

## 最近のバリスタの進歩

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Recent Advances of Varistor

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Varistors have a lot of excellent characteristics, such as symmetry of electric polarity in the V-I curve, good surge absorption and excellent non-linearity. Therefore, varistors are widely used in electrical and electronic equipments for protection device from surge, noise or ESD (electro static discharge). In particular, multilayer chip varistors are now used extensively for IC using most of portable equipments such as mobile phone and tablet PC. Multilayer chip varistors are made by stacked zinc oxide varistor material and internal electrode material such as Pd. Since the equivalent circuit of the multilayer chip varistor is formed in parallel with the capacitor and two Zener diodes, it is possible to reduce the number of electronic parts. The minimum shape is mass-produced to 0402 type, which contributes to the miniaturization of the circuit board of the electronic equipments. Near future development of low-capacitance type and low-voltage type and impedance matching element would be achieved, and the applications would further expand.

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