





Insert Molding Parts by ATECS

Insert parts

Busbar	Terminal pin	Nut, Collar	Sensor core
			

- More than 100 parts / Various parts can be inserted



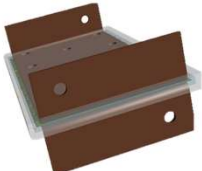
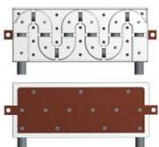

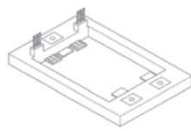

Material

- PBT
- PPS
- LCP
- PA
- Other



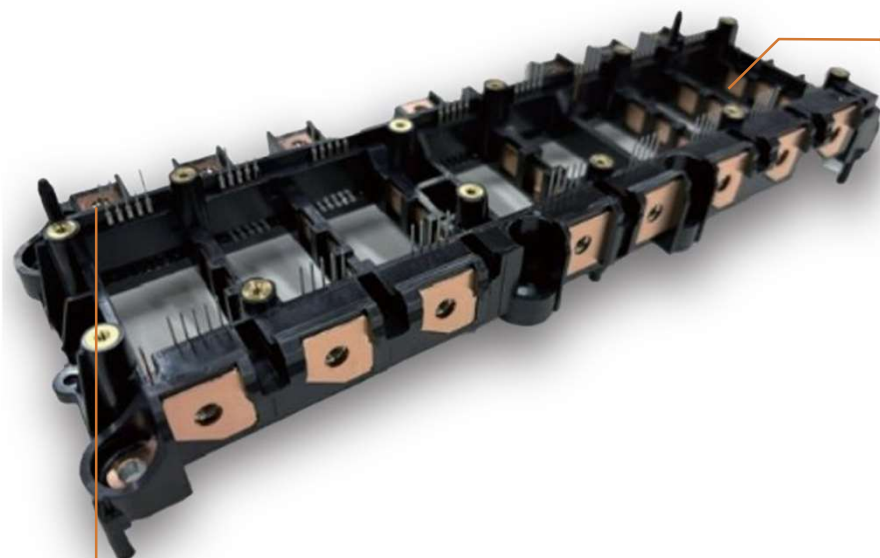
- Possible to propose plastics suitable for product specifications

Special technology

Low inductance busbar	Heat sink insert	In-mold swaging	PCB insert	Nut Holder
				

- Various insert technologies are patented
- Contribution to **Miniaturization**, Lightweight and cost-reduction

ATECS technology (In mold)

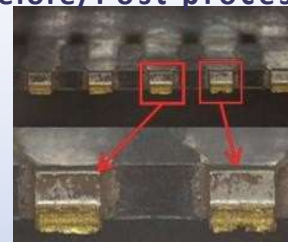


In mold Tie bar cutting

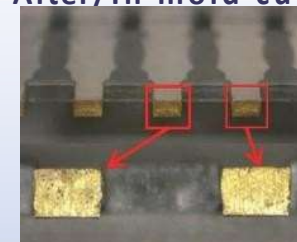
Benefit of this technology

- Reduced post process(Tie bar cutting)
- Improved wire bonding share strength

Before/Post process



After/In mold cutting



In mold swaging

Benefit of this technology

- Reduced parts number(bolt, nut) and assembly cost
- Improved tightening strength

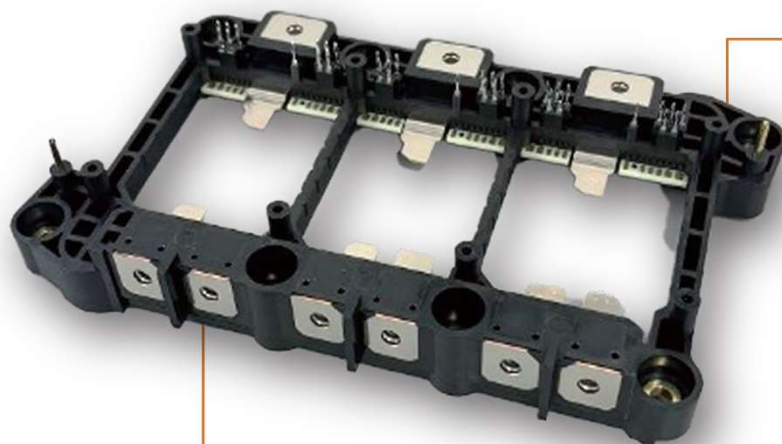
Before/Screw fastening



After/Swaging in-mold



ATECS technology (Integrated)

