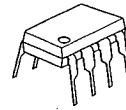


3-INPUT 1-OUTPUT VIDEO SWITCH

■ GENERAL DESCRIPTION

The NJM2534 is a video switch for VCR, TV and others. It contains three bias-type inputs and one buffer-type output.

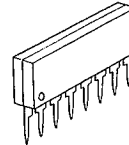
■ PACKAGE OUTLINE



NJM2534D



NJM2534M



NJM2534L

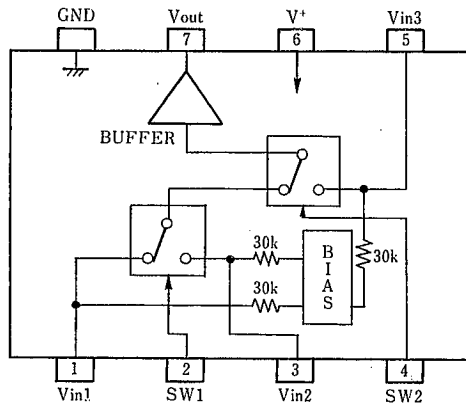


NJM2534V

■ FEATURES

- Operating Voltage (+4.5V ~ +13V)
- Low Operating Current (4.7mA MAX)
- Crosstalk (-70dB)
- 3-Input, 1-Output
- Bipolar Technology
- Package Outline DIP8, DMP8, SIP8, SSOP8

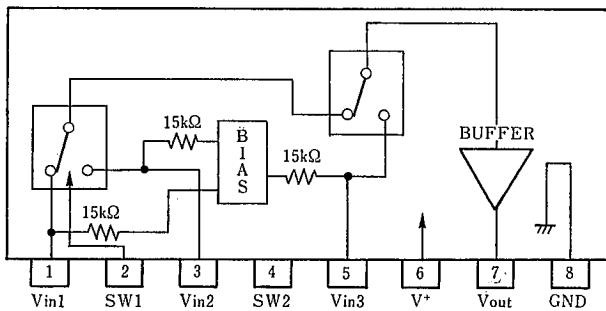
■ PIN CONFIGURATION



NJM2534D
NJM2534M
NJM2534V

PIN FUNCTION

- 1 : Vin1
- 2 : SW1
- 3 : Vin2
- 4 : SW2
- 5 : Vin3
- 6 : V+
- 7 : V_{OUT}
- 8 : GND



NJM2534L

PIN FUNCTION

- 1 : Vin1
- 2 : SW1
- 3 : Vin2
- 4 : SW2
- 5 : Vin3
- 6 : V+
- 7 : V_{OUT}
- 8 : GND

5

■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

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

■ ELECTRICAL CHARACTERISTICS

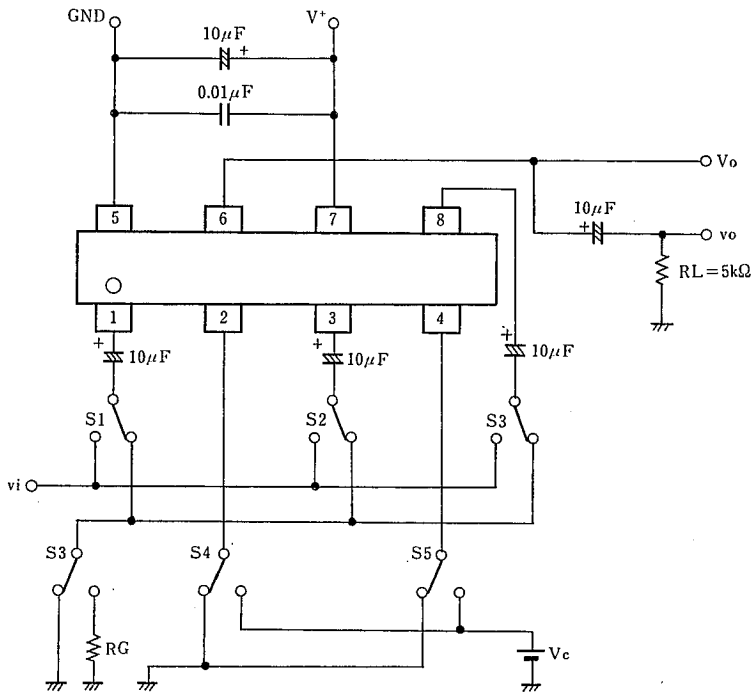
(V*=5V, Ta=25°C)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|---------------------------|------------------|--|------|------|-------|------|
| Operating Voltage | V* | | +4.5 | — | +13.0 | V |
| Operating Current | I _{cc} | | — | 3.7 | 4.7 | mA |
| Frequency Characteristics | G _f | V _{IN} =2V _{pp} , V _O =10MHz/100kHz | -1.0 | 0 | +1.0 | dB |
| Voltage Gain | G _v | V _{IN} =2V _{pp} , 100kHz | -0.5 | 0 | +0.5 | dB |
| Total Harmonic Distortion | THD | V _{IN} =2.5V _{pp} , 1kHz | — | 0.05 | 0.1 | % |
| Differential Gain | DG | V _{IN} =2V _{pp} , Standard staircase signal, APL=50% | — | 0 | 3.0 | % |
| Differential Phase | DP | V _{IN} =2V _{pp} , Standard staircase signal, APL=50% | — | 0 | 3.0 | deg |
| Output Offset Voltage | V _{off} | | -30 | 0 | +30 | mV |
| Crosstalk | CT | V _{IN} =2V _{pp} , 4.3MHz | — | -70 | -60 | dB |
| Switching Voltage | V _{CH} | | 2.4 | — | — | V |
| | V _{CL} | | — | — | 0.8 | V |
| Input Impedance | R _I | | — | 30 | — | kΩ |
| Output Impedance | R _O | | — | 25 | — | Ω |
| Input Bias Voltage | V _{IN} | | — | 2.5 | — | V |

■ INPUT CONTROL SIGNAL-OUTPUT SIGNAL

| SW1 | SW2 | OUTPUT SIGNAL |
|-----|-----|------------------|
| L | L | V _{IN1} |
| H | L | V _{IN2} |
| L/H | H | V _{IN3} |

■ TEST CIRCUIT



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MEMO

[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.