http://www.learningaboutelectronics.com/Articles/Overvoltage-protection-circuit.php">http://www.learningaboutelectronics.com/Articles/Overvoltage-protection-circuit.php</a>