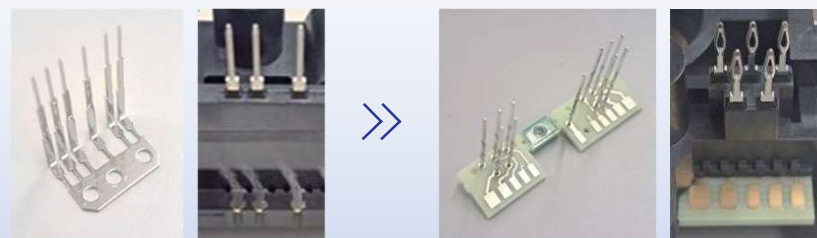


Integrated - Press Fit Pin + Circuit Board

Benefit of this technology

- Improved design flexibility(ex:Narrower circuit layout)
- Cost reduction and better productivity

Before/Stamping parts After/Integrated-Press fit pin/board



Integrated - Nut holder + Pre-bending

Benefit of this technology

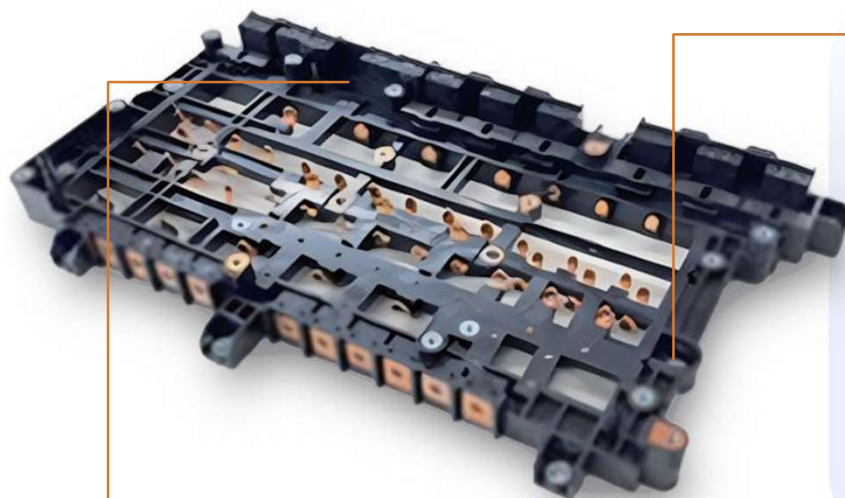
- Reduction of process number = Cost down
- Better flatness of fastening surface
- Nut holder = Can be used regrind resins from sprue/runner

Before/Post bending

After/Nut holder+ Pre-Bending



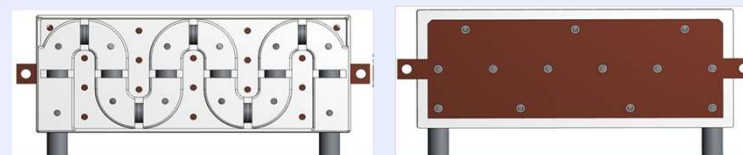
ATECS technology (Specific parts Insert)



Water cooling pipe Insert

Benefit of this technology

- Cost reduction /Heatsink post assembly process



Current sensor core Insert

Benefit of this technology

- Cost reduction – Current sensor core post assembly process

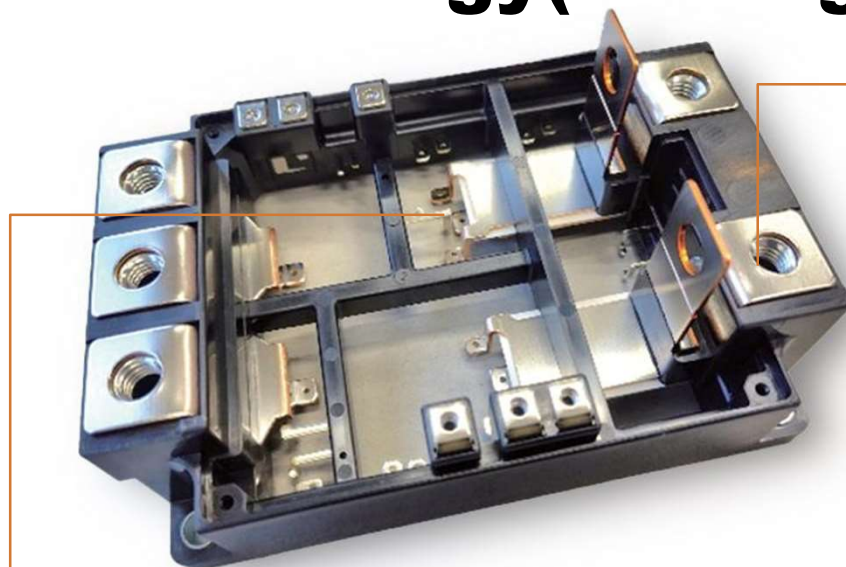
Before/Post process



After/Core insert



ATECS technology(For High current and voltage)



Swaging for thick busbars

Benefit of this technology

- Thick busbar(3mm) can be integrated
- Good for contact resistance for high current



Low Inductance busbar insert

Benefit of this technology

- Maintain Insulation performance at ultra thin distance(0.5mm)
- Further miniaturization and improvement of power loss

