



Power Modules

New Line of SiC-Based Power Modules for Universal Use in Solar and Battery Management Applications

Second generation of SiC modules debuts

Vincotech has rolled out new SiC-based products for ultra efficient, high-frequency operation in solar inverter and battery management applications.

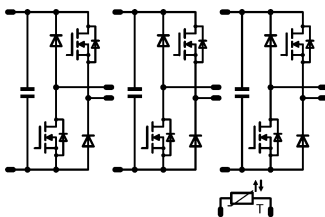
These 2G **flow 0 SiC** modules come in two versions. One is a **flow3xPHASE 0 SiC** three-phase inverter module with 3x BUCK/BOOST and split output topology; the other is the **flow3xBOOST 0 SiC** with three-channel boost circuits.

Both modules feature SiC MOSFET switches designed for ultra fast switching frequencies >100 kHz. They are able to achieve >99% peak efficiency at fPWM = 64 kHz. Equipped with integrated DC capacitors, these new **flow 0 SiC** modules provide ultra low inductance.

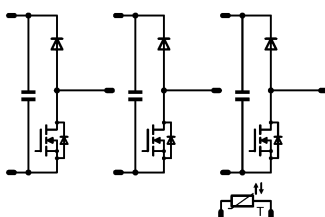


flow 0 SiC

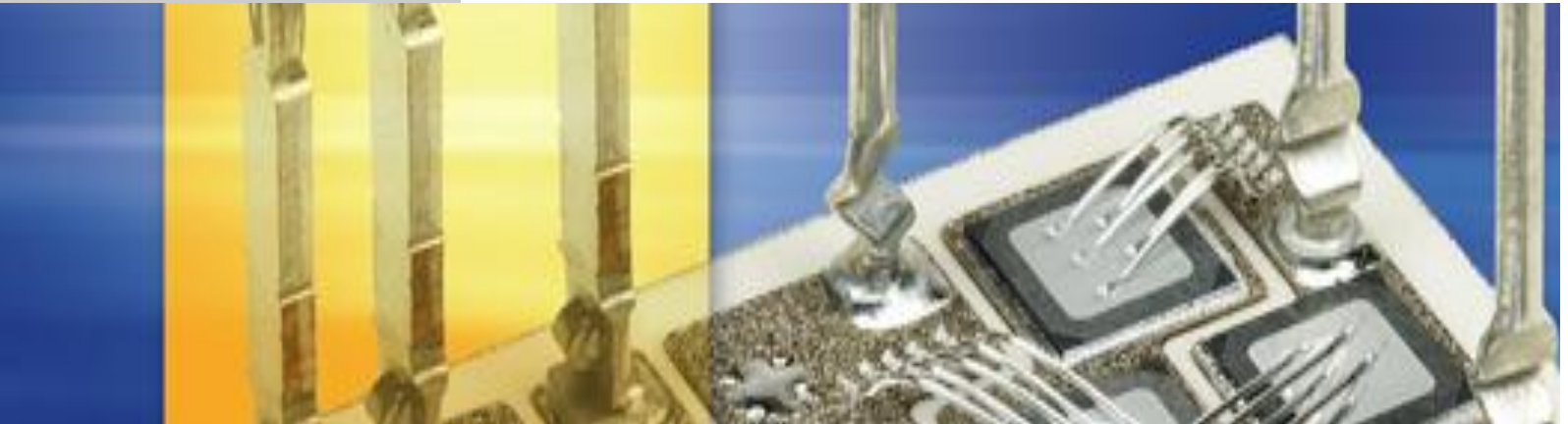
flow3xPHASE 0 SiC
3x Inverter / bi-directional DC-DC



flow3xBOOST 0 SiC
3x BOOST



| Part. No.: | Voltage | R _{DS-ON} | Comments |
|--|---------|--------------------|-------------------|
| 3-Phase Inverter / 3x BUCK/BOOST: | | | |
| 10-PZ126PA080ME-M909F18Y | 1200 V | 80 mΩ | SiC MOSFET (CREE) |
| 3x BOOST: | | | |
| 10-PZ123BA080ME-M909L18Y | 1200 V | 80 mΩ | SiC MOSFET (CREE) |



Power Modules

Main features:

- three-phase inverter (BUCK/BOOST) with split output topology or
- three-channel boost circuit
- SiC-MOSFET switches
- Integrated capacitors
- Temperature sensor

Applications:

- Solar
- Battery management

The **flow3xPHASE 0 SiC** and **flow3xBOOST 0 SiC** come in low-inductive, 12-mm [flow 0 housings](#) with Press-fit pins. Samples of these modules may be sourced on demand from our usual channels.