

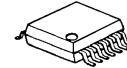
Video Amplifier with 75 ohms Driver

■GENERAL DESCRIPTION

THE NJM2568 is a video amplifier with 75 ohms drivers, which includes LPF and BPF of both Y and C system.

THE NJM2568 can compose the output circuit of digital video items with a little external components. It is suitable for portable items.

■PACKAGE OUTLINE

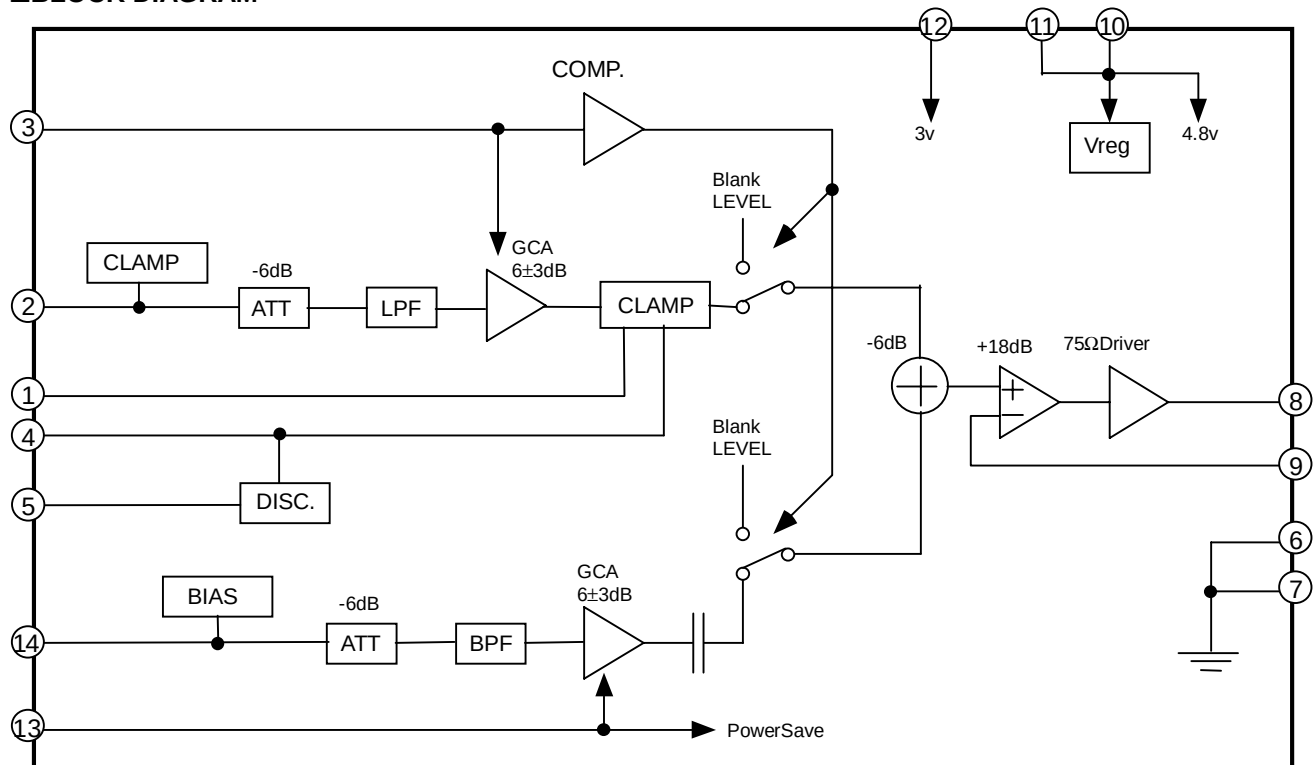


NJM2568V

■FEATURES

- Operating Voltage $V^+1=4.5$ to $5.3V$, $V^+2=2.7$ to $5.3V$
- Operating Current $9.5mA_{typ.} V^+=4.8V$
 $7.3mA_{typ.} V^+=3.0V$
- Internal LPF,BPF
- Internal Clamp Discharge
- Bipolar Technology
- Package Outline SSOP14

