

Topics

• Circuit protection components business

In 1994, we launched a series of chip-type circuit protection components that were smaller than other companies' products at the time. Cumulative results through the second quarter of our 73rd fiscal year indicate that sales in this category accounted for 23.3% of our total sales.

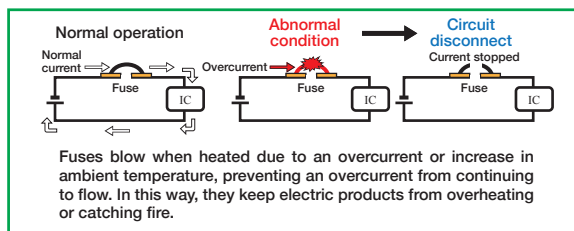
This section of the report describes the roles and applications of circuit protection components, along with future initiatives that we plan to undertake in this business.

(1) Roles and applications of circuit protection components

1. Roles of circuit protection components

The fuses in circuit protection components blow in the event an abnormal current flows in the circuit of an electric or electronic device due to a malfunction or other failure. By blocking such currents, these components protect circuit and thereby keep devices from overheating or catching fire.

Mechanism by which circuit protection components (fuses) work



2. Principal applications of circuit protection components

The principal applications in which circuit protection components are used involve protection of power supply circuits in electronic devices and lithium-ion battery packs.

Examples

- Notebook computers
- Vacuum cleaners
- Drones
- Servers
- Power tools
- Power-assist bicycles
- Transport robots and automatic guided vehicles (AGVs)
- Electric wheelchairs
- xEV systems (HEVs, PHEVs, EVs, and FCVs)

(2) Future initiatives in the circuit protection components business

1. Building structures to increase production in anticipation of increased sales of circuit protection components
We will build structures to increase production so that we can satisfy growing demand for JHC components in lithium-ion battery applications.
2. Putting in place volume-production structures for new products in the medium-current range
Please see the chart below for our circuit protection component products by current range.

*Current values for each current range are given in amperes (A).

Low-current range (0.2 A to 10 A)*	Medium-current range (10 A to 20 A)*	High-current range (30 A to 100 A)*
KAB		
JAG		
	New products: JAJ, JAK	
		JHC

The KAB, JAG, and JHC are existing circuit protection components that we supply.

To strengthen our product line, we developed the JAJ and JAK as new products for the medium-current range (10 A to 20 A) and put in place volume-production structures in October 2021.

- JAJ (designed to blow at 200% of rated current)
Rated currents: 12.5 A, 16 A
- JAK (designed to blow at 250% of rated current)
Rated currents: 10 A, 12.5 A, 16 A, 20 A

