MITSUBISHI ELECTRIC CORPORATION
PUBLIC RELATIONS DIVISION
7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

FOR IMMEDIATE RELEASE **No. 2930**

Customer Inquiries

Power Device Overseas Marketing Dept.A and Dept.B
Mitsubishi Electric Corporation

http://www.MitsubishiElectric.com/semiconductors/

Media Inquiries

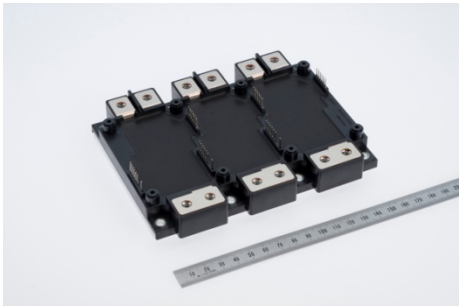
Public Relations Division
Mitsubishi Electric Corporation
prd.gnews@nk.MitsubishiElectric.co.jp
http://www.MitsubishiElectric.com/news/

Mitsubishi Electric to Expand Lineup of J1-Series High-power Semiconductor Modules

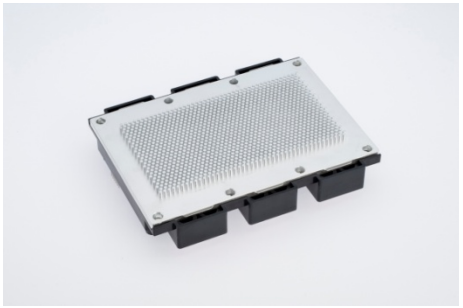
New modules in compact packages for electric and hybrid vehicles

TOKYO, May 12, 2015 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today new J1-Series high-power semiconductor modules featuring compact 6-in-1 packages mainly for use in electric and hybrid vehicles.

Samples will be exhibited at Power Conversion Intelligent Motion (PCIM) Europe 2015 in Nuremberg, Germany from May 19 to 21 and the Automotive Engineering Exposition in Yokohama, Japan from May 20 to 22, and PCIM Asia 2015 in China from June 24 to 26.



Top side



Bottom side

J1-Series high-power semiconductor modules

Power modules for automobiles must deliver higher reliability than industrial-use modules due to the extremely high standards for vehicle safety. Mitsubishi Electric pioneered the mass production of power modules for hybrid vehicles in 1997, and since then the demand for these modules has grown in parallel with the expanding global market for electric and hybrid vehicles. The new high-power J1-Series modules feature compact packages with small footprints, low power loss and high reliability for use in the inverters of electric and hybrid vehicles.

Sale Schedule

Series	Model	Specifications	Shipment
J1-Series	CT1000CJ1B060	650V/1000A (6-in-1 package)	Oct. 2015
	CT600CJ1B120	1200V/600A (6-in-1 package)	Dec. 2015

Features of Sample Products

1) Extra-compact package for automotive inverters

- The 6-in-1 package design shrinks inverter footprint to about 60% of six 2-in-1 J-Series T-PM (CT300DJH120) inverters.

2) Low power loss and high reliability for automotive power train

- Seventh-generation CSTBT^{TM} chip technology enables collector-emitter saturation voltage to be reduced by about 10% compared to 2-in-1 J-Series T-PM (CT300DJH120) chips.
- Direct cooling package with cooling fin improves heat radiation by about 30% compared to 2-in-1 J-Series T-PM (CT300DJH120) mounting power modules on Al fin by way of thermal grease.

3) Suppresses surge voltage through internal inductance reduction

- Low-inductance package adopted for high-frequency switching applications.
- Internal inductance reduced by about 30% compared to 2-in-1 J-Series T-PM (CT300DJH120).

Environmental Awareness

J1-Series power modules are compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive 2011/65/EU.

###

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 4,323.0 billion yen (US$ 36.0 billion*) in the fiscal year ended March 31, 2015. For more information visit:
http://www.MitsubishiElectric.com

*At an exchange rate of 120 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2015