What is Varistor and how it's Works

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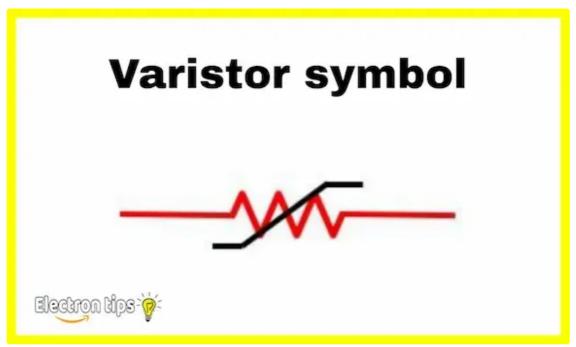
Welcome to the Electron Tips. The topic of our lesson from the electronic elements explanation course is Varistor. This electronic element plays an important role in electronic circuits, as it is not without electronic devices or boards. What is Varistor? What's Varistor uses? Varistor symbol ?All these questions will be solved in the educational article.

First, let's find out what the VARISTOR is and how it works, and what is symbol of the VARISTOR.

Definition of VARISTOR:

The Varistor is made of semiconductors, as is the case of the diode and the transistor... which are originally a variable resistance, but this resistance is somewhat different from the electrical resistors that we know. The value of Varistor resistor change by changing the voltage applied to it, unlike the normal electrical resistance to which the OHM's law applies, the Varistor element is widely used to protect the electronic elements and devices in electrical circuits.

Varistor symbol:



Varistor symbol

Varistor terminals:

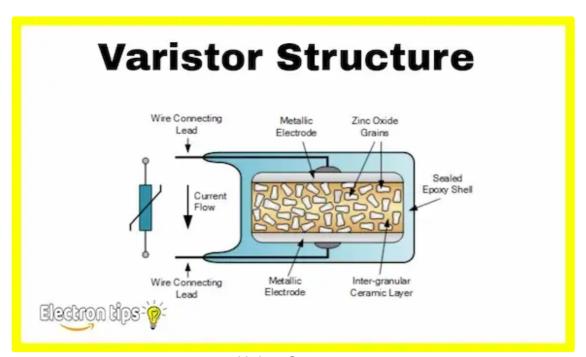
The Varistor resistor has two terminals, just like any normal electrical resistor.



Varistor terminal

Varistor Structure:

This is inside of Varistor element.



Varistor Structure

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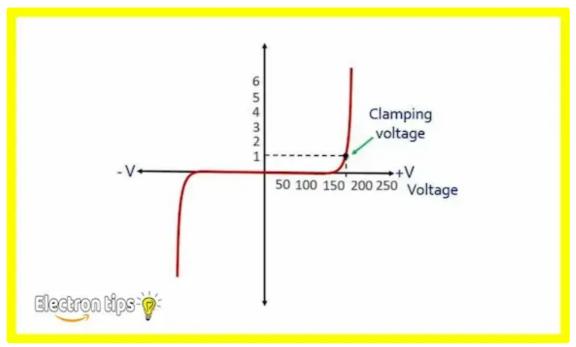
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What is voltage electric.

Ohm's Law equation explanation.

The principle of action of the varistor resistance:

The role of the varistor element is manifested in protecting circuits and electronic components from overvoltage by reducing the resistance of the varistor when the voltage is increased to reach the resistance value almost to zero, which leads to the occurrence of a short circuit and thus cutting off the electrical power from the entire circuit by means of electrical protection devices such as The differential breaker and the protection breakers. This diagram shows the change of the resistance of the fristor with the electric voltage:



Varistor diagram

Varistor uses:

The Varistor element is of great importance in electronic circuits and devices, as it is used in many devices and electrical systems, and these are some of the uses of the Varistor compound:

Varistor compound is generally used to protect circuits and electronic devices such as televisions, computers, and even wireless and wired communication devices, as it is almost impossible to find an electronic device or board that does not contain the element of Varistor.

It is used to protect against sudden voltages, and this is done by connecting it in parallel with the device or load that we want to protect from overvoltage.

Conclusion:

Finally, this was a detailed topic about the Varistor compound and an explanation of its working principle. I hope the explanation is clear to you. If you have any questions or ambiguities, you can ask them in the comments section or send a private message on our Facebook page.