



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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3-INPUT 1-OUTPUT VIDEO SWITCH

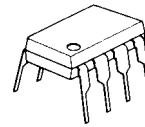
■ GENERAL DESCRIPTION

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

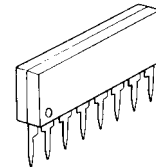
■ PACKAGE OUTLINE



NJM2535D



NJM2535M

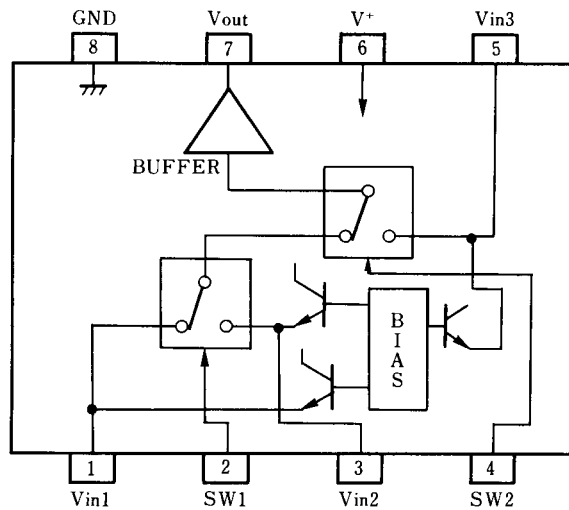


NJM2535L



NJM2535V

■ PIN CONFIGURATION



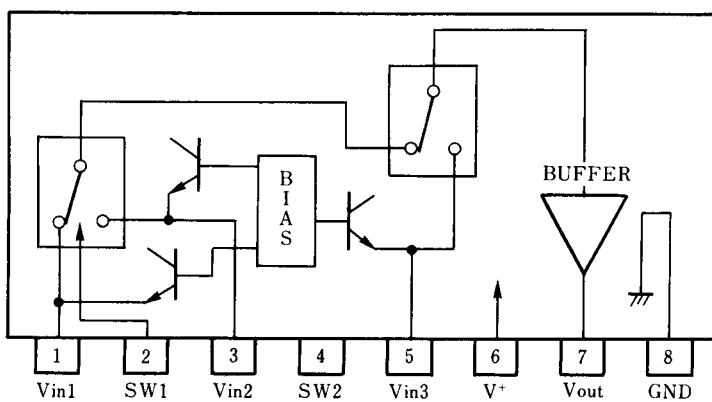
NJM2535D

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

NJM2535

■ ABSOLUTE MAXIMUM RATINGS

($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	$^\circ\text{C}$

■ ELECTRICAL CHARACTERISTICS

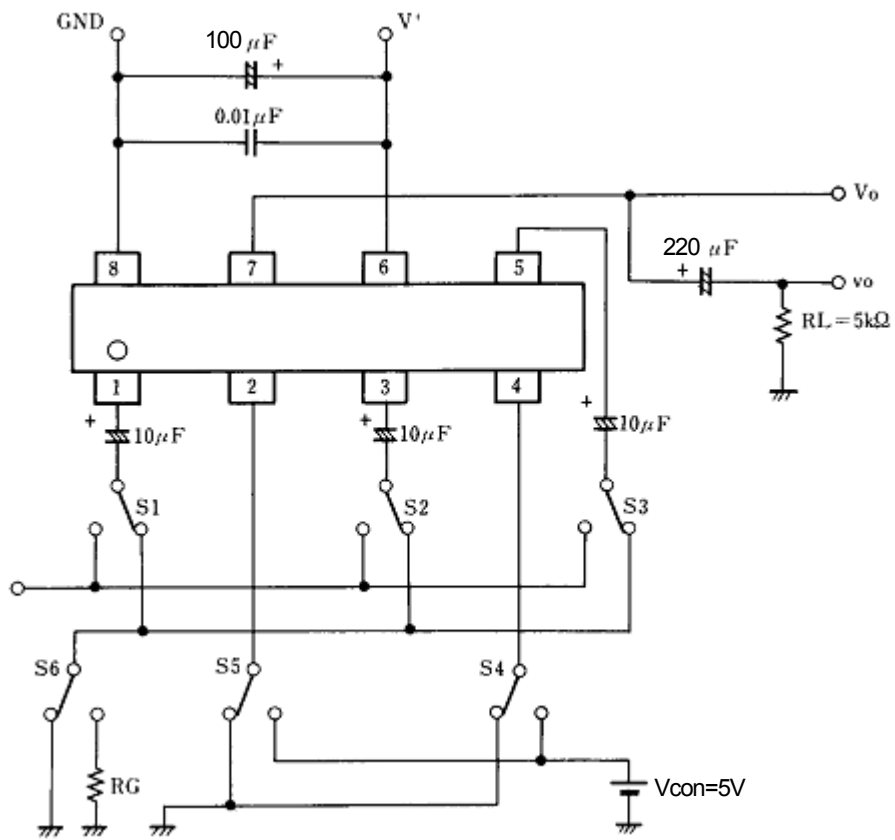
($V^+ = 5\text{V}$, $T_a = 25^\circ\text{C}$)

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	$V_{IN} = 2V_{PP}$, $V_O = 10\text{MHz}/100\text{kHz}$	-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



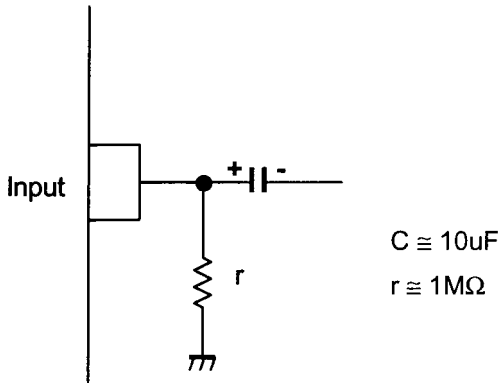
Terminal DC voltage at test circuit (Ta=25°C)

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

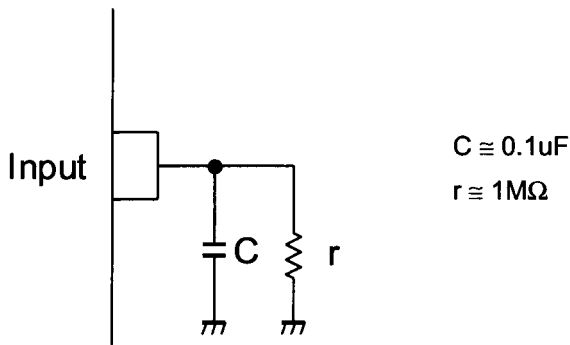
NJM2535

■ APPLICATION

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



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