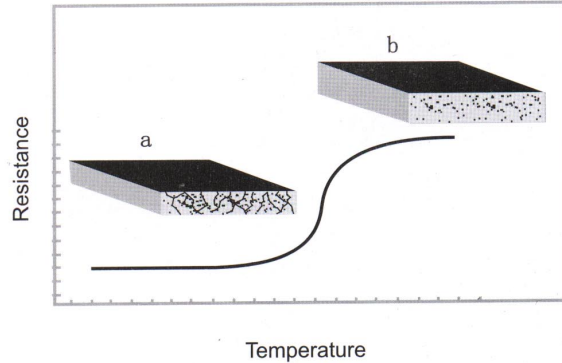


## Principle Introduction

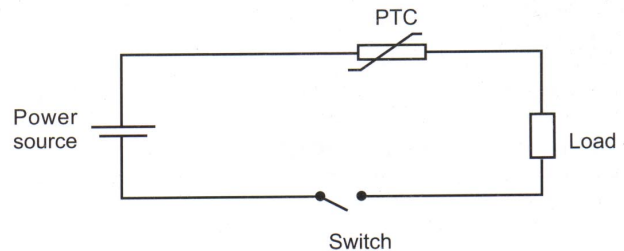
### Principles of Operation

Polymer Resettable Fuses are made of polymeric PTC materials which is a matrix of polymer containing dispersed conductive particles, forming a three-dimensional conductive network in the polymer, and the resistance is low. When the overcurrent is happened, the heat generated by the high current will melt the polymer, causing the volume of the polymer to expand, disrupting the network of conductive paths. So the resistance of the device increases and the circuit is protected from damage. Once fault and power to the circuit are removed and the polymer cool, the device will reset and is ready for normal operation.



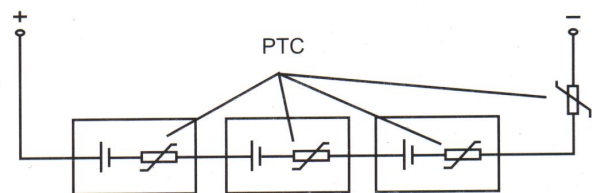
### How to Install

The Polymer Resettable Fuse is usually series connected with other devices to form a circuit. The power source can be DC or AC.



### Typical Application

Primary lithium cells and rechargeable lithium cells are sensitive to faults that cause overcurrent/overtemperature conditions, such as the accidental shorting of the cell terminals, abusive charging. The Polymer Resettable Fuse internal to each cell help provide effective protection.



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