

## For Medium to High Frequency Applications, 1200 V SiC MOSFET Power Modules in Industry-Standard SOT-227 Package Increase Power Efficiency, While Offering Drop-in Replacements for Competing Solutions

### Product Benefits:

- Industry-standard SOT-227 package
- Offered in single switch and low side chopper configurations
- Integrate:
  - Latest generation SiC MOSFETs
  - Soft body diode offering low reverse recovery
- Electrical insulation up to 2500 V for one minute
- Continuous drain current from 50 A to 200 A
- Low on-resistance down to 12.1 mΩ
- High speed switching with low capacitance
- Maximum operating junction temperature of +175 °C
- RoHS-compliant



### Market Applications:

- Solar inverters; off-board chargers for electric vehicles (EV); SMPS, DC/DC converters, UPS, and HVAC systems; large scale battery storage systems; and telecom power supplies

### The News:

Vishay Intertechnology introduces five new 1200 V MOSFET power modules designed to increase power efficiency for medium to high frequency applications in automotive, energy, industrial, and telecom systems. The Vishay Semiconductors VS-SF50LA120, VS-SF50SA120, VS-SF100SA120, VS-SF150SA120, and VS-SF200SA120 feature Vishay's latest generation silicon carbide (SiC) MOSFETs in the industry-standard SOT-227 package.

- The devices reduce switching losses and increase efficiency
- The compact SOT-227 package of the VS-SF50LA120, VS-SF50SA120, VS-SF100SA120, VS-SF150SA120, and VS-SF200SA120 allows the devices to serve as drop-in replacements for competing solutions in existing designs, enabling designers to adopt one of the newest SiC technologies without the expense of changing PCB layouts
- The high electrical isolation offered by the power modules' molded package lowers costs by eliminating the need for additional insulation between the component and heatsink



## The Key Specifications:

Part #	V <sub>DSS</sub>	I <sub>D</sub>	R <sub>DS(ON)</sub>	Configuration	Package
VS-SF50LA120	1200 V	50 A	43 mΩ	Low side chopper	SOT-227
VS-SF50SA120		50 A	47 mΩ	Single switch	
VS-SF100SA120		100 A	23 mΩ	Single switch	
VS-SF150SA120		150 A	16.8 mΩ	Single switch	
VS-SF200SA120		200 A	12.1 mΩ	Single switch	

### Availability:

Samples and production quantities of the VS-SF50LA120, VS-SF50SA120, VS-SF100SA120, VS-SF150SA120, and VS-SF200SA120 are available now, with lead times of 13 weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?97288> (VS-SF50LA120)

<http://www.vishay.com/ppg?97289> (VS-SF50SA120)

<http://www.vishay.com/ppg?97290> (VS-SF100SA120)

<http://www.vishay.com/ppg?97186> (VS-SF150SA120)

<http://www.vishay.com/ppg?97291> (VS-SF200SA120)

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