# In-Mold Connecting Technology

Our method of connecting busbar and wire is to use swaging technique in the insert molding process.

The clamping press to connect and fasten busbar and wire is completed during the molding process so we can offer an effective and faster solution to assemble your parts.

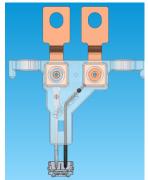
## **Application**

- » Power module
- » ITerminal assembly
- » Busbar assembly parts where current flows

#### **Features**

- » In-mold swaging technology
- » Enabling to use a wide range of metals
- » Enable to use different sizes of thickness
- Reduction of connecting process to save time and cost







#### Find out more



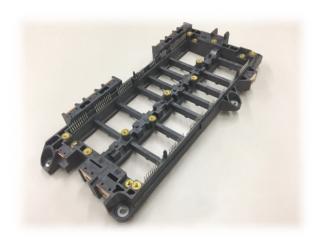
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# Miniaturization and weight reduction for your EV application



- Metal Insert Mold
- Ultra-Low Inductance Busbar
- In-Mold Connecting Technology

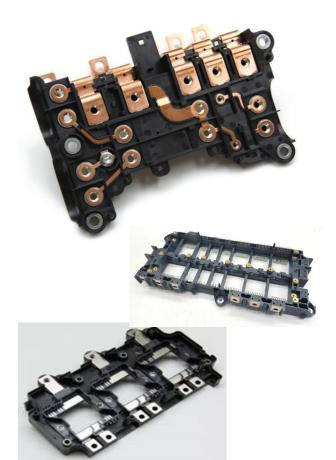




### **Metal Insert Mold**

Miniaturization and weight reduction are ever so important factors in car manufacturing due to the tightening of CO2 emission regulations as well as imerging EVs in which OEM always seek lightweighting to extend a longer crusing range.

We design and make the shape of insert mold with resin/metal composite, to fit your needs and to achieve your goal of miniturization and weight reduction.



# **Application**

- » Inverter
- » Motor
- » Battery module
- » Battery disconnect unit
- » On board charger etc.

#### **Features**

- » Providing multiple resin and metal parts as an integrated product by insert molding
- » Providing multiple insert molded products as one part
- » Desinging enough creepage distances for insulation but ensuring desired mold shape for your needs
- » Advanced production technology to ensure customer's serial production steadily
- » Flexible approach to increase molds and machine to respond to the rapid incrase in customer's demand







# <u>Ultra-Low Inductance</u> <u>Busbar</u>

Achieving ultra-low inductance with super narrowed gap between busbars.

# **Application**

- » Power module
- » Inverter terminal assembly
- » Smoothing capacitors, etc.

#### **Features**

- » Insulation design with a 100 μm gap between busbars
- » Reducing parasitic inductance by making the PN terminals as close as possible
- » Insulation kept by film insert molding
- » Very effective for high-speed switching such as SiC
- » Miniaturisation for module
- » Patent pending

