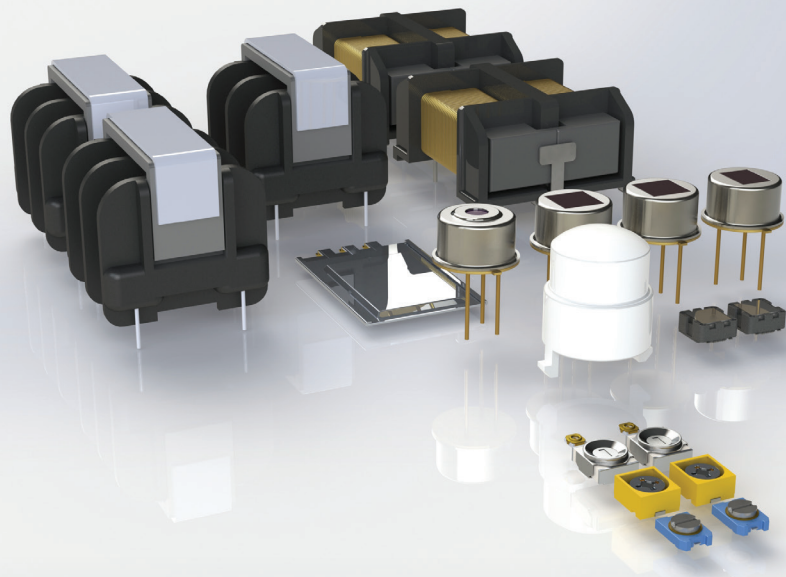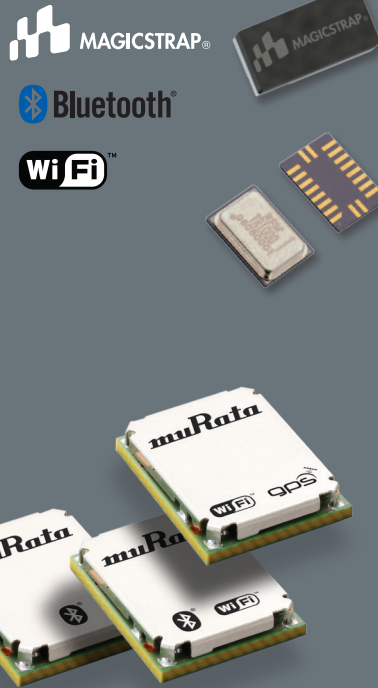# Product line card

*Components & modules*

Product line card

Modules

- Bluetooth® modules
- BluetoothSmart® modules
- WiFi™ modules
- WiFi™ + Bluetooth® modules
- HyperMesh / FHSS
- IEEE 802.15.4 standards-based modules
- WirelessHART modules
- MAGICSTRAP® RFID IC modules
- Ionizer modules
- Active oxygen module (Ozonizers)
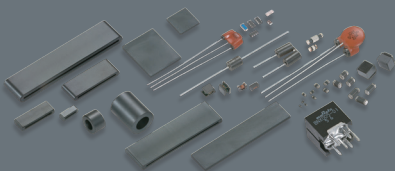- Wireless power transmission modules

RF Components

- Isolators
- Baluns
- Couplers
- Matching devices
- High Frequency coaxial connectors
- Single layer microchip capacitors
- Duplexers
- SAW resonators
- Switch
- Front-end module
- Thin film circuit substrate RUSUB®
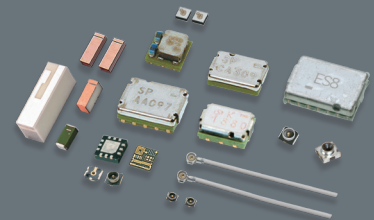
Noise Suppression Products / EMI Suppression Filters

