

Fast Facts

Electrical Smart Switch

KYOCERA AVX's On Board Power Switch enables fast, safe and noiseless disconnection with high-performance electric vehicle batteries.

E-mobility is changing the future of transport. This technology change is a global trend, and between 2020 and 2030 should become a reality for a broad base of consumers. For several years now, hybridization of vehicles has been rolling out across the fleets of many car manufacturers, and continued progress is expected. During the start/stop-mode the electronic power switch for hybrid vehicles disconnects the start battery from the support battery of the power circuit.

KYOCERA AVX's On Board Power Switch achieves high power density in a small package volume

The powerful On Board Power Switch disconnects the battery of an electric car from the power train in a fast, safe and noiseless way. Bare die semiconductors are directly attached to rigid aluminum metal substrates, produced using thick film technology. The switch is located directly between the battery positive terminal and the load, and controls current flow in both directions.

Electrical Smart Switch HV

Semiconductor HV battery disconnect module

Solid State Battery switch for fast, safe and noiseless connection and disconnection with high-performance electric vehicle batteries

Features:

- 750 V or 1200 V – up to 750 A
- Integrated Gate driver
- Over-current detection
- Pre-charging capability
- Small footprint
- Scalable circuit design
- ECPE AQC 324 qualified

Key technologies:

- Silicon carbide semiconductors
- Low inductive package design

Package: 164 mm x 107 mm x 30 mm



Electrical Smart Switch 48V

Semiconductor 48 V battery disconnect module

Features:

- 80 V – up to 500 A cont.
- Pre-charging capability
- Small footprint
- Scalable circuit design
- ECPE AQC 324 qualified

Key Technologies:

- Aluminium busbars
- Low inductive package design
- Transfer molding

Package: 102 mm x 60 mm x 7 mm

