

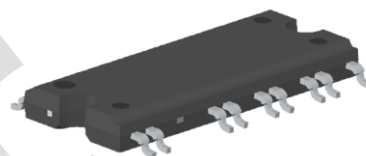
# INTELLIGENT POWER MODULE(IPM), 3 PHASE FULL-BRIDGE 600V/6A

## 1.DESRIPTION

SDM06V60TAS is a highly integrated and highly reliable three-phase brushless DC motor drive circuit, which is mainly used in lower power frequency conversion drives, such as fans, pumps, refrigerator, etc. It contains 6 low loss IGBTs and 3 half-bridge HVIC for gate driving.

SDM06V60TAS integrates various protection functions such as undervoltage, short circuit, and overtemperature, as well as temperature output, providing excellent protection and a wide safe operating range. Since each phase has an independent negative DC terminal, its current can be sensed separately.

SDM06V60TAS is designed with good insulation and perfect thermal properties. It is compact and suitable for built-in motors or any other applications requiring the compact installation.



SOP-2V

## 2.FEATURES

- Built-in six 600V/6A low loss IGBTs
- Built-in high-voltage Gate driver circuit (HVIC)
- Built-in under voltage protections, over temperature/over current protection and temperature output
- Built-in shut-down input
- Built-in inter-lock function
- Built-in bootstrap diode
- Compatible with 3.3V, 5V MCU interface, active high
- Three independent negative DC terminals for inverter current detection
- Insulation class: 1500V<sub>rms</sub>/min

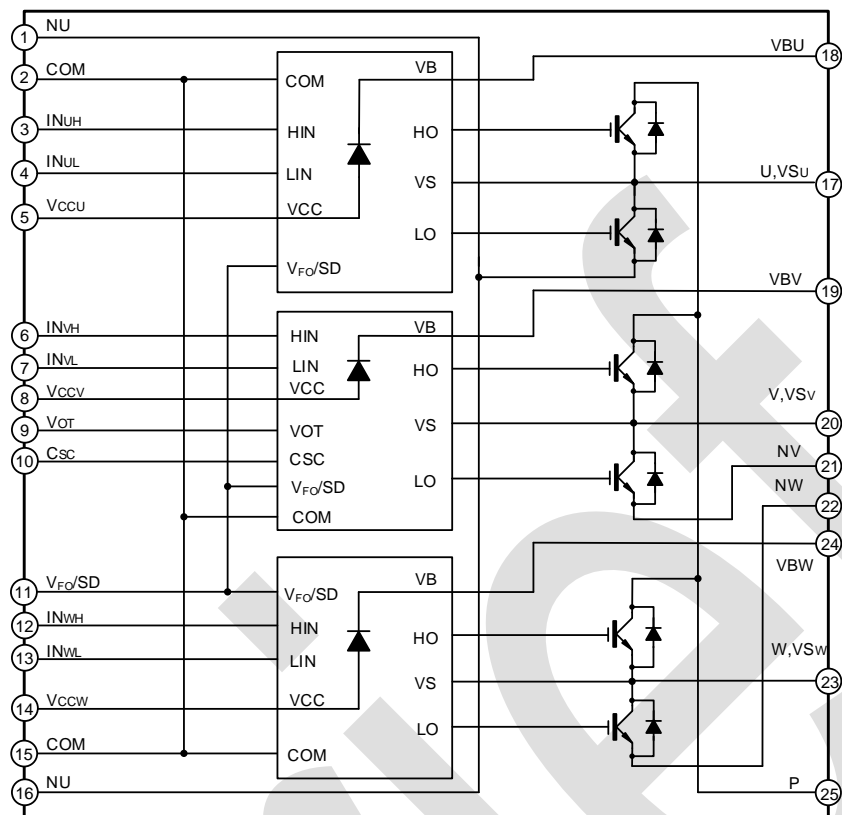
## 3.APPLICATIONS

- Air conditioner fan
- Pump
- Refrigerator

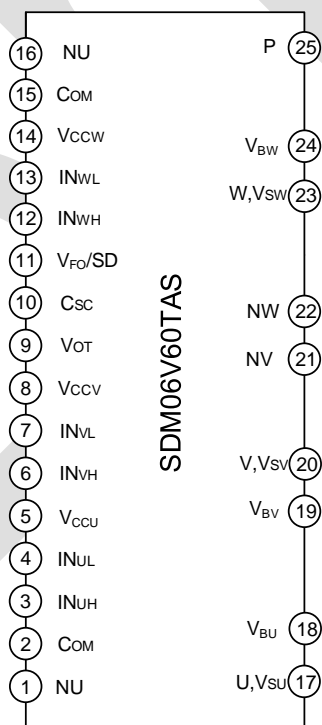
## 4.ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SDM06V60TAS	SOP-2V	SDM06V60TAS	Halogen free	Tube
SDM06V60TASTR	SOP-2V	SDM06V60TAS	Halogen free	Tape & Reel

