



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.



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.

Key Murata products used in audio-visual equipment



Electrical Double Layer Capacitor

Electrical double layer capacitors support peak load in mobile equipment batteries and small power supplies. They are characterized by small size, low profile and low resistance, and contribute to prolonging battery life and making power supplies smaller.



Switching Power Supply

Introduction of an original circuit enables high efficiency, small, low-profile, power saving and low heat generation units.



Polymer Aluminum Electrolytic Capacitor

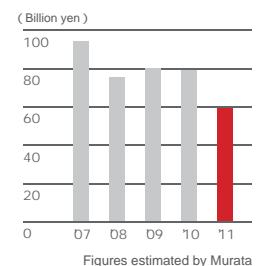
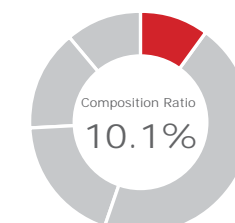
Large capacitance capacitor characterized by low profile and low ESR. It stabilizes power supply for circuits requiring strict voltage control, and contributes to making advancements in AV equipment features.



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.

Net sales share and net sales for the AV market



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.



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 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.



Connectivity Module

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



Key Murata products used in computers



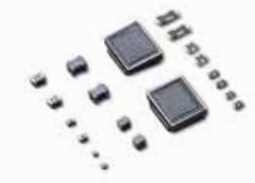
Shock Sensor

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®

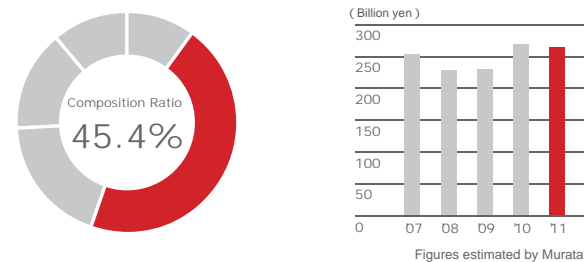
Offering an increasing range of functions, modern PCs face an even worse noise environment on the inside. Murata's traditional noise suppression products can eliminate various noise problems.



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 LTE units and smartphones has caused a sharp rise in the number of components used in handsets, such as capacitors and SAW filters, permitting us to expect continued rapid market growth in the future.

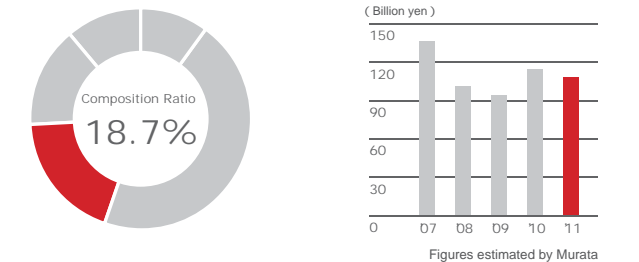
Net sales share and net sales for the communication market



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



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.



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 automobiles



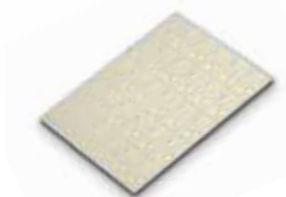
Monolithic Ceramic Capacitor
(for Power Electronics Applications)

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



MEMS Gyro Sensor

MEMS gyro sensor utilizes MEMS technology to detect gyrating motion and is used for navigation and robot posture control. This technology will contribute to development of telematics and motion control.



LTCC Multilayer Substrate

This low-temperature co-fired ceramic substrate is used for ECU (electric control unit) for power train control and radar modules for safety improvement where high reliability is required.



Key Murata products used in home appliances



Rotary Position Sensor (SV Series)

Rotary position sensor is a small and reasonable angle sensor used for rotary switches in home appliances such as washing machines. It contributes to making appliances smaller and more reasonable.



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™)

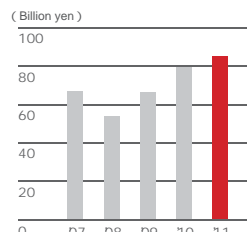
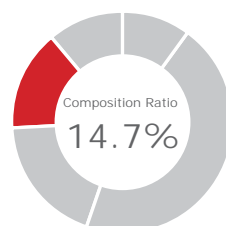
Ion generators provide anti-mold, anti-virus, air cleansing and skin-moisturizing effects. We can now propose a new aspect to our lifestyle, the control of air quality.



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. Various sensors used for safety equipment as well as Bluetooth® modules 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

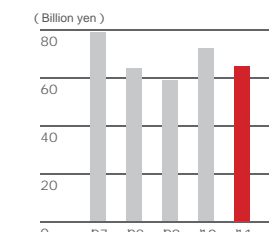
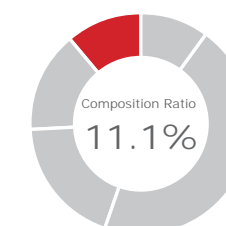


Figures estimated by Murata

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