

## LOW VOLTAGE 3ch VIDEO AMPLIFIER WITH LPF

### ■ GENERAL DESCRIPTION

The NJM2573 is a Low Voltage 3ch Video Amplifier with LPF. Internal 75Ω driver is easy to connect TV monitor directly.

The NJM2573 corresponds to a clamp and bias inputs, and selection of a clamp/ bias is possible for one circuit, and it corresponds to various video signals.

The NJM2573 features low power and small package, and is suitable for low power design on downsizing of DVC.

### ■ PACKAGE OUTLINE

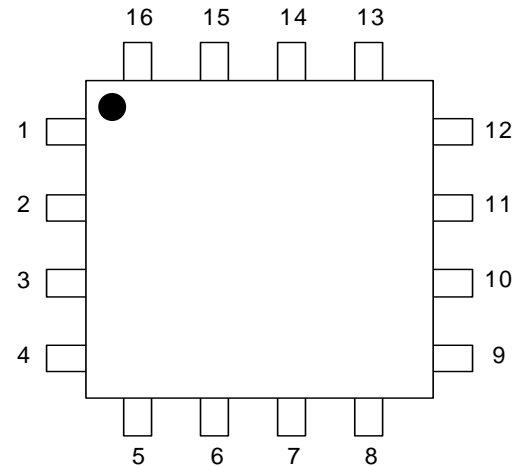
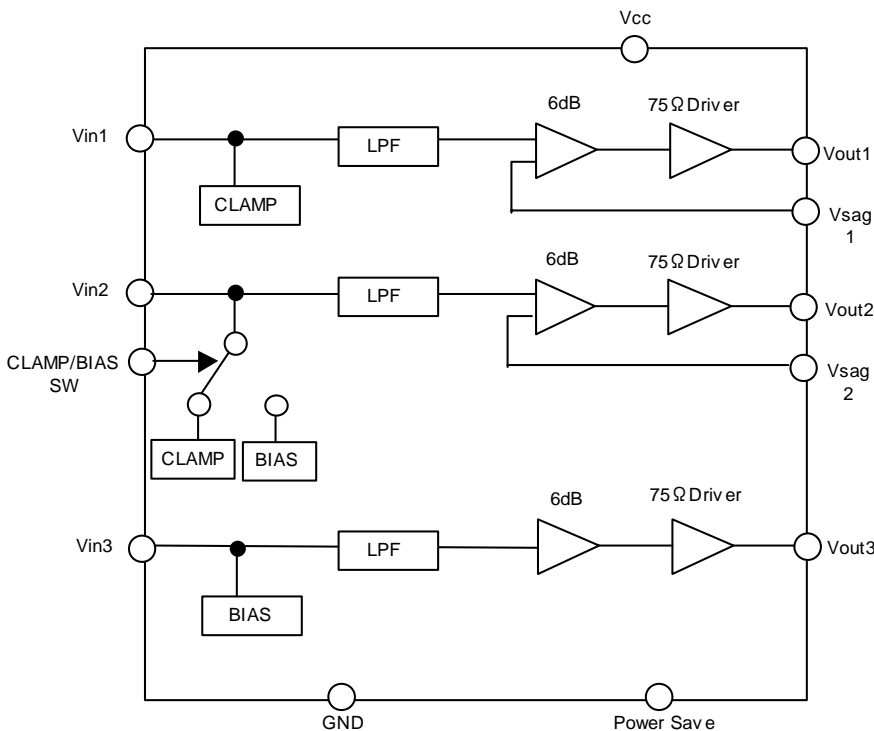


NJM2573SE4

### ■ FEATURES

- Operating Voltage            2.8 to 5.5V
- Input type                    Vin1: CLAMP  
                                      Vin2: CLAMP/ BIAS  
                                      Vin3: BIAS
- Internal 75Ω Driver Circuit (2-system drive)
- Internal LPF
- Internal Power Saving Circuit
- Bipolar Technology
- Package Outline            PCSP16

### ■ BLOCK DIAGRAM



1. Vin1
2. Power Save
3. Vin2
4. NC
5. GND1
6. Vin3
7. CLAMP/BIAS SW
8. Vout3
9. GND2
10. Vout2
11. Vsag2
12. V<sup>+</sup>2
13. Vout1
14. Vsag1
15. NC
16. V<sup>+</sup>1

## ■ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V <sup>+</sup>	7.0	V
Power Dissipation	P <sub>D</sub>	TBD	mW
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +125	°C

