

3V AUTO-REVERSE DUAL PRE-AMPLIFIER

■ GENERAL DESCRIPTION

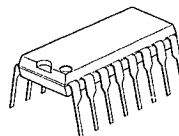
NJM2067 is dual pre-amplifier including channel switch which was designed for 3V Auto-reverse Head Phone Stereo.

■ PACKAGE OUTLINE

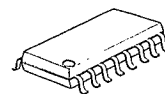
■ FEATURES

- Internal Switch of Input Channel
- Package Outline
- Bipolar Technology

DIP16, DMP16

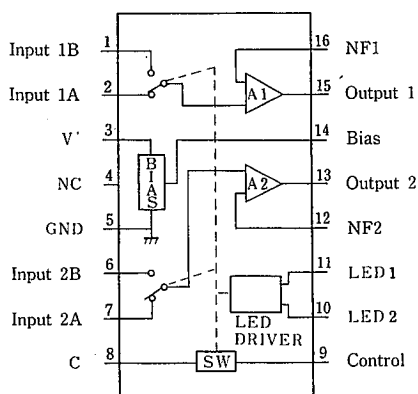


NJM2067D



NJM2067M

■ PIN CONFIGURATION

NJM2067D
NJM2067M

■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

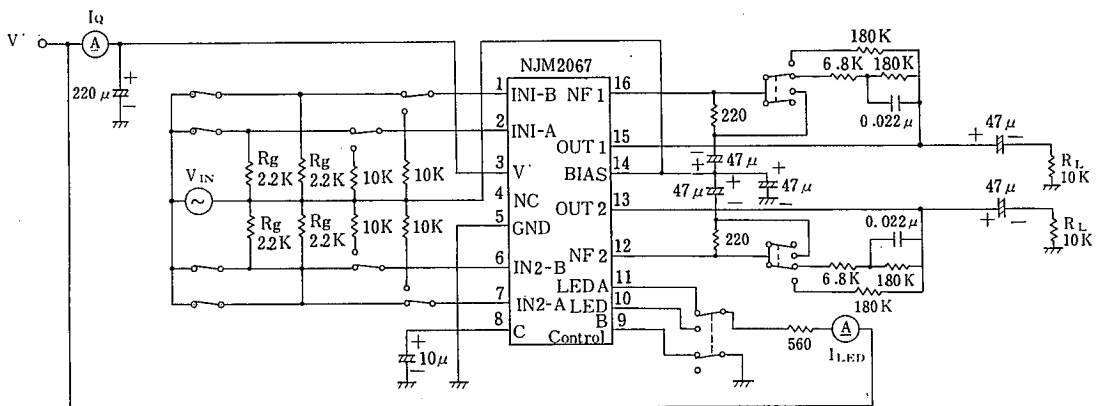
PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V ⁺	4.5	V
Power Dissipation	P _D	(DIP16) 700 (DMP16) 350	mW
Operating Temperature Range	T _{opr}	-20 ~ +75	°C
Storage Temperature Range	T _{stg}	-40 ~ +125	°C

■ ELECTRICAL CHARACTERISTICS

(Ta=25°C, V⁺=3V, R_L=10kΩ)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Current	I _{CC}	V _{IN} =0V	0.9	2.3	4.0	mA
Open Loop Voltage Gain	G _V	V _O =-10dBm, f=1kHz	70	80	—	dB
Equivalent Input Noise Voltage	V _{NI}	V _{IN} =0, R _E =2.2kΩ	—	1.2	—	μVrms
Maximum Output Voltage	V _{OM}	THD=1%, f=1kHz	250	450	—	mVrms
Crosstalk between Channels	CST	Other channels V _O =-10dBm, f=1kHz	55	65	—	dB
Crosstalk between A and B Channel	CT	Other channels V _O =-10dBm, f=1kHz	55	65	—	dB
Total harmonic Distortion	THD	V _O =0.2Vrms, f=1kHz	—	0.08	0.15	%
Input Bias Current	I _B	V _{IN} =0Vrms	—	100	310	nA
Maximum LED Current	I _{LED}		—	5	—	mA

