

2 INPUT 1 OUTPUT 3ch VIDEO SWITCH with ISOLATION AMP.

■ GENERAL DESCRIPTION

The NJM2524 is a 2-input 1-output 3-circuit video switch with isolation amplifier. Isolation circuit removes the noise of a signal.

The NJM2524 includes pedestal clamp circuit. It is suitable for the change of the RGB signal of the Car AV equipment.

■ PACKAGE OUTLINE

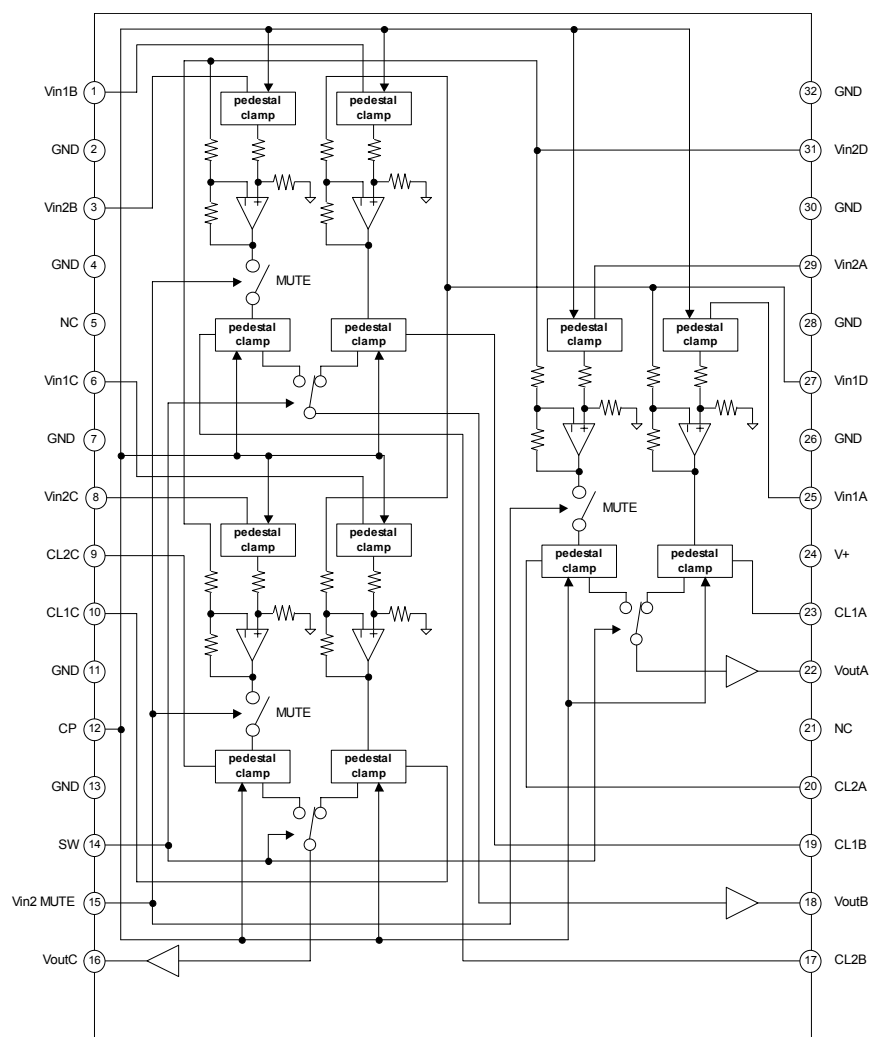


NJM2524V

■ FEATURES

- Operating Voltage 4.5 to 9.0V
- Internal Isolation Amp.
- Internal 3ch 2 input 1 output Video Switch
- Pedestal Clamp
- Bipolar Technology
- Package Outline SSOP32

■ BLOCK DIAGRAM



■ ABOSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Supply Voltage	V ⁺	15.0	V
Power Dissipation	P _D	SSOP32: 800 *	mW
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +125	°C

*EIA/JEDEC STANDARD Test Board(76.2x114.3x1.6mm,2layers,FR-4)mounting

■ RECOMMENDED OPERATING CONDITION(Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage	Vopr		4.5	-	9.0	V

