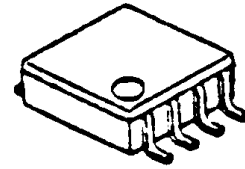


# Single-phase DC Brushless Motor Driver IC

## ◆ GENERAL DESCRIPTION

The NJU7328 is a single-phase DC brushless motor driver IC for small fan-motor application. It features MOS-FET driver circuit for better saturation characteristics. Slew rate of amplifiers and feedback resistors are optimized to achieve low-noise motor operation. The NJU7328 also includes Frequency generator (FG) output for various control needs.

## ◆ PACKAGE OUTLINE

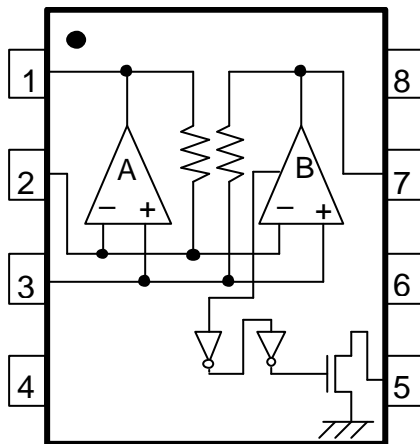


NJU7328RB1

## ◆ FEATURES

- Single Supply
- Operating Voltage  $V_{DD}=2.4 \sim 5.5V$
- Low Operating Current
- Low Saturation Output Voltage  
 $V_{sat}=\pm 0.35V @ I_o=\pm 250mA$
- C-MOS Technology
- FG Output
- Package Outline TVSP8

## ◆ PIN CONFIGURATIONS



### PIN FUNCTION

- 1: A OUTPUT
- 2: Reverse INPUT
- 3: Non-Reverse INPUT
- 4:  $V_{SS}$
- 5: FG
- 6: NC
- 7: B OUTPUT
- 8:  $V_{DD}$

**◆ ABSOLUTE MAXIMUM RATINGS**

(Ta=25°C)

PARAMETER	RATINGS	SYMBOL(unit)	NOTE
Supply Voltage	+7.0	V <sub>DD</sub> (V)	
Input Voltage	-0.3 ~ V <sub>DD</sub> +0.3	V <sub>ID</sub> (V)	
Operating Temperature Range	-40 ~ +85	T <sub>opr</sub> (°C)	
Storage Temperature Range	-50 ~ +150	T <sub>stg</sub> (°C)	
Power Dissipation	400	P <sub>D</sub> (mW)	TVSP8 (Single)

**◆ RECOMMENDED OPERATING CONDITIONS**

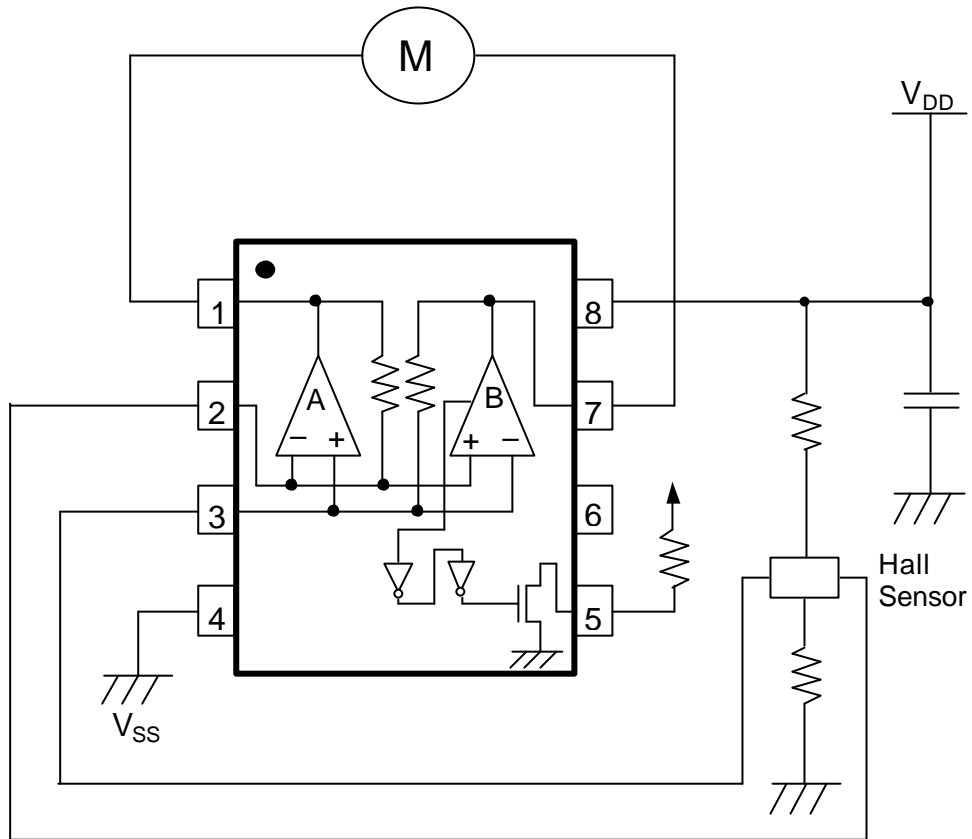
 V<sub>DD</sub>=2.4V~5.5V

**◆ ELECTRICAL CHARACTERISTICS**

 (V<sup>+</sup>=5V, Ta=25°C)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage Range	V <sub>DD</sub>	-	2.4	5.0	5.5	V
Operating Current	I <sub>DD</sub>	-	-	3.0	4.0	mA
Input Offset Voltage	V <sub>IO</sub>	-	-15	-	-15	mV
Input Common Mode Voltage Range	V <sub>ICM</sub>	-	0.4~4.0	-	-	V
Maximum Output Voltage Range	V <sub>OM</sub>	I <sub>o</sub> =+250mA	4.55	4.65	-	V
		I <sub>o</sub> = -250mA	-	0.35	0.45	
Feedback Resistance	R <sub>F</sub>	-	22.0	27.5	33.0	kΩ
FG H Leak Current	FGH	2pin=0V, pin=5V, R <sub>P</sub> =10kΩ	-	-	1.0	μA
FG L Voltage	FGL	2pin=5V, 3pin=0V, R <sub>P</sub> =10kΩ	-	-	0.3	V

◆ APPLICATION



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