

Electronic components that bring “Innovation” into equipment

By downsizing electronic equipment and adding new functions, Electronic components transform equipment from within.

Smaller size along with higher and multiple-functionality does more than just make electronic equipment more convenient.
These advancements also create new value in our everyday lives.
Small electronic components have a great impact on us by changing our communication, working style, lifestyle, and entertainment.
If your life has changed from last year, you can be sure that Murata has played a part in it.

Audio and Visual

TV plays an “ACTIVE” role

—Murata links TV to information technology—

Modern television sets do more than entertain by showing enjoyable programs.
Thanks to increases in screen size and image quality, linkage to peripherals, and integration with communication services, they are now becoming the most accessible information terminals available.
Murata electronic components not only enable the wireless transmission of high-definition TV signals, but also reduce power consumption.



Key Murata products used in audio-visual equipment



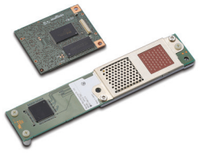
Infrared Sensor

Infrared sensors serve as energy-saving units. They detect the presence of people nearby and switch off the LCD backlight when no one is around watching TV. Our surface mounting technology helps make TV sets even flatter.



Switching Power Supply

Featuring high efficiency, switching power supplies reduce power loss caused by heat generation. Murata offers small and low-profile units.



Wireless HD Module and IEEE 802.11n Module

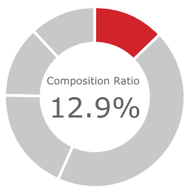
These modules, which allow for the wireless transmission of large high-definition data, are used in home theater systems and feature the free layout of system components.

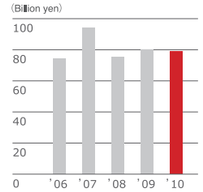


Flat-screen TV sets represent a core market for Murata.

Enjoying rapidly increasing demand in emerging economies, flat-screen TVs not only drive the growth in demand for components such as capacitors, but stimulate the need for infrared sensors for energy savings and power supply modules that contribute to energy savings and downsizing. Murata expects progress in AV equipment networking to lead to a substantial growth in wireless module sales, including WirelessHD modules that allow for the free-layout of TV systems.

■ Net sales share and net sales for the AV market





Figures estimated by Murata

Communications

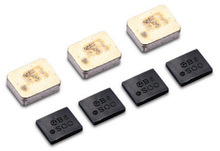
Mobile phones link you with your future, your security

—With Murata, connection takes up a brand new meaning—

People around the world now use mobile phones.
The launch of new higher-speed,
higher-capacity communication services is accelerating
the trend for more diversified and smarter products.
On the other hand, demand for simple low-end phones is also growing.
Microwave products, sensors,
and functional modules contribute to the advancement and
diffusion of innovative communication technology.

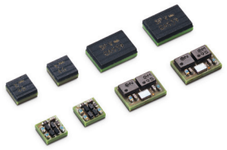


Key Murata products used in mobile phones



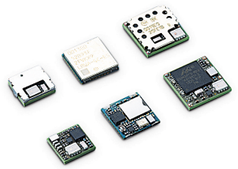
SAW Filter and Duplexer

SAW filters and duplexers, which separate the necessary signal from all radio frequency signals, are key devices in radio frequency circuits. With its unique miniaturization technology, Murata helps RF circuit downsizing.



SWITCHPLEXER®

SWITCHPLEXER® is used for noise filtering and switching between reception and transmission. Murata's innovative multilayer module technology allows the achievement of compact size and high reliability.



Communication Module

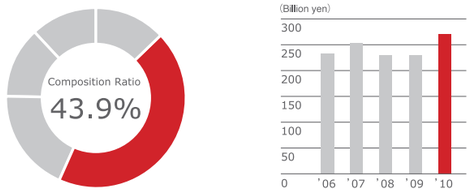
Enabling the mobile phone to access the Internet via wireless LAN, these modules lead the trend of increasing multifunctionality for mobile phones.



The spread of sophisticated mobile phones drives the growth of Murata components.

