## NJM2534

### 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
- Low Operating Current
- Crosstalk

JRC

- 3-Input, 1-Output
- Bipolar Technology
- Package Outline

(+4.5V~+13V) (4.7mA MAX) (-70dB)

DIP8, DMP8, SIP8, SSOP8



PACKAGE OUTLINE



NJM2534M

NJM2534D

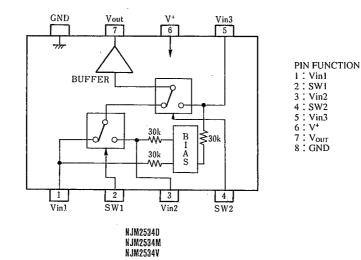




NJM2534V

NJM2534L

#### PIN CONFIGURATION



PIN FUNCTION 1 : Vin1 2 : SW1 3 : Vin2 4 : SW2 5 : Vin3 6 : V\* 7 : V<sub>OUT</sub> 8 : GND

NJM2534L

5

Vin3

 $15k\Omega$ 

Ś

4

SW2

 $15k\Omega$ 

.^//

3

Vin2

0

1

Vinl

 $15k\Omega$ 

₩

2

SW1

B I A S



6

V+

BUFFER

7.

Vout

ᆎ

8

GND

5

(Ta=25℃)

#### ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT	
Supply Voltage	V*	+15	v	
Power Dissipation		(DIP-8) 500	mW	
	PD	(DMP-8) 300		
		(SIP-8) 800		
		(SSOP-8) 250		
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)

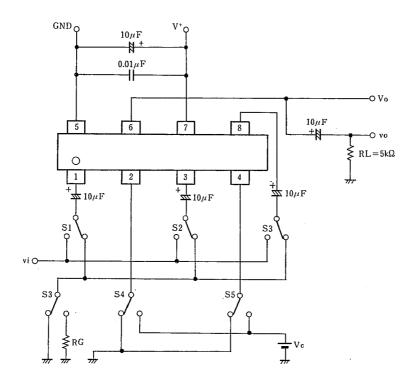
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V*		+4.5	-	+13.0	v
Operating Current	I <sub>CC</sub>		-	3.7	4.7	mA
Frequency Characteristics	Gf	V <sub>IN</sub> =2Vpp, Vo=10MHz/100kHz	-1.0	0	+1.0	dB
Voltage Gain	Gv	V <sub>IN</sub> =2Vpp, 100kHz	-0.5	0	+0.5	dB
Total Harmonic Distortion	THD	V <sub>IN</sub> =2.5Vpp, 1kHz	-	0.05	0.1	%
Differential Gain	DG	V <sub>IN</sub> =2Vpp, Standard staircase signal, APL=50%	-	0	3.0	%
Differential Phase	DP	V <sub>IN</sub> =2Vpp, Standard staircase signal, APL=50%	-	.0	3.0	deg
Output Offset Voltage	V <sub>off</sub>		-30	0	+30	mV
Crosstalk	СТ	V <sub>IN</sub> =2Vpp, 4.3MHz	-	-70	-60	dB
Switching Voltage	V <sub>CH</sub>		2.4	-	-	v
	V <sub>CL</sub>		-	-	0.8	v
Input Impedance	RI		-	30	-	kΩ
Output Impedance	Ro		-	25	-	Ω
Input Bias Voltage	V <sub>IN</sub>			2.5	-	v

#### INPUT CONTROL SIGNAL-OUTPUT SIGNAL

SW1	SW2	OUTPUT SIGNAL		
L	L	V <sub>IN</sub> 1		
н	L	V <sub>IN</sub> 2		
L/H	Н	V <sub>in</sub> 3		

# NJM2534

TEST CIRCUIT



5

**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.