

2-INPUT 1-OUTPUT VIDEO SWITCH

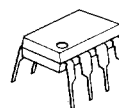
■ GENERAL DESCRIPTION

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

■ FEATURES

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

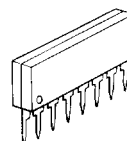
■ PACKAGE OUTLINE



NJM2533D



NJM2533M

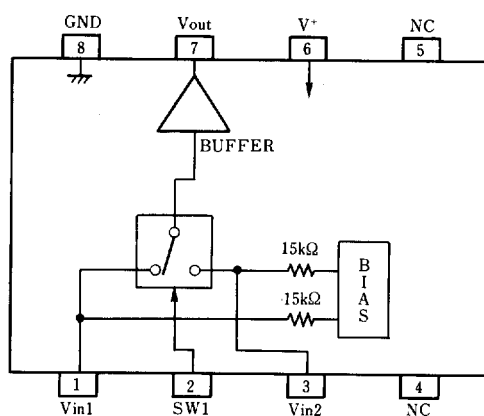


NJM2533L



NJM2533V

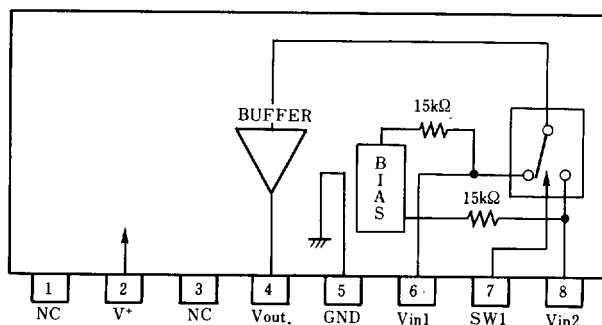
■ PIN CONFIGURATION



NJM2533D
NJM2533M
NJM2533V

PIN FUNCTION

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



NJM2533L

PIN FUNCTION

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



■ ABSOLUTE MAXIMUM RATINGS

(Ta=25℃)

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	℃
Storage Temperature Range	T _{stg}	-40 ~ +125	℃

■ ELECTRICAL CHARACTERISTICS

(V*=5V, Ta=25℃)

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

**■ TEST CIRCUIT**