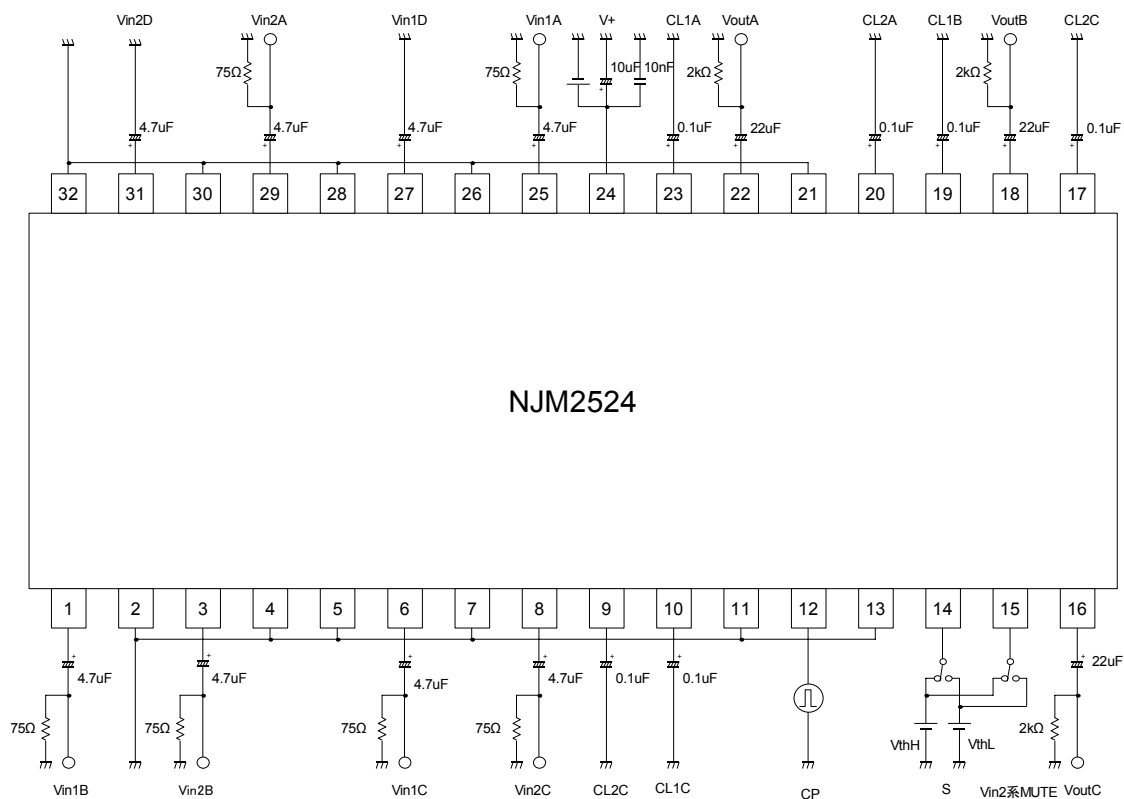
■ ELECTRICAL CHARACTERISTICS(V⁺ =5.0V, Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Current	I _{CC}	No Signal	-	19	28.5	mA
Maximum Output Level	Vom1	Vin=100kHz, Sigh-Signal, THD=1%,	1.4	1.6	-	Vp-p
Voltage Gain	Gv	Vin=100kHz, 1.0Vp-p Sign-Signal	-1.0	0	1.0	dB
Frequency Characteristics	Gf	Vin=10MHz / 1MHz , 1.0Vpp Sign-Signal	-1.0	0	1.0	dB
Common Mode Rejection Ratio	CMR	Vin=20kHz, 1Vpp	-	-45	-	dB
Crosstalk Between Input	CT-I	Vin=4.43MHz, 1.0Vp-p Sign-Signal	-	-65	-	dB
Crosstalk Between SW Block	CT-B	Vin=4.43MHz, 1.0Vp-p Sign-Signal	-	-65	-	dB
Differential Gain	DG	Vin=1.0Vp-p 10step Video Signal	-	0.5	-	%
Differential Phase	DP	Vin=1.0Vp-p 10step Video Signal	-	0.5	-	deg
SW Change High Level	VthH		2.0	-	V ⁺	V
SW Change Low Level	VthL		0	-	0.6	V