Components for mobile phones account for the largest portion of Murata's electronic component sales. In addition to the rapid increase in the number of handsets in use, the spread of sophisticated models such as 3G phones and smartphones has caused a sharp rise in the number of components used in a handsets, such as capacitors and SAW filters, permitting us to expect continued rapid growth in the market in the future.

■ Net sales share and net sales for the communication market



Figures estimated by Murata

Computers

Ubiquitous computing in the true sense

—Murata makes things "simple" with not-so-simple technologies—

Easy to carry and connect to networks,
highly mobile PCs are drawing enthusiastic attention
with the spread of Internet connections and cloud computing services.
Murata downsizes its electronic components, permits them
to accommodate higher-frequency signals,
reduces loss to make them friendlier to the battery,
and develops sensors that confer high reliability and operating comfort,
thereby providing support for new-age computing.



Key Murata products used in computers



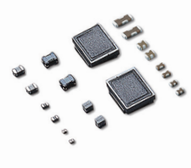
Shock Sensor

In addition to protecting hard disks from impact and vibration, shock sensors make it possible to operate computers by simply touching or shaking them without using the conventional mouse pointer.



Monolithic Ceramic Capacitor and Low-ESL Capacitor

These capacitors stabilize the power supply circuit to MPU, helping reduce size and thickness of mobile PCs.



Chip Ferrite Beads and Chip EMIFIL®

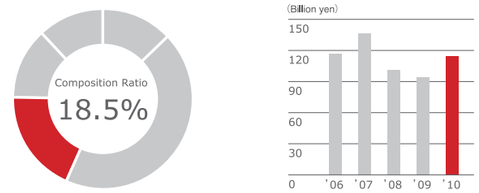
Offering an increasing range of functions, modern PCs face an even worse noise environment on the inside. Murata's traditional noise suppression products can eliminate various noise problems.



Mobile computing now in a new phase of growth.

As personal computer CPUs become more powerful, market demand for capacitors and noise suppression devices is growing. Murata commands an unrivaled share in the shock sensor market for hard disk drives. As tablet PCs with wireless LAN capabilities emerge in the market, Murata can expect further growth in one of company's strongholds, microwave products.

■ Net sales share and net sales for the computers and peripherals market



Figures estimated by Murata

Automotive Electronics

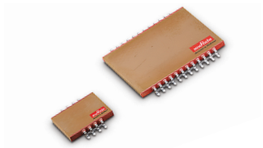
Automotive technology is going through transformation for our Earth and people

—Thus Murata's missions abound···—

The automotive industry is increasingly computerizing and electrifying their vehicles to improve their environmental compatibility as part of their responsibility for people and our planet. Murata's highly reliable electronic components based on the heat resistance of ceramics prove their mettle under punishing driving conditions.
Power devices that accommodate high power accelerate advancements in hybrid and electric drive technology.



Key Murata products used in automobiles



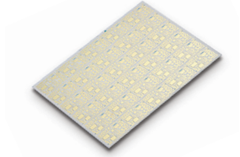
Monolithic Ceramic Capacitor (for Power Electronics Applications)

Employed in the inverter that controls the hybrid / electric vehicle motor, monolithic ceramic capacitors for power electronics applications feature a space-saving design.



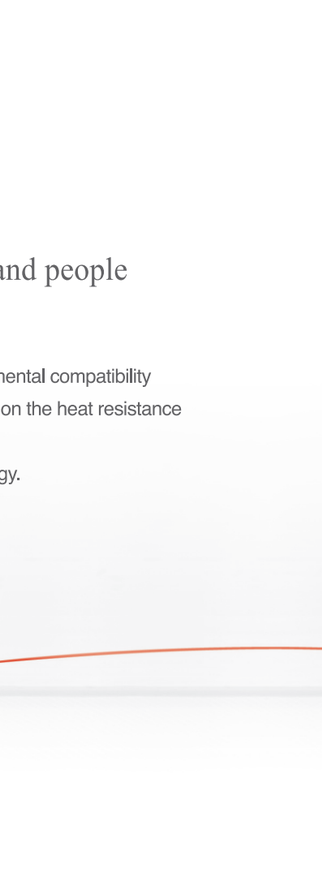
Ultrasonic Sensor

Ultrasonic sensors can detect the distance to obstacles during parking maneuvers. It realizes easy parking and enhance driver's comfort.