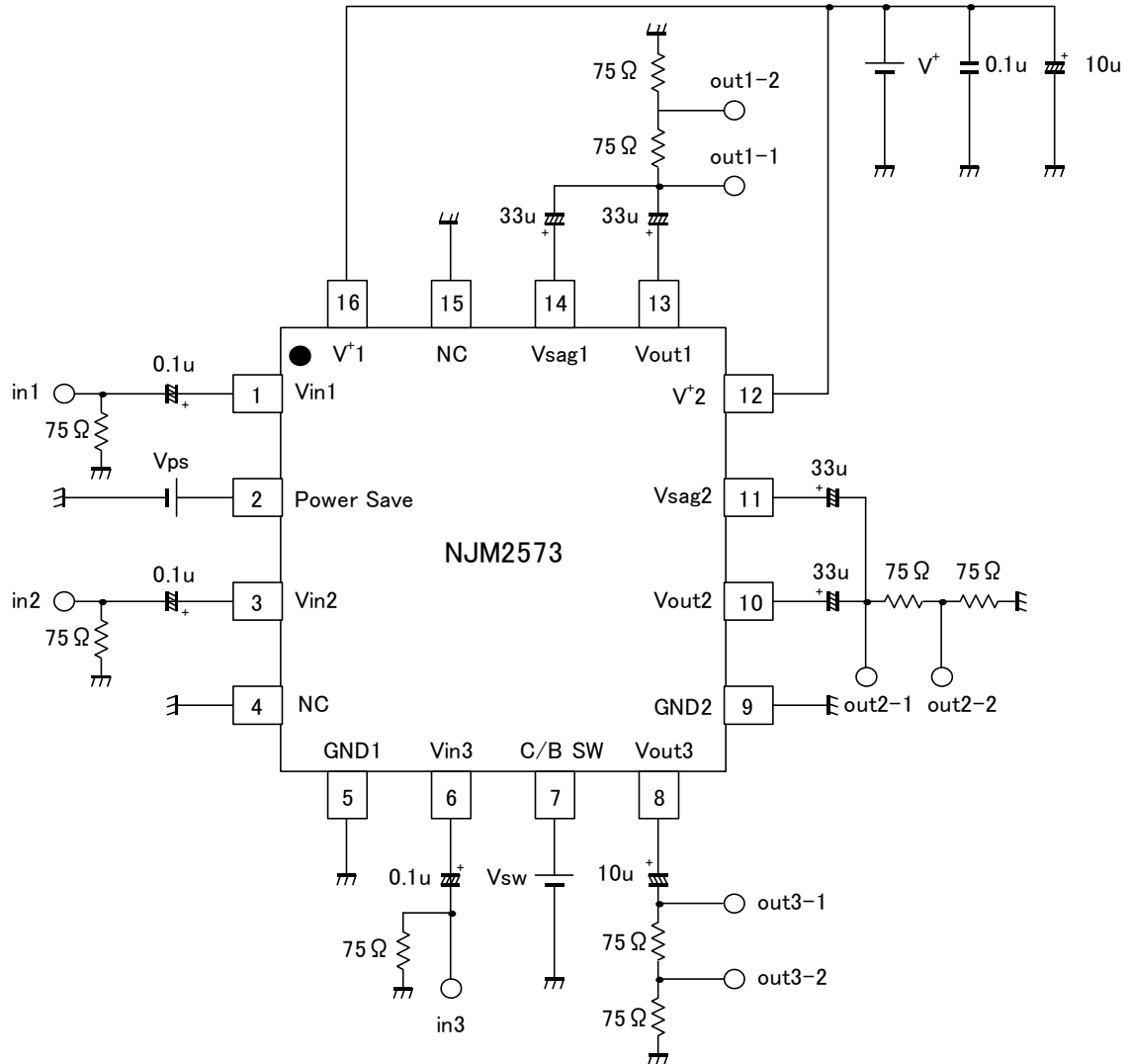
## ■ELECTRICAL CHARACTERISTICS (V<sup>+</sup>=3.0V, R<sub>L</sub>=150Ω, Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage	Vopr		2.8	3.0	5.5	V
Operating Current	I <sub>CC</sub>	No Signal	-	18.0	26.0	mA
Operating Current at Power Save	I <sub>save</sub>	Power Save Mode	-	60	90	uA
Maximum Output Voltage Swing	Vomv	f=1kHz, THD=1%, CLAMP Input	2.2	2.4	-	Vp-p
	Vom RGB	f=1kHz, THD=1%, BIAS Input	1.4	2.2	-	
Voltage Gain	Gv	Vin=100kHz, 1.0Vp-p, Sin Signal (CLAMP) Vin=100kHz 0.7Vp-p, Sin Signal (BIAS)	6.1	6.5	6.9	dB
Low Pass Filter Characteristic	Gfy4.5M	Vin=4.5MHz/100kHz, 1.0Vp-p(CLAMP) Vin=4.5MHz/100kHz, 0.7Vp-p(BIAS)	-0.5	0.0	+0.5	dB
	Gfy8M	Vin=8MHz/100kHz, 1.0Vp-p(CLAMP) Vin=8MHz/100kHz, 0.7Vp-p(BIAS)	-	-2.0	-	
	Gfy16M	Vin=16MHz/100kHz, 1.0Vp-p(CLAMP) Vin=16MHz/100kHz, 0.7Vp-p(BIAS)	-	-12	-	
Differential Gain	DG	(CLAMP) Vin=1.0Vp-p Input 10step Video Signal	-	0.2	-	%
Differential Phase	DP	(CLAMP) Vin=1.0Vp-p Input 10step Video Signal	-	0.2	-	deg
S/N Ratio	SNv	(CLAMP) Vin=1.0Vp-p, R <sub>L</sub> =75Ω, 100% White Video Signal	-	+60	-	dB
2nd. Distortion	Hv	(CLAMP) Vin=1.0Vp-p, 3.58MHz, Sin Video Signal, R <sub>L</sub> =75Ω (BIAS) Vin=0.7Vp-p, 3.58MHz, Sin Video Signal, R <sub>L</sub> =75Ω	-	-40	-	dB
SW Change Voltage High Level	VthPH	Active	1.8	-	V <sup>+</sup>	V
SW Change Voltage Low Level	VthPL	Non-active	0	-	0.3	

## ■CONTROL TERMINAL

PARAMETER	STATUS	NOTE
Power Save	H	Power Save: ON
	L	Power Save: OFF
	OPEN	Power Save: OFF
CLAMP/BIAS SW	H	BIAS
	L	CLAMP
	OPEN	CLAMP

■ TEST CIRCUIT



[CAUTION]  
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