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.

■ FEATURES

Operating Voltage

 $(+4.5V \sim +13V)$

Low Operating Current

(4.7mA MAX)

Crosstalk

(-70dB)

3-Input, 1-Output

Bipolar Technology

Package Outline

DIP8, DMP8, SIP8, SSOP8

■ PACKAGE OUTLINE





NJM2534D

NJM2534M

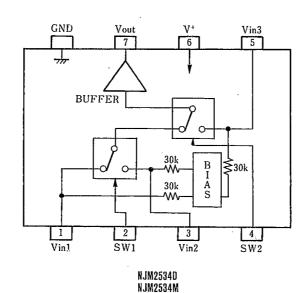




NJM2534L

NJM2534V

■ PIN CONFIGURATION



PIN FUNCTION

1 : Vin1 2 : SW1

3: Vin2 4: SW2 5: Vin3 6: V⁺ 7: V_{OUT} 8 GND

 $15 k \Omega$ BUFFER Ë I A S $15 k \Omega$ 15kΩ 2 6 5 Vin2 SW2 Vin3 Vin1

NJM2534V

PIN FUNCTION PIN FUN

1: Vin1

2: SW1

3: Vin2

4: SW2

5: Vin3

6: V*

7: Vout

8: GND

NJM2534L

■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

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

■ ELECTRICAL CHARACTERISTICS

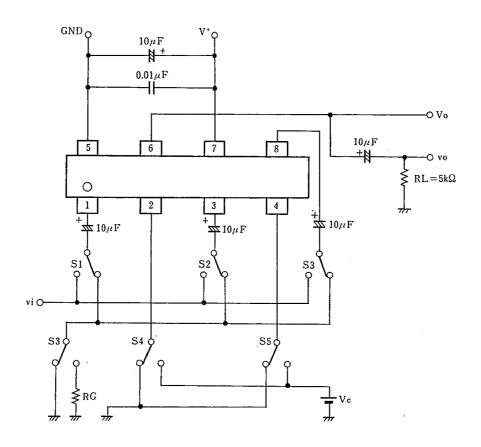
(V⁺=5V, Ta=25°C)

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	Gf	V _{IN} =2Vpp, Vo=10MHz/100kHz	-1.0	0	+1.0	dB
Voltage Gain	Gv	V _{IN} =2Vpp, 100kHz	-0.5	0	+0.5	dB
Total Harmonic Distortion	THD	V _{IN} =2.5Vpp, 1kHz	_	0.05	0.1	%
Differential Gain	DG	V _{IN} =2Vpp, Standard staircase signal, APL=50%	_	0	3.0	%
Differential Phase	DP	V _{IN} =2Vpp, Standard staircase signal, APL=50%		.0	3.0	deg
Output Offset Voltage	V _{off}		-30	0	+30	mV
Crosstalk	СТ	V _{IN} =2Vpp, 4.3MHz	_	-70	-60	dB
Switching Voltage	V _{CH}		2.4			V
	V _{CL}		-	_	0.8	V
Input Impedance	Ri		_	30	_	kΩ
Output Impedance	Ro		_	25		Ω
Input Bias Voltage	V _{IN}		_	2.5		V

■ INPUT CONTROL SIGNAL-OUTPUT SIGNAL

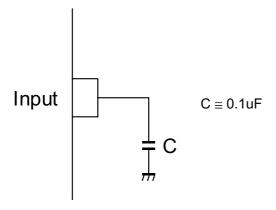
SW1	SW2	OUTPUT SIGNAL
L	L	V _{IN} 1
Н	L	V _{IN} 2
L/H	Н	V _{IN} 3

■ TEST CIRCUIT



■APPLICATION

This IC requires 0.1uF capacitor between INPUT and GND for bias type input at mute mode.



[CAUTION]
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