LTCC Multilayer Substrate

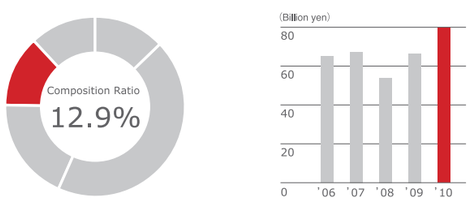
Co-fired at low temperatures, these ceramic substrates find use in the automotive ECU (electric control unit) of the powertrain control equipment, such as transmission control unit, which is required to be highly reliable.



Murata enjoys a growing demand for various electronic components that ensure environmental friendliness, safety, and comfort in cars.

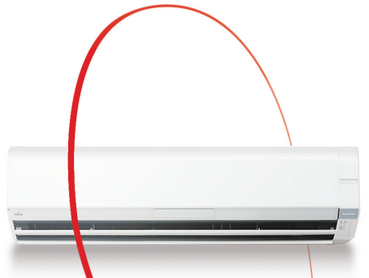
As environmentally friendly cars go mainstream, automobiles are fitted with more electronics, causing a rapid growth in demand for capacitors and other electronic components from Murata. Ultrasonic sensors used for safety equipment as well as gyroscopes and Bluetooth® modules for navigation systems are also successful. We expect to continue to achieve high growth in the sales of components for automobile applications.

■ Net sales share and net sales for the automotive electronics market



Figures estimated by Murata

Home Appliances



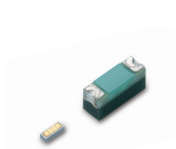
Eco living is cool living

—Make it smart with Murata's electronic components—

Even more energy savings and environmental compatibility are required for the home electric appliances we use in our everyday lives, such as lighting and air-conditioning. Murata offers low-loss and long-life ceramic capacitors, transformation-efficient power supply modules, and sensors/communication modules that control equipment by monitoring its operation to provide support for smart home electronics.



Key Murata products used in home appliances



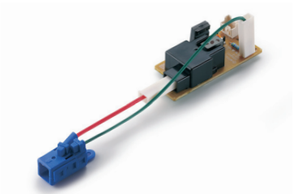
Anti Fuse Device

Used in LED lighting equipment, these protective elements increase energy-saving performance and service life.



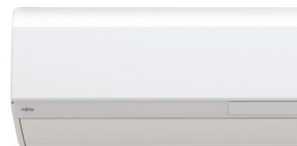
POSISTOR® for Motor Starters

POSISTOR® controls the electric current generated when the refrigerator compressor is activated. By helping reduce power consumption, POSISTOR® contributes to the opening of a low-carbon society in future.



Ionizer (Ionissimo™)

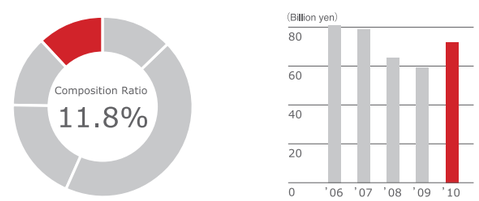
Ion generators provide anti-mold, anti-virus, air cleansing and skin-moisturizing effects. We can now propose a new aspect to our lifestyle, the control of air quality.



Creating ecological value as a new form of affluence.

Home electric appliances are icons of a wealthy lifestyle. Emerging markets are seeing increasing demand for thermistors for refrigerators and air-conditioners. In advanced countries, home electric appliances represent a major target in the commitment to reducing energy consumption. Murata's electronic components also find use in the control circuit of LED lighting equipment.

■ Net sales share and net sales for the home and others market



Figures estimated by Murata