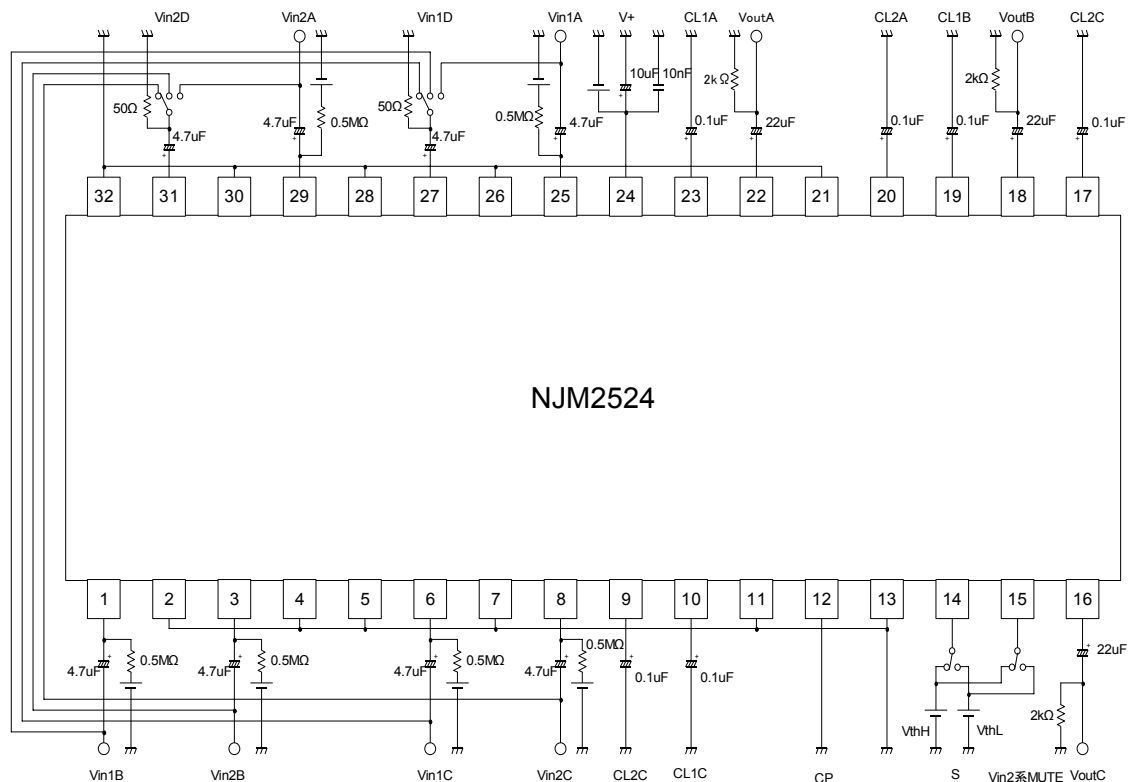
■ SW vs. INPUT/OUTPUT

SW	MUTE	VoutA	VoutB	VoutC
L	H	Vin1A	Vin1B	Vin1C
L	L	Vin1A	Vin1B	Vin1C
H	H	MUTE	MUTE	MUTE
H	L	Vin2A	Vin2B	Vin2C

■ TEST CIRCUIT (Measure Video-signal)

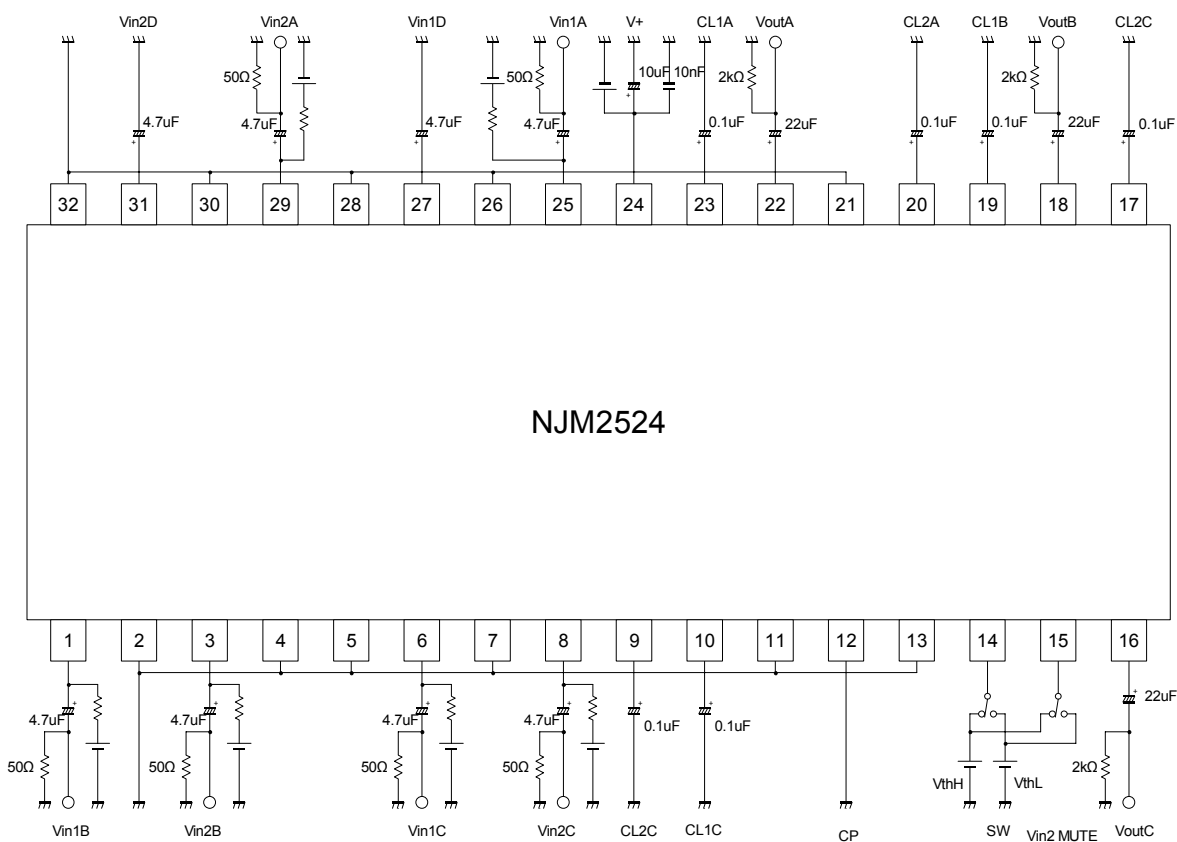


■ TEST CIRCUIT(Measure CMR)



NJM2524

■ TEST CIRCUIT(sign-signal)



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