

High Voltage Semiconductor Junction Box

Developing

Background

- It is necessary to develop products with high output charging specification to reduce charging time as one of the challenges for electric vehicles.

Function

- Supply/distribute high voltage power
- Change over series- parallel battery

Feature

- Reduce charging time by changed over series- parallel battery
- Downsize with a semiconductor relay (Decrease in 50% volume of Yazaki's product)

Specification

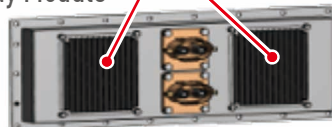
- Voltage: Up to 800V
- Voltage of battery pack: Change over between 400V & 800V
- Current: Continuous 200A
- Implement semiconductor FUSE function
- Internal voltage/ current sensor

High Voltage Junction Box (Power supply / distribution)

Heatsink

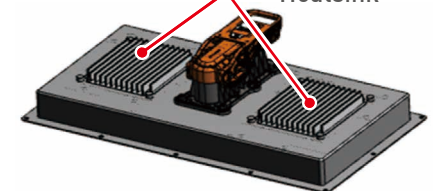


Semiconductor
Relay Module

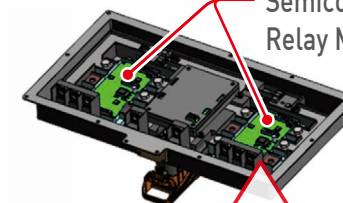


High Voltage Junction Box (Switching battery voltage)

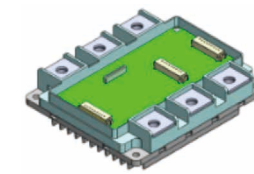
Heatsink



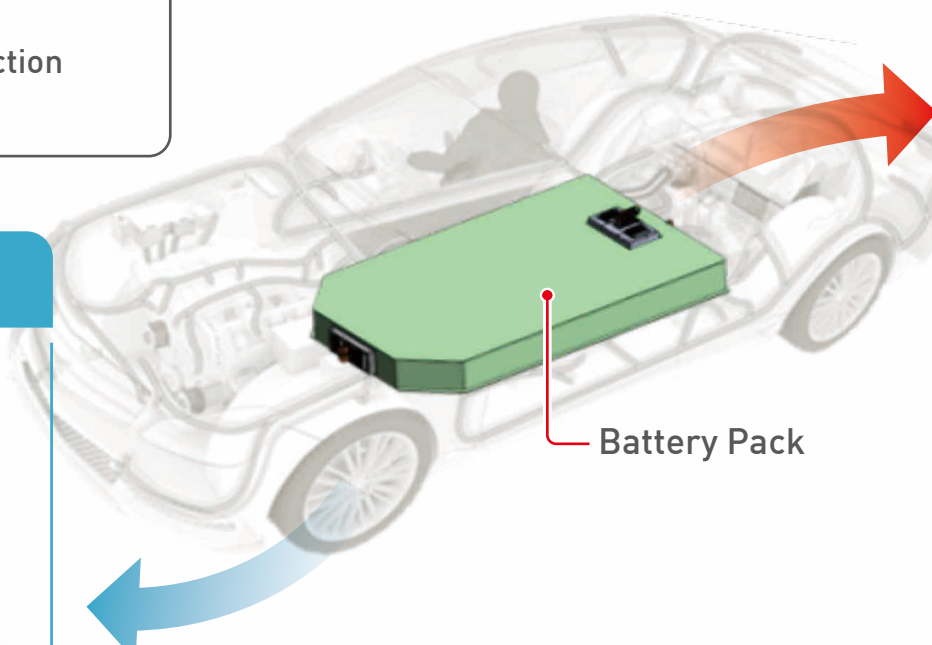
Semiconductor
Relay Module



Internal SiC
Semiconductor



Semiconductor
Relay Module



Battery Pack