

HAEDPHONE AMPLIFIER for CD-ROM

■ GENERAL DESCRIPTION

The **NJM2769A** is a headphone amplifier designed for CD-ROM.

It includes 6dB closed loop gain and mute circuit which require few external component.

The **NJM2769A** realizes very low turn-noise at mute mode.

It is suitable for CD-ROM, and other general audio headphone amplifier application.

■ PACKAGE OUTLENE

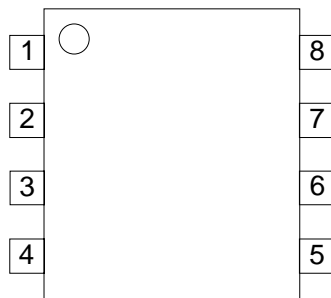


NJM2769AM

■ FEATURES

- Operating Voltage 4.5-5.5V
- Operating Current 2mA typ., at $V^+ = 5V$
- Fixed Gain 6dB typ.
- Stereo Headphone Output
- Internal Mute Circuit
- Bipolar Technology
- Package Outline DMP8

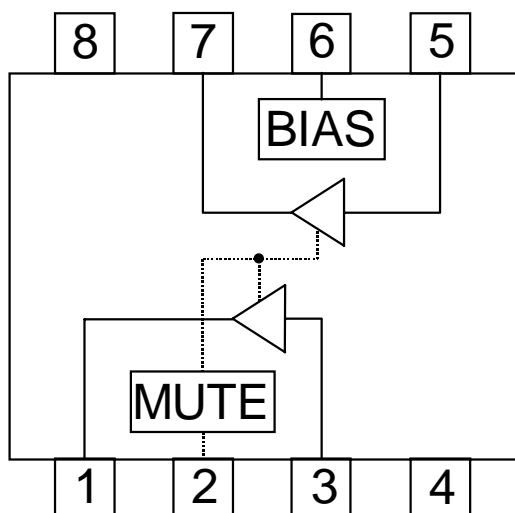
■ PIN CONFIGURATION



PIN FUNCTION

- 1.OUT1
- 2.MUTE
- 3.IN1
- 4.GND
- 5.IN2
- 6.BIAS
- 7.OUT2
- 8. V^+

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RANGE ($T_a=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V^+	+7	V
Power Dissipation	P_D	(DMP8) 375 750 (note)	mW
Operating Temperature Range	T_{opr}	-40 to +85	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-50 to +150	$^{\circ}\text{C}$

(note)At on PC board

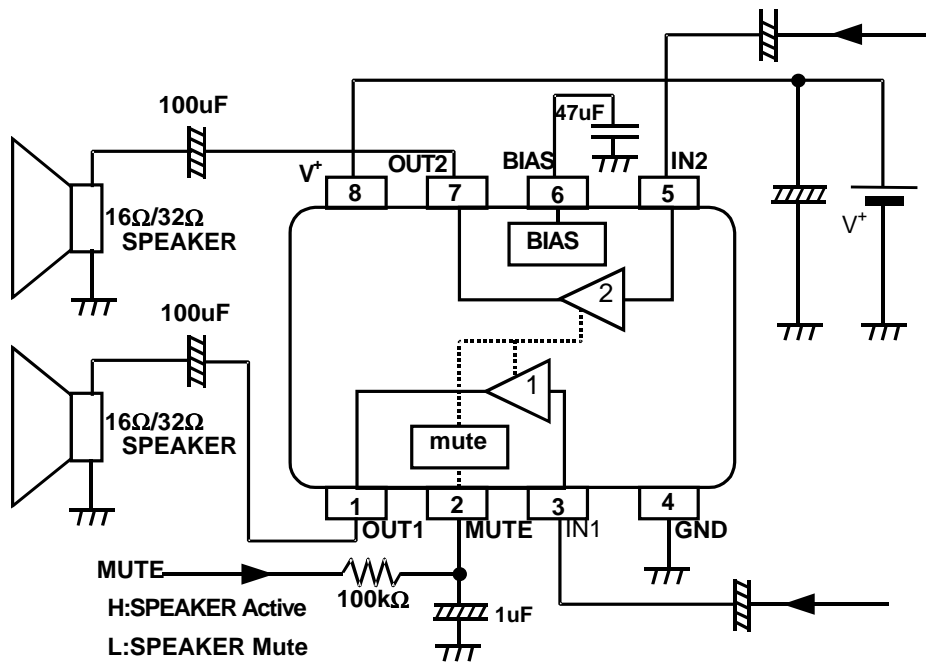
■ ELECTRICAL CHARACTERISTICS ($V^+=5.0\text{V}$, $V_{in}=-6\text{dBV}$, $f=1\text{kHz}$, $R_L=32\Omega$, $T_a=25^{\circ}\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V^+		4.5	5.0	5.5	V
Operating Current	I_{CC}	No Signal	-	2.0	4.0	mA
Reference Voltage	V_{ref}	No Signal	-	2.1	-	V
Closed Loop Gain	G_V		5	6	7	dB
Channel Balance	ΔG_V		-0.5	0	+0.5	dB
Output Power	P_{O1}	$R_L=32\Omega$, THD=1%	30	50	-	mW
	P_{O2}	$R_L=16\Omega$, THD=1%	40	100	-	mW
Total Harmonic Distortion	THD		-	0.02	0.1	%
Output Noise Voltage	V_{no}	$R_g=0\Omega$, A-Weighted	-	-98 (12.6)	-88 (39.8)	dBV (μV_{rms})
Mute Attenuation	ATT	V_o/V_{in}	-	-80	-70	dB
Channel Separation	CS		65	80	-	dB
Ripple Rejection Ratio	RR	$V_{ripple}=-20\text{dBV}$, $R_g=0\Omega$	-	65	-	dB
Input Voltage H-level	V_{IH}		2.0	-	V^+	V
Input Voltage L-level	V_{IL}		0.0	-	0.3	V

■ CONTROL PIN INFORMATION

PARAMETER	CONTROL SIGNAL	OPERATING CONDITION
MUTE ON	L	NON-SIGNAL
MUTE OFF	H	OUTPUT SIGNAL

■ TYPICAL APPLICATION



MEMO

[CAUTION]

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