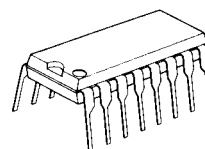


3-INPUT / 2-INPUT VIDEO SWITCH

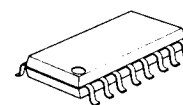
■ GENERAL DESCRIPTION

The **NJM2513** is a switching IC for switching over from one audio or video input signal to another. Internalizing 3 input-1 output, and 2 input-1 output and then each set can be operated independently. Side of 2 input-1 output are "Clamp type", and they can be operated while setting DC level fixed in position of the video signal. It is a higher efficiency video switch, featuring the operating voltage 4.75 to 13V, the frequency feature 10MHz, and then the Crosstalk 75dB (at 4.43MHz).

■ PACKAGE OUTLINE



NJM2513D



NJM2513M

■ FEATURES

- Operating Voltage (+4.75V to +13V)
- 3 Input-1 Output/2 Input-1 output.
- Crosstalk 75dB (at 4.43MHz)
- Wide Bandwidth Frequency 10MHz (2V_{P-P} Input)
- Package Outline DIP16, DMP16
- Bipolar Technology

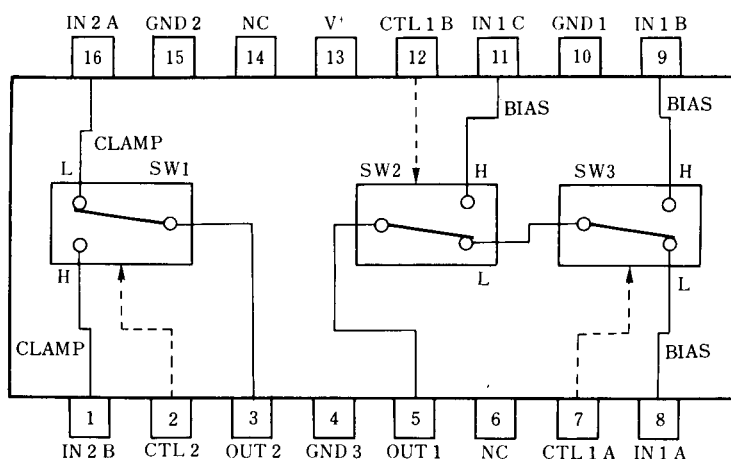
■ RECOMMENDED OPERATING CONDITION

- Operating Voltage V⁺ 4.75V to 13.0V

■ APPLICATIONS

- VCR, Video Camera, AV-TV, Video Disk Player.

■ BLOCK DIAGRAM



NJM2513D

NJM2513M

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

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

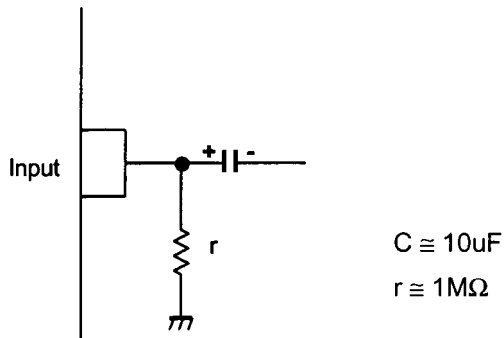
01	1	1	04	00	00	04	05	00	05	1
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■ TERMINAL EXPLANATION

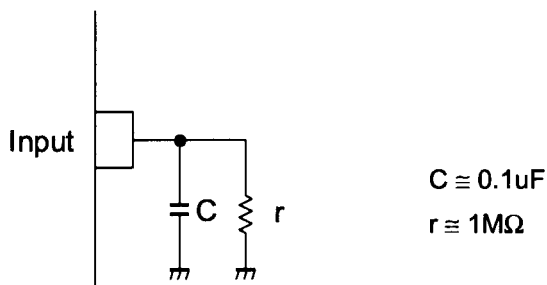
PIN No.	PIN NAME	VOLTAGE	INSIDE EQUIVALENT CIRCUIT
8 9 11	IN 1 A IN 1 B IN 1 C [Input]	2.5V $\left(\frac{1}{2}V^+\right)$	
16 1	IN 2 A IN 2 B [Input]	1.5V $\left(\frac{3}{10}V^+\right)$	
7 12 2	CTL 1A CTL 1B CTL 2 [Switching]		
5	OUT1 [Output]	1.8V $\left(\frac{1}{2}V^+ - 0.7\right)$	
3	OUT2 [Output]	0.8V $\left(\frac{3}{10}V^+ - 0.7\right)$	
13	V ⁺	5V	
15 4 10	GND 1 GND 2 GND 3		

■ APPLICATION

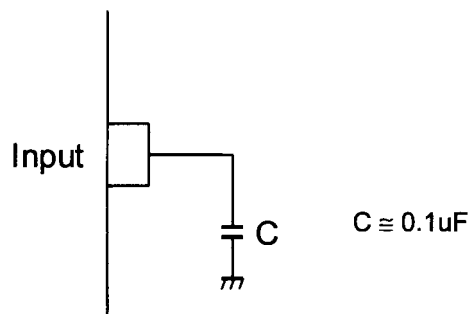
This IC requires $1\text{M}\Omega$ resistance between INPUT and GND pin for clamp type input since the minute current causes an unstable pin voltage.



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.



This IC requires $0.1\mu\text{F}$ capacitor between INPUT and GND for bias type input at mute mode.



[CAUTION]

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