

3-INPUT 1-OUTPUT VIDEO SWITCH

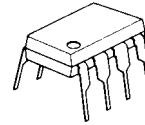
■ GENERAL DESCRIPTION

The **NJM2535** is a video switch for VCR, TV and others.
It contains three clamp-type inputs and one buffer-type output.

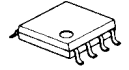
■ FEATURES

- Operating Voltage (+4.5V to +13V)
- Low Operating Current (4.6mA MAX)
- Crosstalk (-70dB)
- 3-Input, 1-Output
- Bipolar Technology
- Package Outline DIP8, DMP8, SIP8, SSOP8

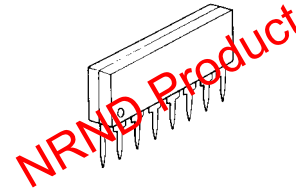
■ PACKAGE OUTLINE



NJM2535D



NJM2535M

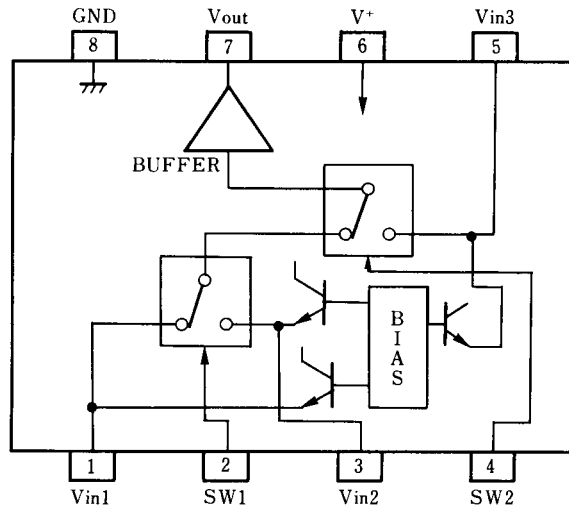


NJM2535L



NJM2535V

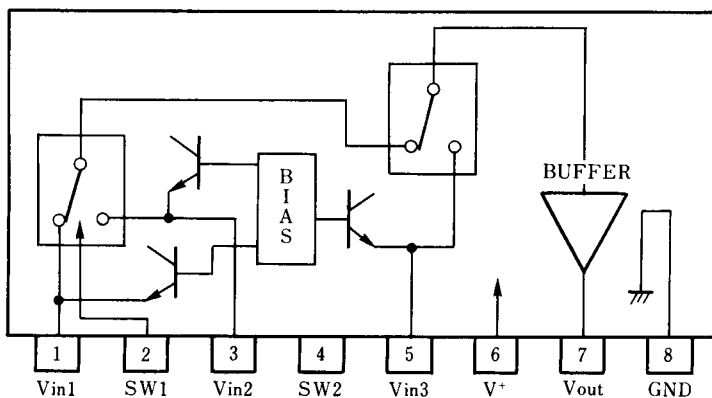
■ PIN CONFIGURATION



NJM2535D
NJM2535M
NJM2535V

PIN FUNCTION

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



NJM2535L

PIN FUNCTION

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

■ ABSOLUTE MAXIMUM RATINGS

(T_a = 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}	-40 to +85	°C
Storage Temperature Range	T _{stg}	-40 to +125	°C