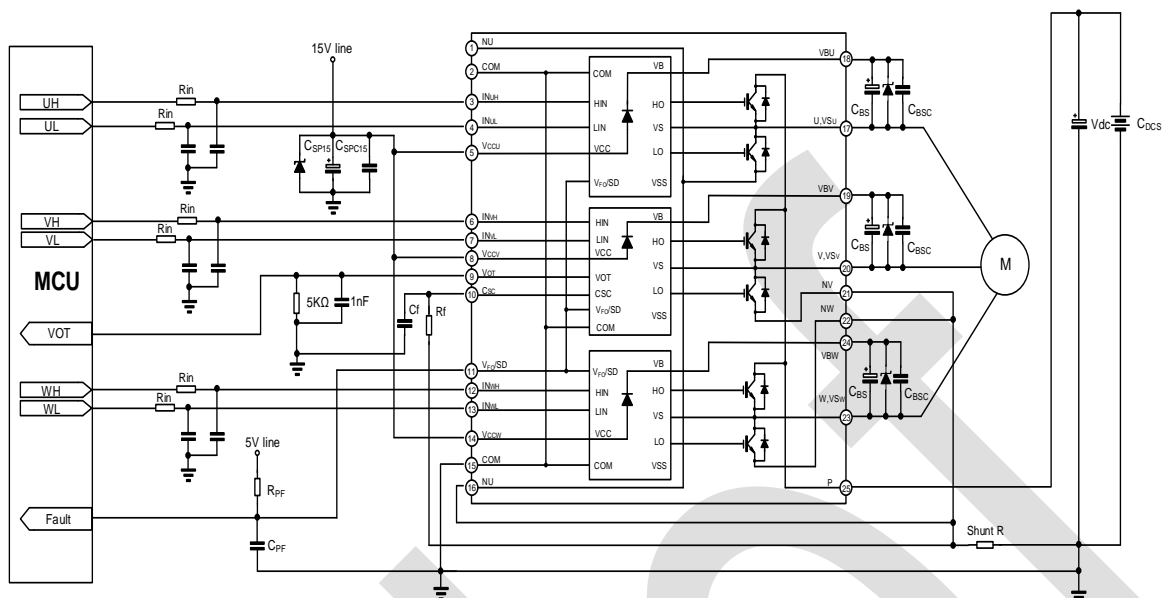
## 5. BLOCK DIAGRAM



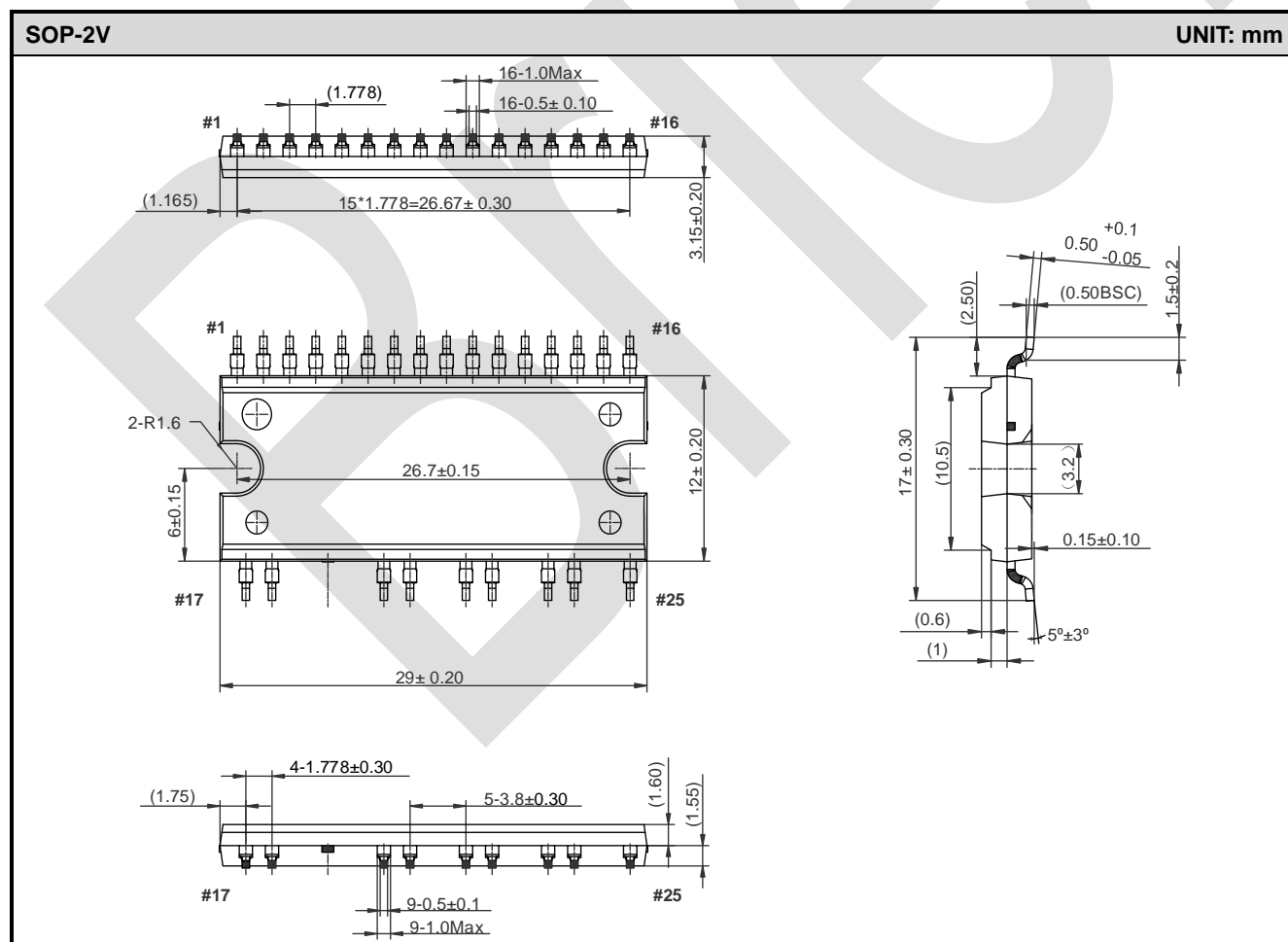
## 6. PIN CONFIGURATION



## 7.TYPICAL APPLICATION CIRCUIT



## 8.PACKAGE OUTLINE



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2. Customers should obtain the latest relevant information when purchasing and should verify whether such information is latest and complete. Please read this instruction and application manual and related materials carefully before using products, including the circuit operation precautions, etc.
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