## **Business Activities**

Since its establishment in 1944, Murata has conducted wide-ranging research and development of functional ceramics as functional raw materials. Focusing primarily on the electrical properties of ceramics, Murata has built on the success of our representative dielectric product, the chip monolithic ceramic capacitor, to develop piezoelectric products such as ceramic filters as well as microwave devices and modules incorporating thin film forming technology, micro-scale processing technology, and microwave circuit design technology. In addition to developing these varied electronic components, we have developed related products while refining our manufacturing and marketing expertise.

Working in the belief that "new quality electronic equipment begins with new quality components, and new quality components begin with



Dielectric Products

new quality materials," Murata has maintained consistent production of items ranging from inorganic and organic chemical materials to ceramics and electronic components. Supporting this effort as the foundation of the company's material, process, design and production expertise, Murata's R&D initiatives emphasize the vertical integration of these technologies.

In recent years, the global electronics industry has been making rapid progress toward ever more compact and thin form factors while developing electronic devices and tools offering enhanced functionality and multifunctionality. Moreover, the market for products incorporating microwave and digital technologies has grown significantly, particularly in the area of mobile communications equipment and computer-related equipment. The result of these trends has been a growing demand for new components.



Chip Monolithic Ceramic Capacitors



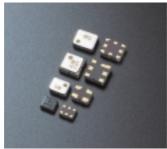
Thermistors



Piezoelectric Products



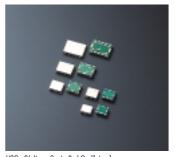
Ceramic Filters, Ceramic Resonators



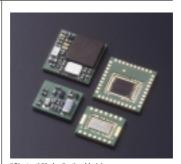
Surface Acoustic Wave (SAW) Filters



Functional Modules



VCOs (Voltage Controlled Oscillators)



"*Bluetooth*®", Application Modules



"EMIFIL®", EMI Suppression Filters



Piezoelectric Application Sensors



Chip Coils



Chip Dielectric/Multilayer Antennas