■BLOCK DIAGRAM



- 1.CLAMP REF
- 2.Y_{IN}
- 3.GCA CTLY/MUTE
- 4.CLAMP
- 5.DIS CTL
- 6.GND
- 7.GND

- 8.V_{SAG}
- 9.V_{OUT}
- 10.V⁺1
- 11.V⁺1
- 12.V⁺2
- 13.GCA CTLC/POWER SAVE
- 14.C_{IN}

■ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETERS	SYMBOL	RATINGS	UNIT
Supply Voltage	V^+	7.0	V
Power Dissipation	P_D	300	mW
Operating Temperature Range	T_{opr}	-20 to +85	°C
Storage Temperature Range	T_{stg}	-40 to +125	°C

■ELECTRICAL CHARACTERISTICS (Ta=25°C, $V^+1=4.8V$, $V^+2=3.0V$, $R_L=150\Omega$)

PARAMETERS	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Current 1	I_{CC1}	$V^+1=4.8V$, No Signal	-	9.5	12.5	mA
Operating Current 1 (Power Save Mode)	I_{save1}	$V^+1=4.8V$, Power Save	-	1.6	2.1	mA
Operating Current 2	I_{CC2}	$V^+2=3.0V$, No Signal	-	7.3	10.0	mA
Operating Current2 (Power Save Mode)	I_{save2}	$V^+2=3.0V$, Power Save	-	0.37	0.9	mA

(Y Amplifier)

Voltage Gain 1	G_{VY1}	V_{IN} to V_{OUT} , $G_{CACTLY}=0.5V$ 100kHz, 0.5Vp-p @Sine Wave	+3.0	+6.0	+9.0	dB
Voltage Gain 2	G_{VY2}	V_{IN} to V_{OUT} , $G_{CACTLY}=2.5V$ 100kHz, 0.5Vp-p @Sine Wave	+13.0	+16.0	+19.0	dB

(C Amplifier)

Voltage Gain 1	G_{VC1}	C_{IN} to V_{OUT} , $G_{CACTLY}=0.5V$ 4MHz, 143mVp-p @Sine Wave	+3.0	+6.0	+9.0	dB
Voltage Gain 2	G_{VC2}	C_{IN} to V_{OUT} , $G_{CACTLC}=2.5V$ 4MHz, 143mVp-p @Sine Wave	+13.0	+16.0	+19.0	dB

(Filter Characteristics)

LPF (Y_{IN})	Gf_{Y6M}	6MHz/100kHz, 100mVp-p @Sine Wave	-1.0	0	-	dB
	$Gf_{Y7.2M}$	7.2MHz/100kHz, 100mVp-p @Sine Wave	-1.5	0	-	dB
	Gf_{Y20M}	20MHz/100kHz, 100mVp-p @Sine Wave	-	-30	-20	dB
	DL_Y	Group Delay GD3MHz-GD6MHz	-	60	100	nsec
BPF (C_{IN})	$Gf_{C\pm1M}$	$\pm1MHz/4MHz$, 100mV @Sine Wave	-1.0	0	-	dB
	$Gf_{C\pm1.6M}$	$\pm1.6MHz/4MHz$, 100mV @Sine Wave	-3.0	0	-	dB
	Gf_{C500k}	500kHz/4MHz, 100mVp-p @Sine Wave	-	-15	-10	dB
	Gf_{C20M}	20MHz/4MHz, 100mVp-p @Sine Wave	-	-25	-10	dB
	DL_C	Group Delay GD3MHz-GD6MHz	-	60	90	nsec

(YC Delay)

