

2-INPUT 1-OUTPUT VIDEO SWITCH

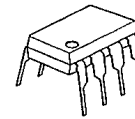
GENERAL DESCRIPTION

The NJM2533 is a video switch for VCR, TV, and others. It contains two bias-type inputs and one buffer-type output.

PACKAGE OUTLINE

FEATURES

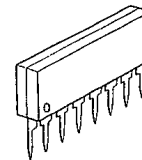
- Operating Voltage (+4.75V ~ +13V)
- Low Operating Current (MAX : 3.7mA)
- Crosstalk (-70dB)
- 2-Input, 1-Output
- Bipolar Technology
- Package Outline DIP8, DMP8, SIP8, SSOP8



NJM2533D



NJM2533M

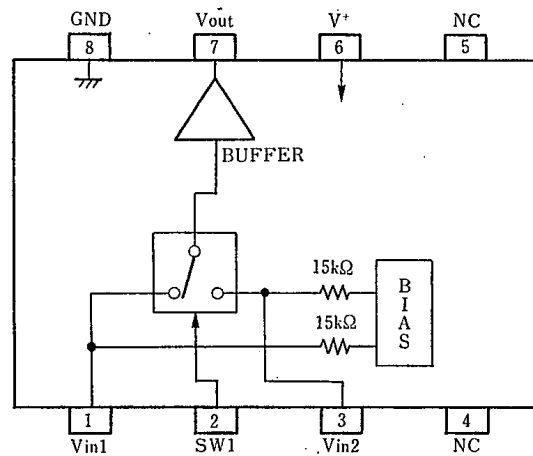


NJM2533L



NJM2533V

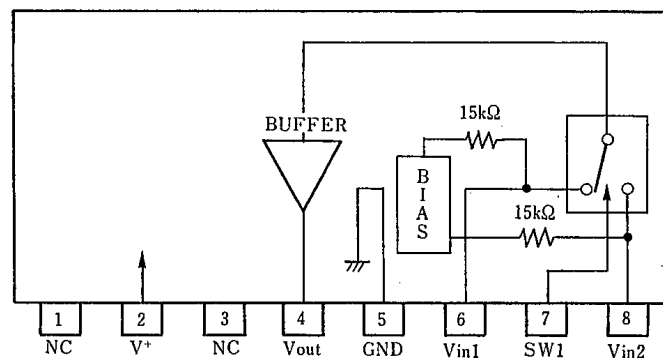
PIN CONFIGURATION



PIN FUNCTION

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

NJM2533D
NJM2533M
NJM2533V



PIN FUNCTION

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

NJM2533L



■ 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)

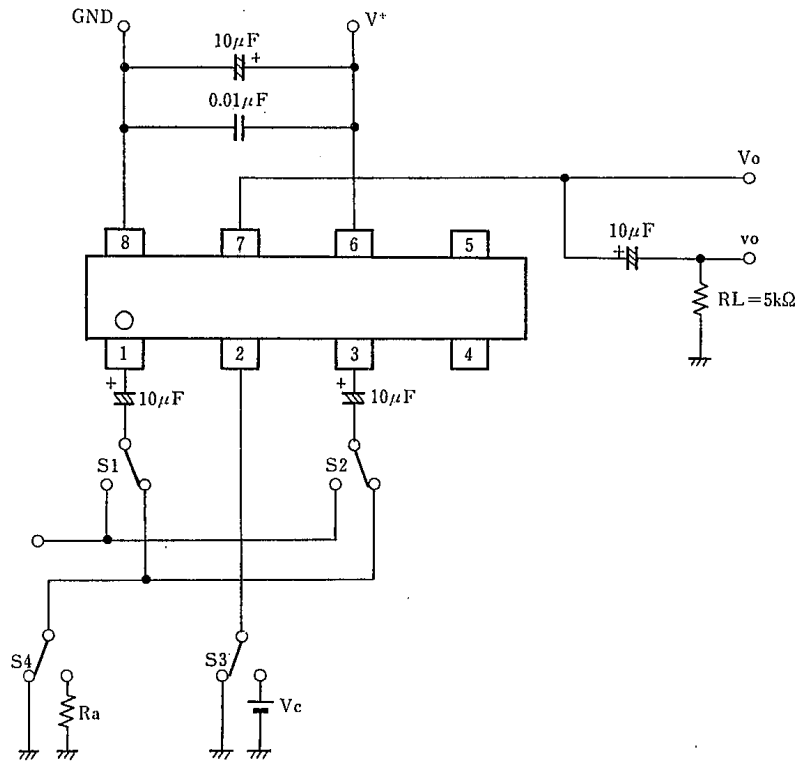
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V*		+4.5	—	+13.0	V
Operating Current	I _{CC}		—	2.7	3.7	mA
Frequency Characteristics	G _f	V _{IN} =2V _{pp} , V _O =10MHz/100kHz	-1.0	0	+1.0	dB
Voltage Gain	G _v	V _{IN} =2V _{pp} , 100kHz	-0.5	0	+0.5	dB
Total Harmonic Distortion	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}		-15	0	+15	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

5

■ CONTROL SIGNAL-OUTPUT SIGNAL

SW1	OUTPUT SIGNAL
L	V _{IN1}
H	V _{IN2}

■ TEST CIRCUIT



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.