- Noise suppression filters EMIFIL® (chip and lead type)
- Common mode chokes (chip and lead type)
- AC line filters
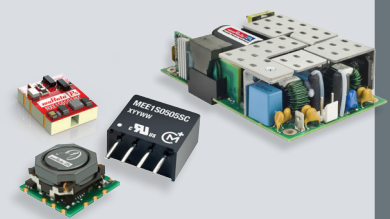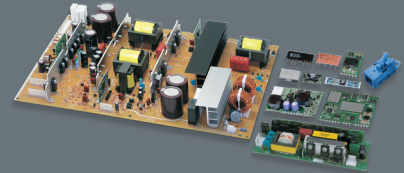- Microwave absorbers
- ESD protection devices
- Ferrite cores

Inductors (coils)

- Inductors for power circuits (power and choke)
- RF inductors
- Inductor and transformer for DC-DC converter
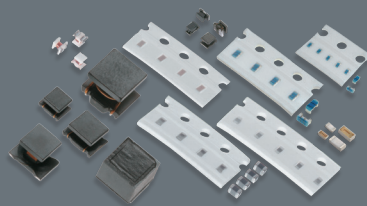
Power devices

- AC-DC power supplies
- DC-DC converters
- µDC-DC converters
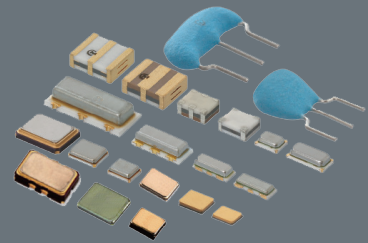- Wireless power transmission modules

Capacitors

- Monolithic ceramic capacitors
- Polymer aluminum electrolytic capacitors
- Electric double layer capacitors (Supercap)
- Single layer microchip capacitors
- Variable capacitors
- Trimmer capacitors
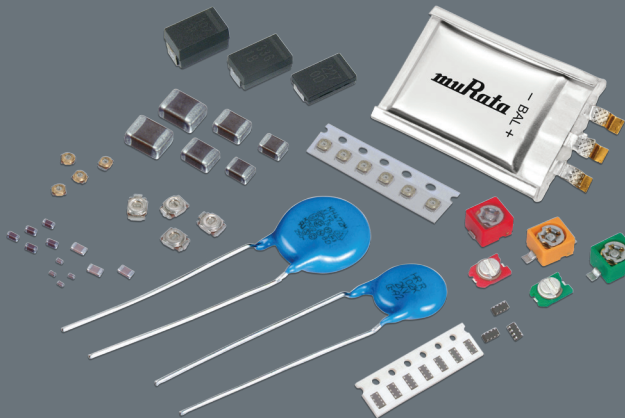
Timing devices

- Ceramic resonators CERALOCK®
- Crystal units
- Crystal oscillators

Sensors

- Pyroelectric infrared sensors
- Ultrasonic sensors
- Magnetic pattern recognition sensors
- Magnetic switches (AMR sensors)
- Shock sensors
- Rotary position sensors
- Pressure sensors
- Optical sensors
- Temperature sensors (Thermistors)
- Accelerometers
- Inclinometers
- Gyro sensors
- Digital panel meter
- Barometric pressure sensors
- Proximity ambient light sensors
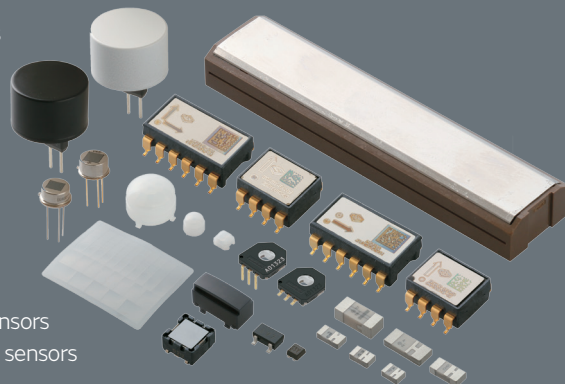
Thermistors

- NTC Thermistors for temperature sensing/ temperature compensation, for inrush current suppression
- PTC Thermistors (POSISTOR®) for overheat sensing, overcurrent protection and inrush current suppression
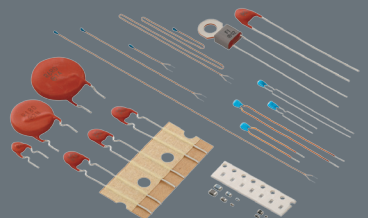
Filters

