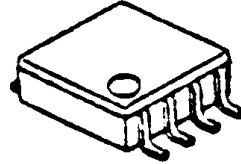


## Single-Phase DC Brushless Motor Driver IC

### ■ GENERAL DESCRIPTION

The NJU7325 is dual power amplifiers.  
It features MOS-FET output for better saturation characteristics.  
It is suitable for small fan-motor applications.

### ■ PACKAGE OUTLINE

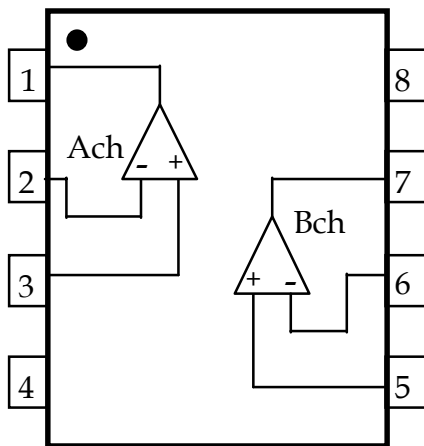


NJU7325R/RB1

### ■ FEATURES

- Single Supply
- Operating Voltage  $V_{DD}=2.4$  to  $5.5V$
- Low Operating Current
- Low Saturation Output Voltage  $V_{sat}=\pm 0.35V$  @  $I_o=\pm 250mA$
- C-MOS Technology
- Package VSP8, TVSP8

### ■ BLOCK DIAGRAM



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

### ■ ABSOLUTE MAXIMUM RATINGS

( $T_a=25^\circ C$ )

PARAMETER	RATINGS	SYMBOL (unit)	NOTE
Supply Voltage	+7.0	$V_{DD}$ (V)	
Input Voltage	-0.3 to $V_{DD}+0.3$	$V_{id}$ (V)	
Operating Temperature Range	-40 to +85	$T_{opr}$ ( $^\circ C$ )	
Storage Temperature Range	-50 to +150	$T_{stg}$ ( $^\circ C$ )	
Power Dissipation	400	$P_D$ (mW)	VSP8/TVSP8 (Single)

# NJU7325

## RECOMMENDED OPERATING CONDITION

$$V_{DD} = 2.4V \sim 5.5V$$

## ELECTRICAL CHARACTERISTICS

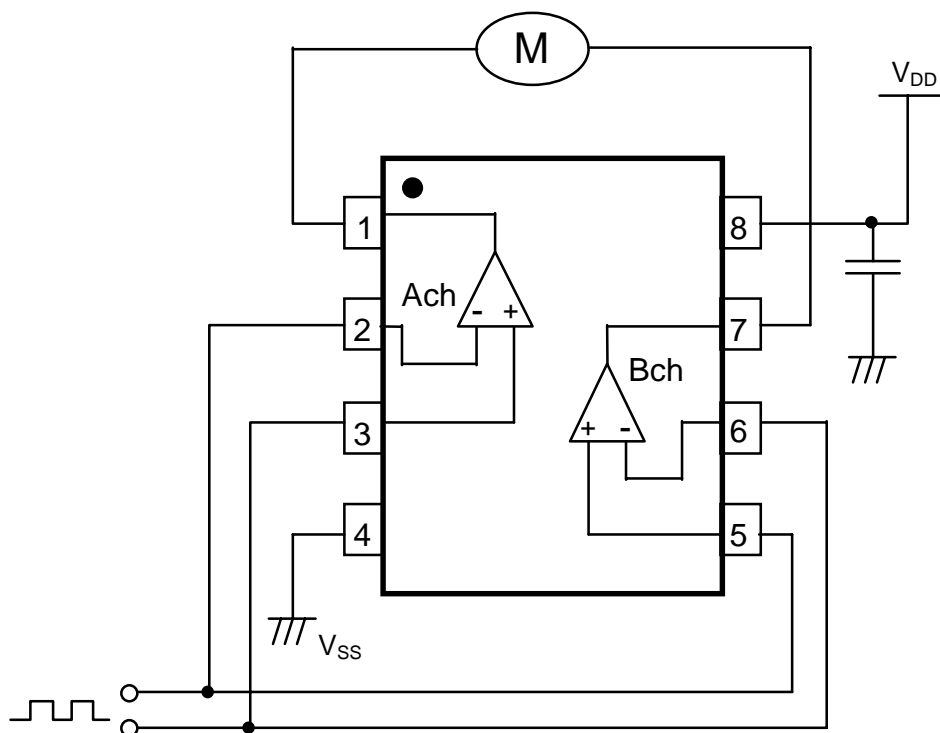
(Ta=25°C, V<sub>DD</sub>=5V)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX	UNIT
Operating Current	I <sub>DD</sub>	No Load Condition : Voltage Follower V <sub>O</sub> =2.5V : 1 circuit	-	3.0	4.0	mA
Input Offset Voltage	V <sub>IO</sub>	-	-15	-	+15	mV
Input Offset Current	I <sub>IO</sub>	-	-	10	-	pA
Input Bias Current	I <sub>IB</sub>	-	-	10	-	pA
Input Impedance	R <sub>IN</sub>	-	-	10 <sup>12</sup>	-	Ω
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	
Large-Signal Voltage gain	A <sub>V</sub>	-	55	-	-	dB
Common Mode Rejection ration	CMRR	V <sub>ICM</sub> =0.4 to 4.0V	53	-	-	dB
Supply Voltage Rejection ration	PSRR	V <sub>DD</sub> =4.5 to 5.5V	55	-	-	dB
Unity Gain Bandwidth	F <sub>T</sub>	C <sub>L</sub> =10pF ; Open Loop	-	1.5	-	MHz
Slew Rate	SR	Voltage Follower , R <sub>L</sub> =16.5Ω	-	1	-	V/μs

Note1) Oscillation margin of NJU7325 will be narrow if the application features light load-current and low-gain (i.e. voltage follower). Maintain the value of stray capacitance at the output terminal with less than 100pF to prevent the oscillation.

Note2) Place decoupling-capacitor near V<sub>SS</sub> and V<sub>DD</sub> pins.

## ■ Application Circuit



Note) Place decoupling-capacitor near  $V_{SS}$  and  $V_{DD}$  pins.

[CAUTION]  
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