

HAEDPHONE AMPLIFIER for CD-ROM

■ GENERAL DESCRPTION

■ PACKAGE OUTLENE

The **NJM2768** is a headphone amplifier designed for CD-ROM.

It includes 0dB closed loop gain and mute circuit which require few external component.

The NJM2768 realizes very low turn-noise at mute mode.

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



NJM2768M

■ FEATURES

●Operating Voltage 4.5-5.5V

●Operating Current 2mA typ., at V⁺=5V

●Fixed Gain 0dB typ.

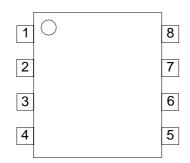
●Stereo Headphone Output

●Internal Mute Circuit

Bipolar Technology

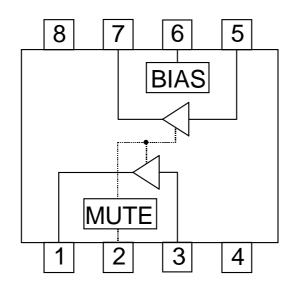
●Package Outline DMP8

■ PIN CONFIGURATION



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

■ BLOCK DIAGRAM





■ ABSOLUTE MAXMUM RANGE (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V ⁺	+7	V
Power Dissipation	P_{D}	(DMP8) 375 750 (note)	mW
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-50 to +150	°C

(note)At on PC board

■ ELECTRICAL CHARACTERISTICS (V⁺=5.0V,Vin=0dBV,f=1kHz,R₁=32Ω,Ta=25°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	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 _O 1	R _L =32Ω, THD=0.1%	30	50	-	mW
	P _O 2	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

■ COMTROL PIN INFOMETION

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



■ TYPICAL APPLICATION

