

# MITSUBISHI ELECTRIC CORPORATION

PUBLIC RELATIONS DIVISION

7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

### FOR IMMEDIATE RELEASE

Customer Inquiries

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

No. 3326

Media Inquiries

Public Relations Division Mitsubishi Electric Corporation

www.MitsubishiElectric.com/semiconductors/ www.M

## prd.gnews@nk.MitsubishiElectric.co.jp www.MitsubishiElectric.com/news/

# Mitsubishi Electric to Launch SLIMDIP-W

Will help to lower motor noise and power consumption of appliances

**TOKYO, December 24, 2019** – <u>Mitsubishi Electric Corporation</u> (TOKYO: 6503) announced today the coming launch of its SLIMDIP<sup>TM</sup>-W, a new high-performance intelligent power module (IPM) that will enable washing machines, air conditioners and various small-capacity motor drives to achieve reduced motor noise and consume less power. Sales of the SLIMDIP-W will begin on January 15, 2020.



SLIMDIP-W

## **Product Features**

- 1) Optimized high-speed-switching RC-IGBT enables high carrier-frequency drive for quieter and more efficient appliances
  - Improved reverse-conducting IGBT (RC-IGBT) is optimized for high-speed switching to reduce switching loss in high carrier-frequency drive, helping to lower motor noise.
  - Switching power loss is reduced by approx. 40% (Tj=125°C, Io(Arms)=5A) compared to that of existing SLIMDIP-L
- 2) Less noise enables downsizing and reduced total cost of inverter systems
  - Less noise compared to that of existing model allows use of fewer noise-suppressing components on circuit board for smaller, lower-cost inverter systems .
- 3) Flexible wiring pattern simplifies layout design of inverter systems
  - Positioning negative electrode (GND terminal) next to P-side bootstrap power supply realizes more flexible wiring-pattern design and smaller inverter systems.

#### Sales Schedule

Product	Model	Shipment date
SLIMDIP	SLIMDIP-W	January 15, 2020

### **Specifications**

Model	SLIMDIP-W	
Dimensions	18.8×32.8×3.6mm	
Built-in chips	Three-phase inverter bridge with built-in RC-IGBT, HVIC, LVIC	
	and bootstrap diode chips	
Functions	- Short-circuit(SC) protection by means of outer shunt resistor	
	- Controlled power supply under-voltage (UV) protection: Fo output on N-side	
	- Over temperature protection (OT, on N-side)	
	- Analog temperature voltage output (VOT)	
Other	Open-emitter N-side IGBT	

Mitsubishi Electric commercialized its first DIPIPM<sup>TM</sup> transfer-molded intelligent power module in 1997, contributing greatly to the miniaturization and energy efficiency of inverter systems. This newest version in the series addresses demands for the further reduction of power consumption, mainly for washing machines, air conditioners and white goods.

#### **Environmental Awareness**

This product is compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive 2011/65/EU and (EU) 2015/863.

###

## About Mitsubishi Electric Corporation

With nearly 100 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 a revenue of 4,519.9 billion yen (US\$ 40.7 billion\*) in the fiscal year ended March 31, 2019. For more information visit:

www.MitsubishiElectric.com

\*At an exchange rate of 111 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2019

DIPIPM and SLIMDIP are registered trademarks of Mitsubishi Electric.