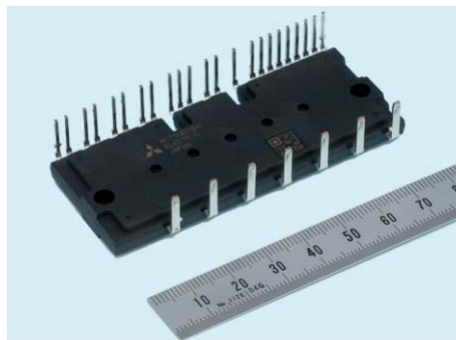


Mitsubishi Electric to Launch Large Hybrid SiC DIIPM for PV Application

11/20/2014

More efficient power modules for PV power conditioner applications

Mitsubishi Electric Corporation (TOKYO: 6503) announced today the launch of its large hybrid SiC transfer-mold dual in-line package intelligent power module (DIIPMTM), which incorporates a SiC Schottky barrier diode and seventh-generation IGBT chips featuring the carrier-stored trench-gate bipolar transistor (CSTBTM) structure. The new module, which reduces the power consumption and size of PV inverter applications, will begin selling on November 28.



Large hybrid SiC DIIPM (PSH50YA2A6)

Product Features

1) Reduces power consumption of PV inverter systems

- Hybrid structure achieved with SiC Schottky barrier diode and seventh-generation IGBT chips
- Reduces power loss by about 25% compared with Mitsubishi Electric's existing PV product (PS61A99).

2) Helps downsize PV inverter system thanks to modified short-circuit protection scheme

- The IGBT chip has a current-sensing pin that could detect a couple of thousands of the main collector current and can be used for external short-circuit protection function.
- Current-sensing pin eliminates the need for a large external shunt resistor, which helps downsize power conditioner inverter systems

Sale Schedule Series

Series	Model	Specification	Shipment
Large Hybrid SiC DIIPM for PV applications	PSH50YA2A6	50A/600V	Nov. 28, 2014

Main Specifications

Large Hybrid SiC DIIPM	
Model	PSH50YA2A6
Rating	50A/600V
Dimensions	31.0x79.0x8.0mm (same as Large DIIPM Ver.4 series)
Build-in chips	Inverter bridge with build-in IGBT, SiC-SBD and LVIC chips
Functions	Short-circuit protection (with current detection). Control power supply under-voltage protection: FO output on N-side protection

Environmental Awareness

The PSH50YA2A6 is compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS).

Mitsubishi Electric commercialized its first DIIPM transfer-mold intelligent power module in 1997, the beginning of its ongoing contributions to miniaturization and energy savings in inverter systems.

Note: Development of this DIIPM has been partially supported by Japan's New Energy and Industrial Technology Development Organization (NEDO).

About Mitsubishi Electric Corporation

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,054.3 billion yen (US\$ 39.3 billion*) in the fiscal year ended March 31, 2014. For more information visit <http://www.MitsubishiElectric.com> *At an exchange rate of 103 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2014
DIIPM is a registered trademark of Mitsubishi Electric.