- Ceramic filters CERAFIL®
- Crystal filters
- Dielectric filters GIGAFIL® (Duplexers)
- Dielectric filters GIGAFIL® (BPF)
- LC filters
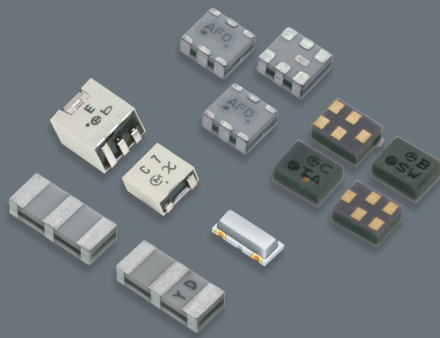
Sound components

- Piezoelectric sounders
- Piezoelectric buzzers
- Piezoelectric diaphragms
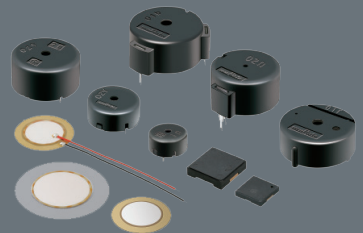
Substrates

- LTCC multilayer substrates LFC®
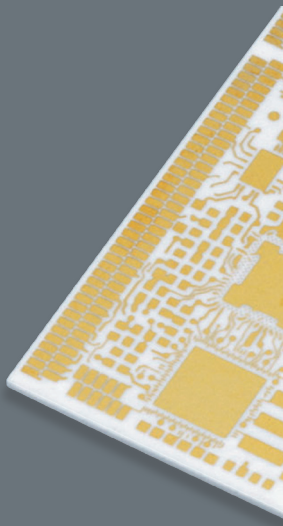
Micromechatronics

- Micro blower
- Piezoelectric actuator

RFID / NFC

- Smartphone-readable NFC tags
- HF & UHF RFID tags
- RFID/NFC tags for smart plastics
- UHF RFID tag for clothing

About Murata

Murata is a leading manufacturer of electronic components, modules, and devices. The complete range includes ceramic capacitors, resistors/thermistors, inductors/chokes, timing devices, buzzers, sensors and EMI suppression filters. Whilst the company is known as a global ceramic capacitor manufacturer, it is also a world leader in Bluetooth® & WiFi™ Modules, board-mount DC-DC converters and is a key manufacturer of standard and custom AC-DC power supplies.
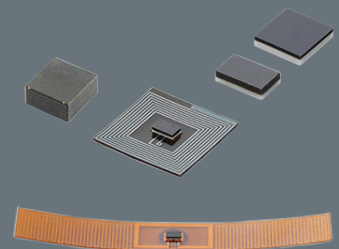
Established in 1944, Murata is headquartered in Japan and has European offices in Finland, France, Germany, Hungary, Italy, the Netherlands, Spain, Switzerland and the UK.

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Global locations

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⚠Note

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2 Please contact our sales representatives or product engineers before using the products in this catalog for the applications listed below, which require especially high reliability for the prevention of defects which might directly damage a third party's life, body or property, or when one of our products is intended for use in applications other than those specified in this catalog.

① *Aircraft equipment*

② *Aerospace equipment*

③ *Undersea equipment*

④ *Power plant equipment*

⑤ *Medical equipment*

⑥ *Transportation equipment (vehicles, trains, ships, etc.)*

⑦ *Traffic signal equipment*

⑧ *Disaster prevention / crime prevention equipment*

⑨ *Data-processing equipment*

⑩ *Application of similar complexity and/or reliability requirements to the applications listed above*

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4 Please read rating and ⚠CAUTION (for storage, operating, rating, soldering, mounting and handling) in this catalog to prevent smoking and/or burning, etc.

5 This catalog has only typical specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

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