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# General Info. of Ceramic Resonators

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### ▶ General Information

#### Token Cuts Resonator Size and Cost

Token's Resonators are made of high stability piezoelectric ceramics that function as a mechanical resonator. This device has been developed to function as a reference signal generator. The frequency is primarily adjusted by the size and thickness of the ceramic element. With the advance of the IC technology, various equipment may be controlled by a single LSI (Large-Scale Integration) integrated circuit, such as the one-chip microprocessor.

Resonator can be used as the timing element in most microprocessor based equipment. In the future, more and more applications will use **ceramic resonator** because of its high stability non-adjustment performance, miniature size and cost savings.

Typical applications include TVs, VCRs, remote controls and toys, voice synthesizers, automotive electronic devices, copiers, telephones, cameras, communication equipment.

Token offers a full range of industry standard through hole and surface mount resonators both with and without internal capacitors. For standard Operating Temperatures ( $-20^{\circ}\text{C}$  to  $80^{\circ}\text{C}$ ), and for Automotive applications ( $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ ), with a wide range of frequencies and frequency stability options. Additionally, Token Application Engineering and Design capabilities allow for custom design and characterization requirements that meet the demands of most applications.