■ ELECTRICAL CHARACTERISTICS

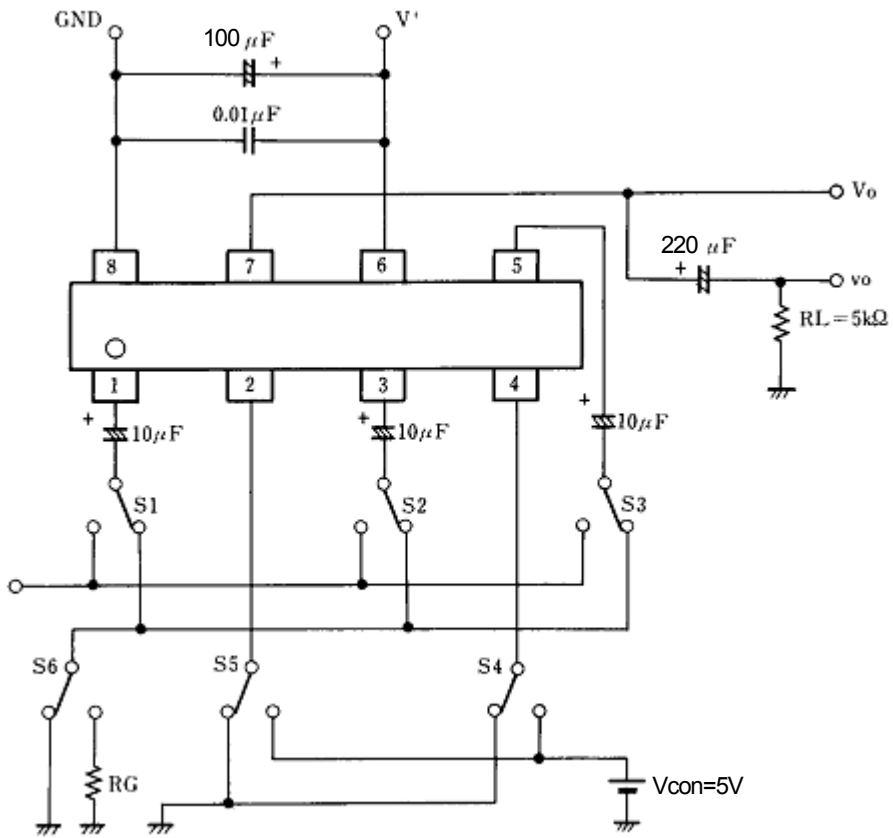
(V⁺ = 5V, T_a = 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Supply Voltage	V ⁺		+4.5	-	+13.0	V
Supply Current	I _{CC}		-	3.6	4.6	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
Differential Gain	DG	V _{IN} = 2V _{PP} , Standard staircase signal, APL = 50%	-	0.2	3.0	%
Differential Phase	DP	V _{IN} = 2V _{PP} , Standard staircase signal, APL = 50%	-	0.2	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
Output Impedance	R _O		-	25	-	Ω
Input Clamp Voltage	V _{IN}		-	1.5	-	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

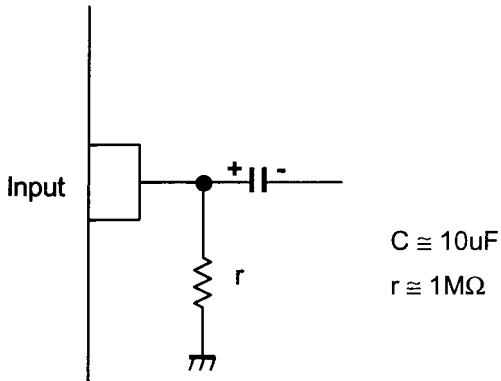


Terminal DC voltage at test circuit (Ta=25°C)

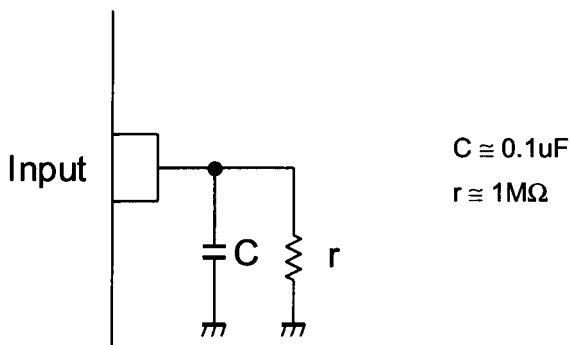
Terminal name	Vin1	Vin2	Vin3	Vout
DC voltage (V)	$(3 \cdot V^+) / 10$	$(3 \cdot V^+) / 10$	$(3 \cdot V^+) / 10$	$(3 \cdot V^+) / 10 - 0.7$

■ APPLICATION

This IC requires $1M\Omega$ resistance between INPUT and GND pin for clamp type input since the minute current causes an unstable pin voltage.



This IC requires $0.1\mu\text{F}$ capacitor between INPUT and GND, $1M\Omega$ resistance between INPUT and GND for clamp type input at mute mode.



[CAUTION]
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