

Fact sheet

Mold Module

The solid, flexible basis for power electronics systems

Advanced technology

- Fully automotive compliant (AEC-Q100)
- Less production steps, faster assembling
- Minimised material usage: copper base plate, soft molding and bondable frame eliminated

- Weight- and volume reduction
- Very high mechanical robustness
- Increased cycling capability (temperature shocks and load cycling)
- Pressfit connections instead of solder pins

Key characteristics and applications

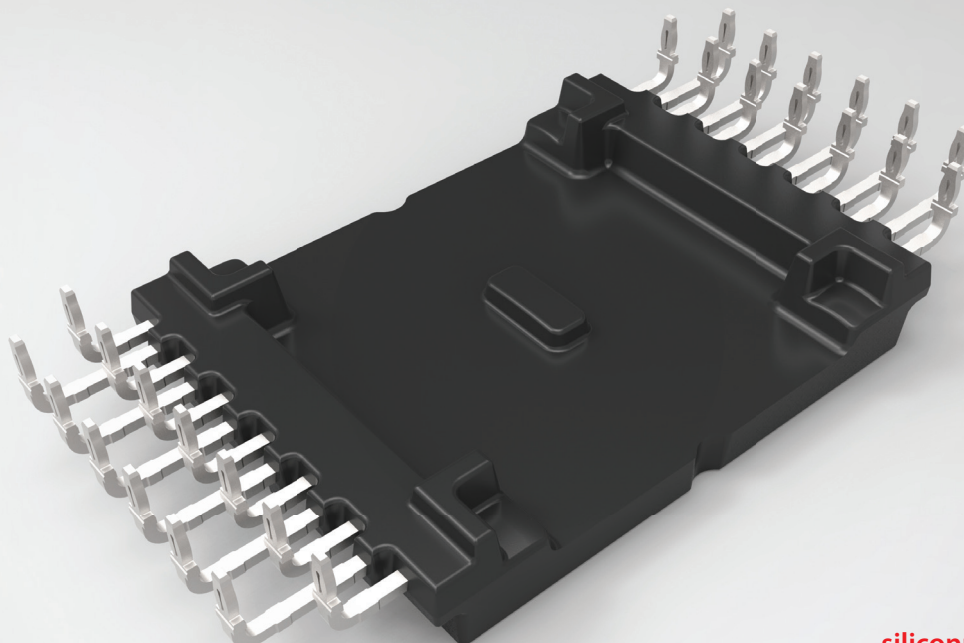
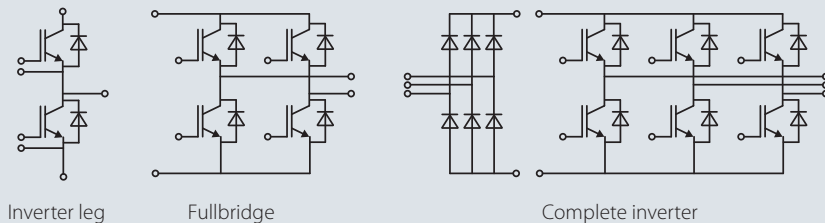
The Mold Module provides a universal platform which can integrate various electrical circuits and any kind of semiconductor technology.

Pressfit pins assure reliable electrical connections, no soldering of the electrical contacts.

Due to its robust and lightweight conception, the Mold Module is particularly suited for applications with harsh environmental conditions:

- Automotive and heavy duty vehicles
- Inverters for traction and auxiliaries
- Solar inverters
- Uninterruptible power supplies

Circuit examples



Specifications

Module information

Isolation test voltage terminals to bottom area (AC 50 Hz 1 minute)	3000	V
Material for internal insulation	AL203	
Thickness of insulation material	0.32	mm
Creepage distance terminal to bottom side of module	9.5	mm
Creepage distance terminal to terminal	2.7	mm
Clearance terminal to bottom side of module	8.2	mm
Clearance terminal to terminal	1.1	mm
Comparative tracking index of the mold compound (CTI)	> 400	
RoHs compliant	yes	
Lead free	yes	
UL flammability standard	94 - V0	

Maximum ratings

Ambient temperature	-40 to + 125	°C
Allowable continuous current on one connection pin	50	Arms

Reliability

Vibration and shock	Automotive profile	
Thermal cycles -40°C / +125° C 30 min	1000	---
Pressfit qualification	IEC-60352-5	

Package dimensions

