

## 3-INPUT 1-OUTPUT AUDIO SWITCH

## ■ GENERAL DESCRIPTION

The NJM2521 is 58k $\Omega$  input impedance 3-input 1-output audio switch.

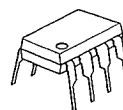
It contains two bias-type inputs and one buffer-type output.

## ■ FEATURES

- Operating Voltage +4.75V ~ +13V
- Crosstalk (-70dB typ.)
- Input Impedance (58k $\Omega$  typ.)
- 3-Input, 1-Output
- Bipolar Technology
- Package Outline

DIP8, DMP8, SIP8, SSOP8

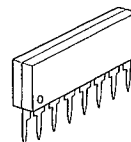
## ■ PACKAGE OUTLINE



NJM2521D



NJM2521M

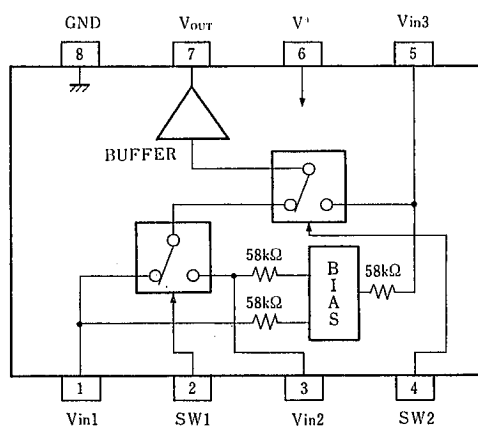


NJM2521L



NJM2521V

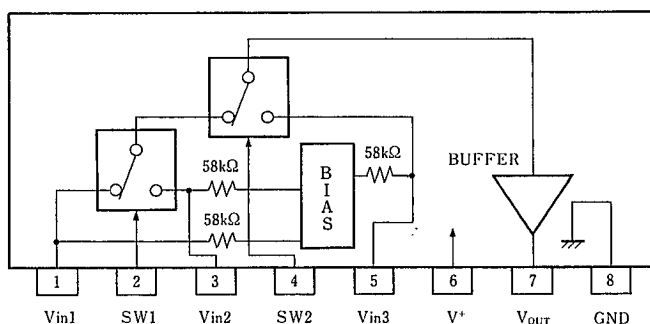
## ■ PIN CONFIGURATION



NJM2521D  
NJM2521M  
NJM2521V

## PIN FUNCTION

1. Vin1
2. SW1
3. Vin2
4. SW2
5. Vin3
6. V<sup>+</sup>
7. Vout
8. GND



NJM2521L

## PIN FUNCTION

1. Vin1
2. SW1
3. Vin2
4. SW2
5. Vin3
6. V<sup>+</sup>
7. Vout
8. GND

■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

| PARAMETER                   | SYMBOL           | RATINGS   | UNIT |
|-----------------------------|------------------|---|------|
| Supply Voltage              | V*               | +15   | V    |
| Power Dissipation           | P <sub>D</sub>   | (DIP-8) 500<br>(DMP-8) 300<br>(SIP-8) 800<br>(SSOP-8) 250 | mW   |
| Operating Temperature Range | T <sub>opr</sub> | -20~+75   | °C   |
| Storage Temperature Range   | T <sub>stg</sub> | -40~+125  | °C   |

■ ELECTRICAL CHARACTERISTICS

(V\*=5V, Ta=25°C)

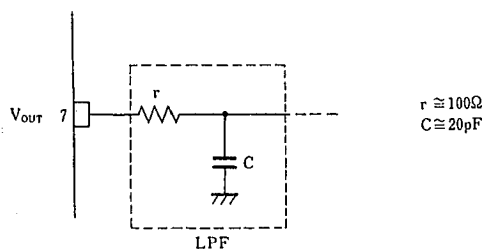
| PARAMETER                 | SYMBOL           | TEST CONDITIONS  | MIN.  | TYP. | MAX.  | UNIT |
|---------------------------|------------------|--|-------|------|-------|------|
| Operating Voltage         | V*               |  | +4.75 | —    | +13.0 | V    |
| Operating Current         | I <sub>CC</sub>  |  | —     | 11.0 | 14.5  | mA   |
| Frequency Characteristics | G <sub>f</sub>   | V <sub>in</sub> =2V <sub>pp</sub> , V <sub>o</sub> =10MHz/100kHz | -1.0  | 0    | +1.0  | dB   |
| Voltage Gain              | G <sub>v</sub>   | V <sub>in</sub> =2V <sub>pp</sub> , 100kHz                       | -0.5  | 0    | +0.5  | dB   |
| Total Harmonic Distortion | THD              | V <sub>in</sub> =2.5V <sub>pp</sub> , 1kHz                       | —     | 0.03 | —     | %    |
| Output Offset Voltage     | V <sub>off</sub> |  | -35   | 0    | +35   | mV   |
| Switching Voltage         | V <sub>CH</sub>  |  | 2.4   | —    | —     | V    |
|                           | V <sub>CL</sub>  |  | —     | —    | 0.8   | V    |
| Input Impedance           | R <sub>i</sub>   |  | —     | 58   | —     | kΩ   |
| Output Impedance          | R <sub>o</sub>   |  | —     | 10   | —     | Ω    |

■ INPUT CONTROL SIGNAL-OUTPUT SIGNAL

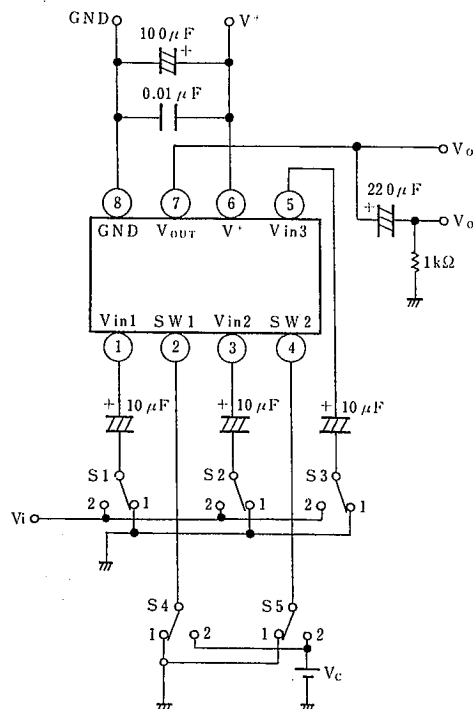
| SW1 | SW2 | OUTPUT SIGNAL    |
|-----|-----|------------------|
| L   | L   | V <sub>IN1</sub> |
| H   | L   | V <sub>IN2</sub> |
| L/H | H   | V <sub>IN3</sub> |

■ APPLICATION

Oscillation Pervention on light loading conditions  
Recommended under circuit



■ TEST CIRCUIT



## MEMO

**[CAUTION]**

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