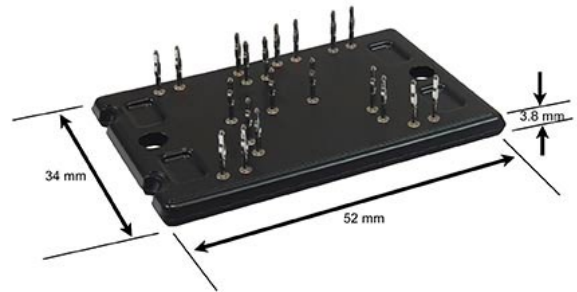


For Medium to High Frequency Applications, 1200 V SiC MOSFET Power Modules in MAACPAK PressFit Package Increase Efficiency and Reliability, While Saving Space and Reducing Parasitic Inductance for Cleaner Switching

Product Benefits:

- Low profile MAACPAK PressFit package
- Integrate:
 - Latest generation SiC MOSFETs
 - Fast intrinsic SiC diodes with low reverse recovery
 - NTC thermistors for temperature sensing
- Rugged transfer mold construction
- Available in full-bridge inverter and three-phase inverter topologies
- Low on-resistance down to 38 mΩ
- High 1200 V blocking voltage
- High speed switching with low capacitance
- Maximum operating junction temperature of +175 °C
- RoHS-compliant and halogen-free



Market Applications:

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

The News:

Vishay Intertechnology introduces two new 1200 V MOSFET power modules designed to increase efficiency and reliability for medium to high frequency applications in automotive, energy, industrial, and telecom systems. Offering four and six MOSFETs, respectively, in the low profile MAACPAK PressFit package, the Vishay Semiconductors VS-MPY038P120 and VS-MPX075P120 combine the latest silicon carbide (SiC) technology with a rugged transfer mold construction.

- The devices reduce switching losses and increase efficiency
- For increased reliability, the rugged transfer mold technology of the VS-MPY038P120 and VS-MPX075P120 allows them to achieve much longer product lifecycles than legacy solutions available on the market, while improving thermal resistance
- For more efficient, cleaner switching, the devices' low profile helps reduce parasitic inductance and EMI, while saving space
- The modules' PressFit pins are arranged in a matrix that adheres to industry-standard layouts, allowing for easy replacement of competing solutions in existing designs to enhance performance



The Key Specifications:

Part number	VS-MPY038P120	VS-MPX075P120
V _{DSS}	1200 V	
R _{DS(ON)}	38 mΩ	75 mΩ
I _D at +80 °C	35 A	18 A
Package	MAACPAK	
Circuit configuration	Full-bridge inverter	Three-phase inverter
Max. junction temp. range	-55 °C to +175 °C	

Availability:

Samples and production quantities of the VS-MPX075P120 and VS-MPY038P120 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?97296> (VS-MPX075P120)

<http://www.vishay.com/ppg?97297> (VS-MPY038P120)

Contact Information:

The Americas

Diodes-Americas@vishay.com

Europe

Diodes-Europe@vishay.com

Asia/Pacific

Diodes-Asia@vishay.com