

Single-Phase DC Brushless Motor Driver IC

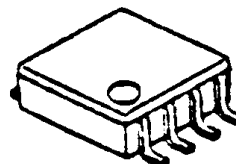
■ GENERAL DESCRIPTION

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

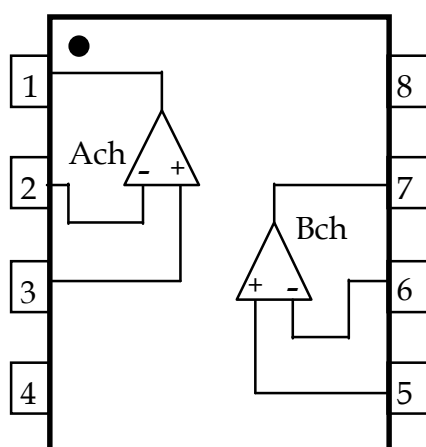


NJU7325R/RB1

■ 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)

RECOMMENDED OPERATING CONDITION

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

ELECTRICAL CHARACTERISTICS

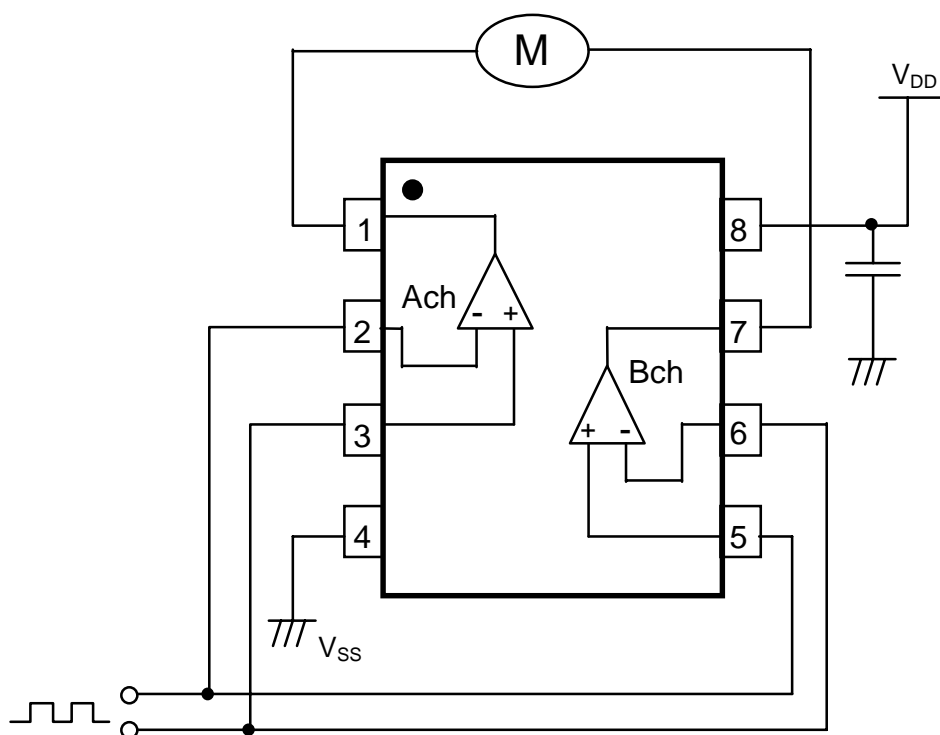
(Ta=25°C, V_{DD}=5V)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX	UNIT
Operating Current	I _{DD}	No Load Condition : Voltage Follower Vo=2.5V : 1 circuit	-	3.0	4.0	mA
Input Offset Voltage	V _{IO}	-	-15	-	+15	mV
Input Offset Current	I _{IO}	-	-	10	-	pA
Input Bias Current	I _{IB}	-	-	10	-	pA
Input Impedance	R _{IN}	-	-	10 ¹²	-	Ω
Input Common Mode Voltage Range	V _{ICM}	-	0.4~4.0	-	-	V
Maximum Output Voltage Range	V _{OM}	I _O =+250mA	4.55	4.65	-	V
		I _O =-250mA	-	0.35	0.45	
Large-Signal Voltage gain	A _V	-	55	-	-	dB
Common Mode Rejection ration	CMRR	V _{ICM} =0.4 to 4.0V	53	-	-	dB
Supply Voltage Rejection ration	PSRR	V _{DD} =4.5 to 5.5V	55	-	-	dB
Unity Gain Bandwidth	F _T	C _L =10pF ; Open Loop	-	1.5	-	MHz
Slew Rate	SR	Voltage Follower , R _L =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_{SS} and V_{DD} pins.

■ Application Circuit



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

[CAUTION]
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