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**FOR IMMEDIATE RELEASE**

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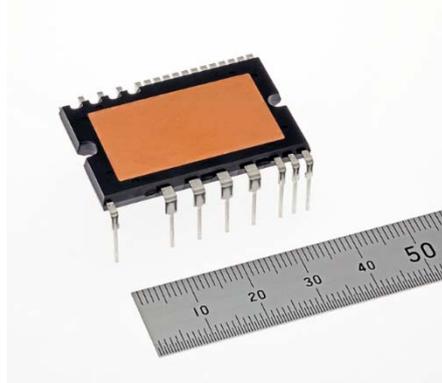
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## **Mitsubishi Electric to Launch Super mini DIIPM Ver.7**

*DIIPM for inverter drive systems achieves low radiation noise and low power consumption*

**TOKYO, August 27, 2019** – [Mitsubishi Electric Corporation](http://www.MitsubishiElectric.com) (TOKYO: 6503) announced today the coming launch of a new high-performance intelligent power module (IPM), the Super mini DIIPM™ Ver.7, featuring reduced radiation noise and low power consumption for the inverter drive systems of air conditioners and other small-capacity motor drives. Sales of the Super mini DIIPM Ver.7 will begin on October 29.



Super mini DIIPM Ver.7 series

### **Product Features**

**1) *Low-power, low-noise DIIPM suitable for wide-ranging applications***

- Built-in low-noise seventh-generation insulated gate bipolar transistor (IGBT) deploys CSTBT™ structure to reduce radiation noise while still maintaining the low-power consumption level of the Super mini DIIPM Ver.6, ideal for industrial motors and many other applications
- Reduced-noise components on circuit board ensure low radiation noise

**2) *Extra-flexible heat dissipation design***

- Module case operation temperature raised from 100 to 125 degrees Celsius and maximum junction temperature raised from 150 to 175 degrees Celsius to expand the heat-dissipation design flexibility of inverter systems

**3) *Higher current rating in super mini package***

- Newly increased 40A rating achieved in a super mini package

**4) *Package compatibility***

- Package and pin assignment are compatible with conventional Super mini DIIPM series

## **Sales Schedule**

Product	Model	Rating	Shipment date
Super mini DIIPM Ver.7 Series	PSS20S93E6/F6-AG	20A / 600V	October 29, 2019
	PSS30S93E6/F6-AG	30A / 600V	
	PSS40S93E6/F6-AG	40A / 600V	

## **Specifications**

Model	PSS20S93E6/F6-AG	PSS30S93E6/F6-AG	PSS40S93E6/F6-AG
Rating	20A / 600V	30A / 600V	40A / 600V
Dimensions	24.0×38.0×3.5mm		
Built-in chips	Three-phase inverter bridge with built-in IGBT, FWD, 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 – Selectable over temperature protection (OT, on N-side) or analog temperature voltage output (VOT)*		
Others	Open-emitter N-side IGBT		

\*PSS20S93E6: Over temperature protection type, PSS20S93F6: Analog temperature voltage output type  
(Notations are consistent with other current-rating products.)

Mitsubishi Electric commercialized its first DIIPM 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 in air conditioners and other consumer appliances.

## **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.

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## **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](http://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

*DIIPM and CSTBT are trademarks of Mitsubishi Electric.*