HEADPHONE AMPLIFIER for CD-ROM

■ GENERAL DESCRIPTION

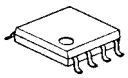
The **NJM2768B** is a headphone amplifier designed for CD-ROM.

It includes 0dB closed loop gain and mute circuit, requires few external component.

The **NJM2768B** realizes very low turn-noise at mute mode.

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

■ PACKAGE OUTLINE



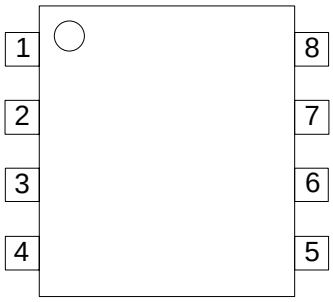
NJM2768BM

NJM2768BRB1

■ FEATURES

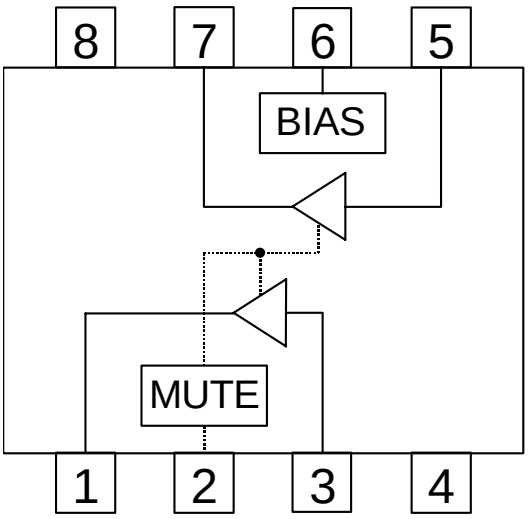
- Operating Voltage 2.8 to 5.5V
- Operating Current 2mA typ. at V^+=5V
- Fixed Gain 0dB typ.
- Stereo Headphone Output
- Internal Mute Circuit
- Bipolar Technology
- Package Outline DMP8,TVSP8

■ PIN CONFIGURATION



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

■ BLOCK DIAGRAM



■ ABSOLUTE MAXMUM RANGE (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V^+	+7	V
Power Dissipation	P_D	(DMP8) 375 (TVSP8)320	mW
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-50 to +150	°C

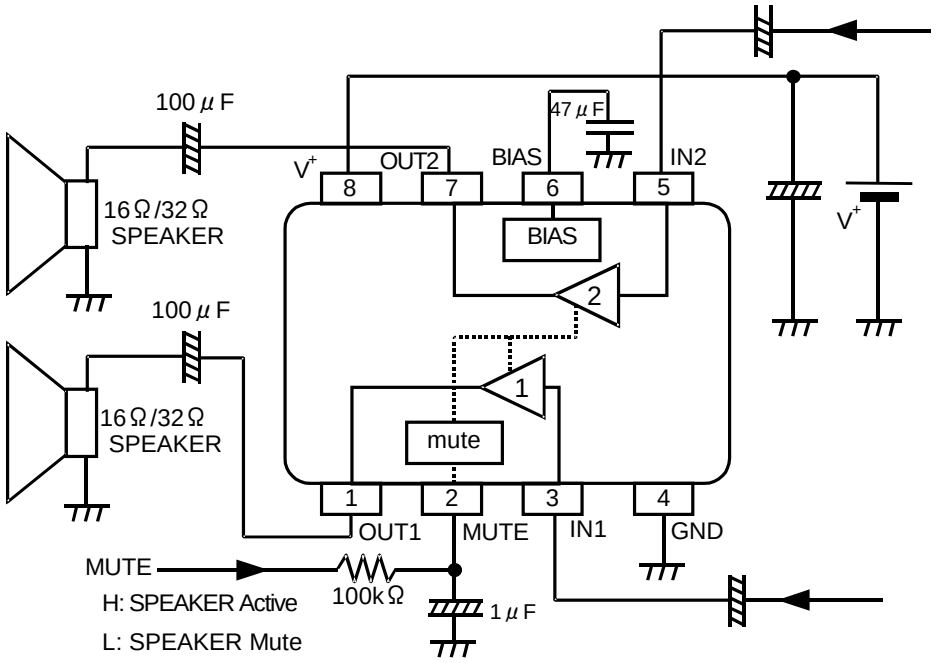
■ ELECTRICAL CHARACTERISTICS (V^+=5.0V,Vin=0dBV,f=1kHz,R_L=32Ω,Ta=25°C unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V^+		2.8	5.0	5.5	V
Operating Current	I_{CC}	No Signal	-	2.0	4.0	mA
Reference Voltage	Vref	No Signal	-	2.1	-	V
Closed Loop Gain	G_V		-1	0	1	dB
Channel Balance	ΔG_V		-0.5	0	+0.5	dB
Output Power	P_O1	R_L=32Ω, THD=0.1%	30	50	-	mW
	P_O2	R_L=16Ω, THD=0.1%	40	100	-	mW
Total Harmonic Distortion	THD		-	0.02	0.1	%
Output Noise Voltage	Vno	Rg=0Ω, A-Weighted	-	-104 (6.3)	-94 (20)	dBV (μVrms)
Mute Attenuation	ATT	Vo/Vin	-	-80	-70	dB
Channel Separation	CS		90	110	-	dB
Ripple Rejection Ratio	RR	Vripple=-20dBV, Rg=0Ω	-	70	-	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



[CAUTION]
The specifications on this databook are only given for information , without any guarantee as regards either mistakes or omissions. The application circuits in this databook are described only to show representative usages of the product and not intended for the guarantee or permission of any right including the industrial rights.