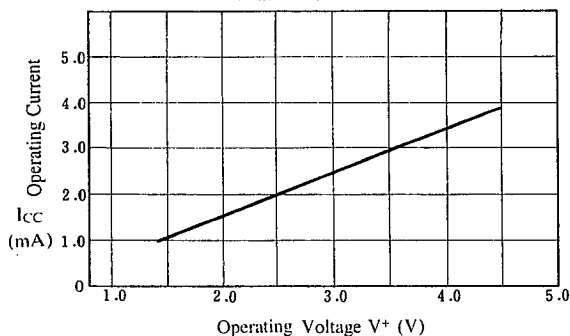
■ TEST CIRCUIT



■ TYPICAL CHARACTERISTICS

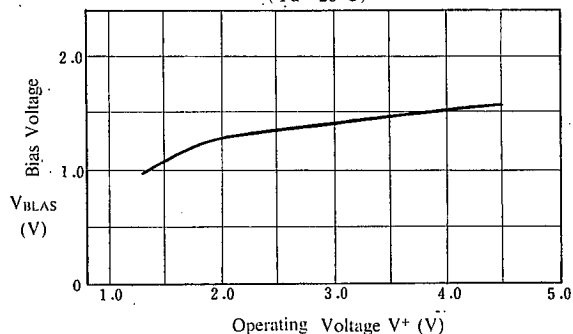
**Operating Current
vs. Operating Voltage**

($V_{IN}=0V$, $T_a=25^\circ C$)



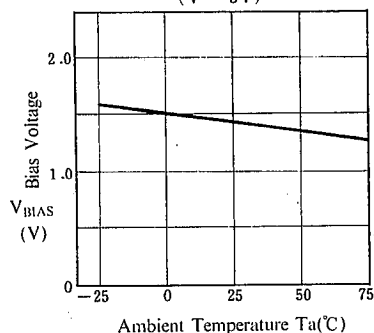
**Bias Voltage
vs. Operating Voltage**

($T_a=25^\circ C$)



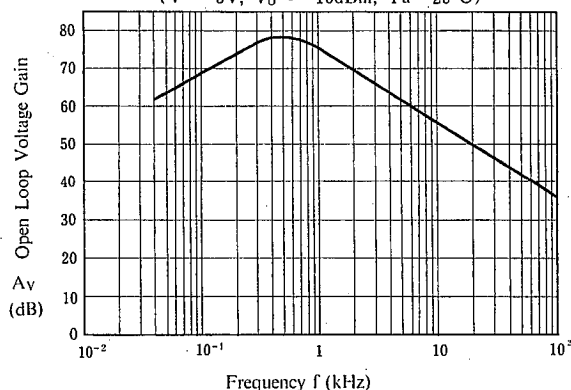
**Bias Voltage
vs. Ambient Temperature**

($V^+=3V$)



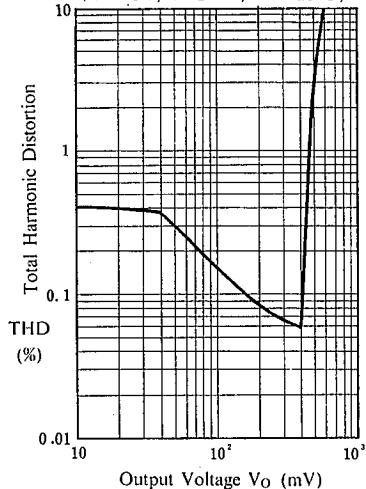
**Open Loop Voltage Gain
vs. Frequency**

($V^+=3V$, $V_o=-10dBm$, $T_a=25^\circ C$)



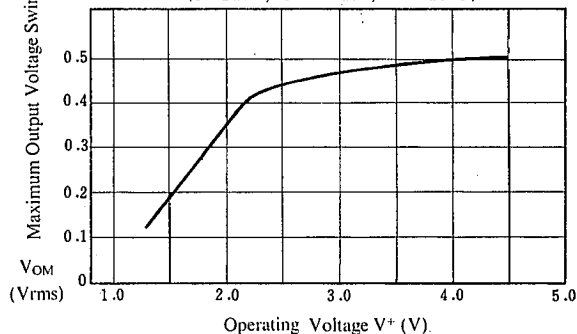
**Total Harmonic Distortion
vs. Output Voltage**

($V^+=3V$, $f=1kHz$, $T_a=25^\circ C$)



**Maximum Output Voltage Swing
vs. Operating Voltage**

($f=1kHz$, $THD=1\%$, $T_a=25^\circ C$)



MEMO

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