3-INPUT 1-OUTPUT VIDEO SWITCH
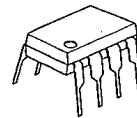
■ GENERAL DESCRIPTION

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

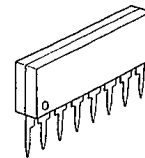## ■ FEATURES

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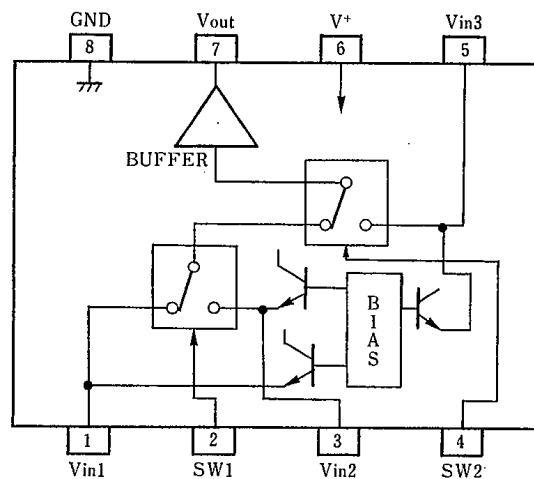- Package Outline   DIP8, DMP8, SIP8, SSOP8

■ PACKAGE OUTLINE

NJM2535D

NJM2535M

NJM2535L

NJM2535V

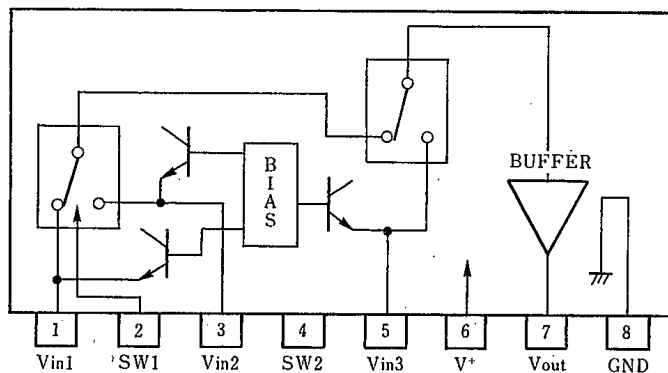## ■ PIN CONFIGURATION

PIN FUNCTION
1 : Vin1
2 : SW1
3 : Vin2
4 : SW2
5 : Vin3
6 : V⁺
7 : Vout
8 : GND

NJM2535D
NJM2535M
NJM2535V

PIN FUNCTION
1 : Vin1
2 : SW1
3 : Vin2
4 : SW2
5 : Vin3
6 : V⁺
7 : Vout
8 : GND

NJM2535L

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NJM2535

■ **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
Supply Voltage	V^+		+4.5	—	+13.0	V
Supply Current	I_{CC}		—	3.6	4.6	mA
Frequency Characteristics	Gf	V_{IN}=2Vpp, Vo=10MHz/100kHz	−1.0	0	+1.0	dB
Voltage Gain	G_V	V_{IN}=2Vpp, 100kHz	−0.5	0	+0.5	dB
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	CT	V_{IN}=2Vpp, 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

■ **INPUT CONTROL SIGNAL-OUTPUT SIGNAL**

SW1	SW2	OUTPUT SIGNAL
L	L	$V_{IN}1$
H	L	$V_{IN}2$
L/H	H	$V_{IN}3$

■ TEST CIRCUIT
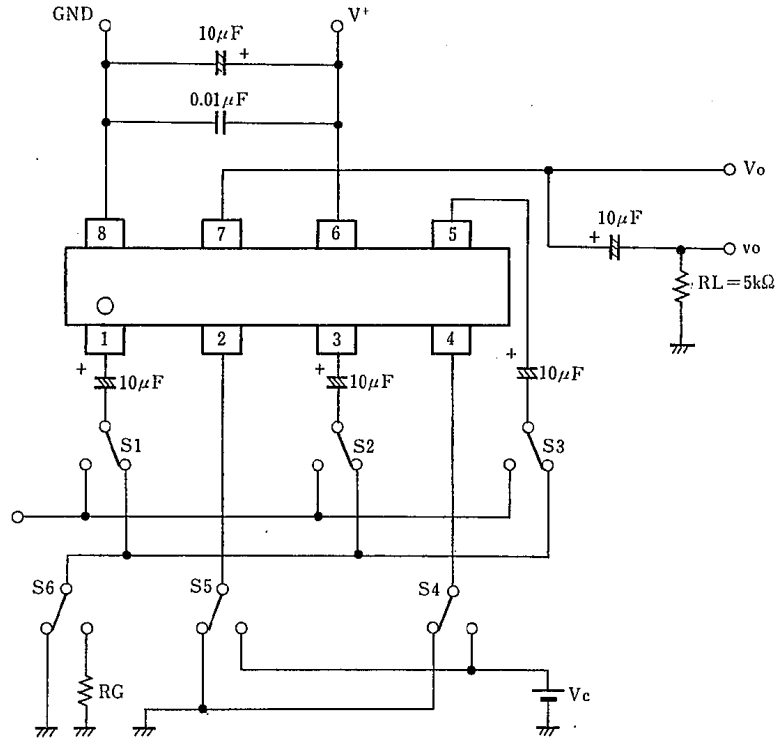
This IC requires 1M Ω resistance between INPUT and GND pin for clamp type input since the minute current causes an unstable pin voltage.

MEMO

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