YC Delay	T_{YC}	T_{YOUT} - T_{COUT} at 4MHz	-	+25	-	nsec
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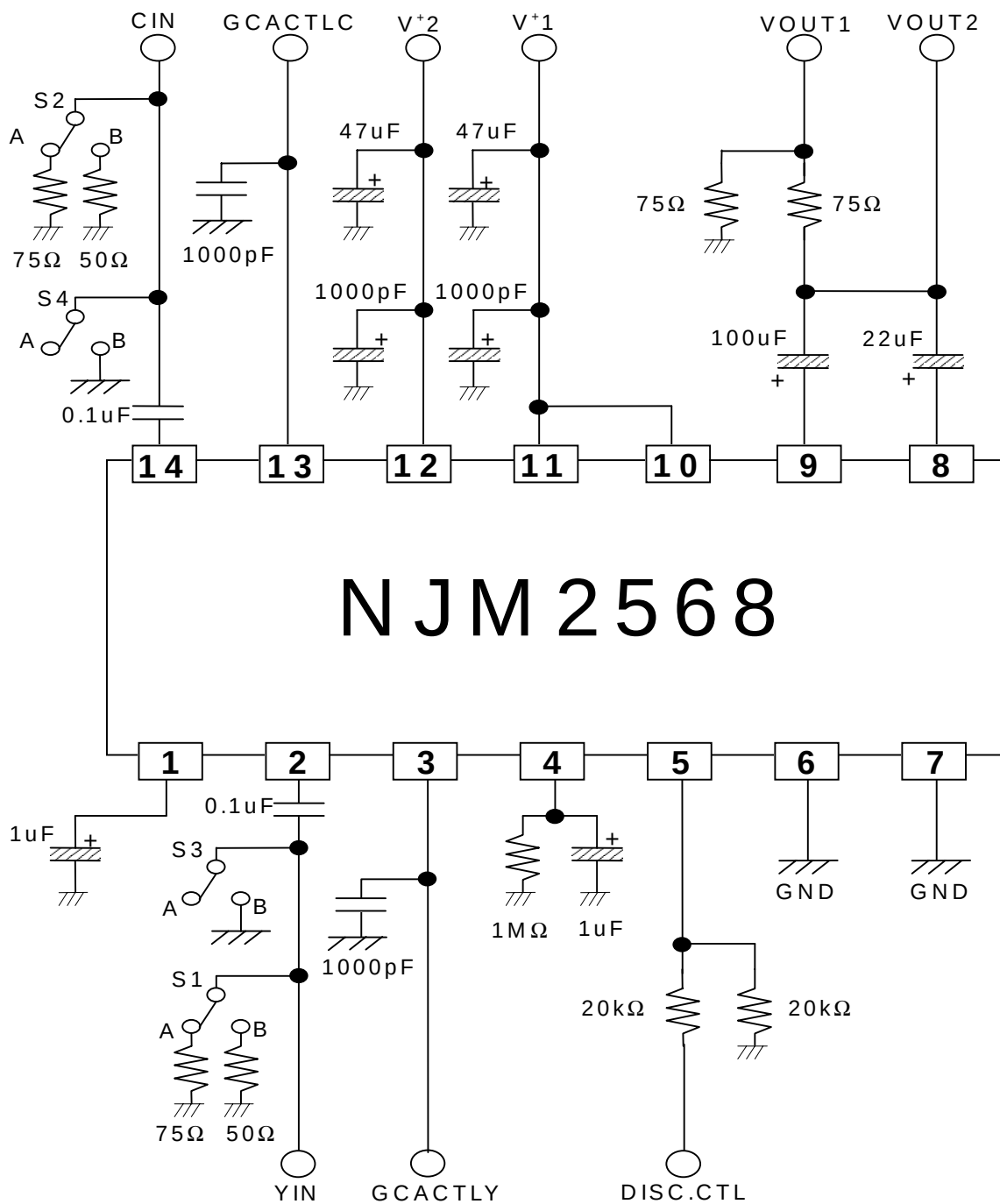
(Maximum Output Swing)

V-OUT	V_{OVM}	100kHz, Sine Wave, $R_L=75\Omega$	1.2	-	-	Vp-p
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(GCA Control Signal)

GCACTLY	V_{GC1}	GCA Control Voltage	0.5	-	2.5	V
	V_{GL1}	MUTE Voltage	GND	-	0.3	V
GCACTLC	V_{GC2}	GCA Control Voltage	0.5	-	2.5	V
	V_{GL2}	Power Down Voltage	GND	-	0.3	V

■TEST CIRCUIT



MEMO

<注意事項>
このデータブックの掲載内容の正確さには
万全を期しておりますが、掲載内容について
何らかの法的な保証を行うものではありません。
とくに応用回路については、製品の代表的
な応用例を説明するためのものです。また、
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ことを保証するものではありません。