TDK's three focus markets and main products

AUTOMOTIVE

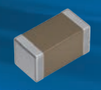
Supporting safe and environment-friendly “connected cars”

The world of automotive electronics keeps climbing to new levels of safety, comfort, and environmental compatibility. Limiting the volume of exhaust gas from automobiles is key to solving the serious problem of carbon dioxide emissions. This necessitates the rapid electrification, such as xEVs (hybrid, plug-in hybrid, and battery electric vehicles).
In addition, the “connected car,” which is constantly linked to the Internet, will enable the realization of advanced driver assistance systems (ADAS) and autonomous driving to further improve safety, accuracy, and comfort. TDK provides a wide range of electronic components and devices to assist the electrification and connectivity of automobiles. TDK’s highly reliable products, ideal for automotive use, will support both the safety of automobiles and environmental countermeasures.


Common mode chokes for CAN-BUS/ 1000BASE-T1

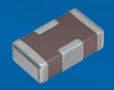

Power inductors for noise suppression and voltage stabilization


Multilayer power inductors for infotainment and ADAS


MLCCs for noise suppression and voltage stabilization


Film capacitors for DC link & EMI suppression

Aluminum electrolytic capacitors for buck-boost converters


3-terminal feedthrough filters for decoupling and filtering


Hall sensors & embedded controllers


High-precision TMR angle & motion sensors


Multilayer RF inductors for connectivity

MEMS motion sensors for navigation and safety


MEMS microphones for communication


DC-DC converters for xEV


Rare earth & ferrite magnets for motors and generators


Temperature sensors for HVAC, motor, battery, ATF

ICT

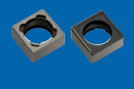
For the realization of an ultra-high speed, large-capacity network society

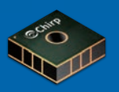
As well as being advanced information tools with not only mobile phone but also personal computer, camera, and other functions, smartphones are also increasingly used to connect and control smart homes, cars, and factories. Because of the arrival of ultra-high speed and large-capacity telecommunications like LTE and 5G, smartphones have evolved into key devices of the IoT society, even faster and connected to all kinds of things. Moreover, 5G is going to change our whole lives, beginning with the fields of transport, medical, and logistics. TDK’s products are essential to the new ultra-high speed, large-capacity network society. Our electronic components and sensors utilizing TDK’s proprietary core technologies further support smartphone evolution. Our high reliability electronic components, such as RF components and products for power supply will contribute to the development of such telecommunications infrastructure as base stations and servers, the foundations of 5G.

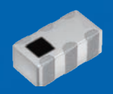

DC-DC converter for Point-of-Load

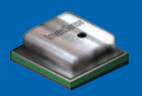

Microphones for communication

Motion sensors for mobile devices

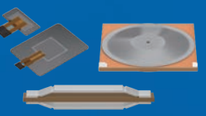

Lens actuators for camera modules


ToF ultrasonic sensors for AR/VR


Thin-film & multilayer RF components for filtering


Pressure sensors for drones and IoT


Modules with SESUB (Simiconductor Embedded in SUBstrate)


Piezo actuators for haptic feedback and speaker solutions


Lithium-ion polymer batteries for energy storage

INDUSTRIAL & ENERGY

Toward a sustainable society

One of the key challenges for humankind in the 21st century will be to effectively utilize limited resources to build an affluent society while reducing the adverse environmental impact, such as carbon dioxide emissions, as much as possible. Renewable energy systems, such as wind and solar power installations, have gained momentum as viable sources of clean energy.

The industrial equipment and rail transport industries also are required to pursue higher efficiency and lightness for the effective utilization of energy. TDK is harnessing its unique materials and process technologies to provide key devices to these sectors and thereby contribute to the realization of a sustainable and smart society.


Power line EMC filters


Power film capacitors for DC link, AC filtering

Flash memories & SSDs for data storage


AC-DC power supplies


High-voltage contactors


Aluminum electrolytic capacitors for frequency converters


Output chokes up to 1500 A for converters