

PRELIMINARY

VIDEO AMPLIFIER

DESCRIPTION

AA8630 is a video driver with 6db gain, 75Ω output buffer and SAG correction ant it supports 3V and 5V operation voltage. The 75Ω buffer is capable of driving two circuits. The SAG could reduce the output coupling capacitor. The power saving circuit provides the power saving function. The IC is available for 6-pin SOT26L.

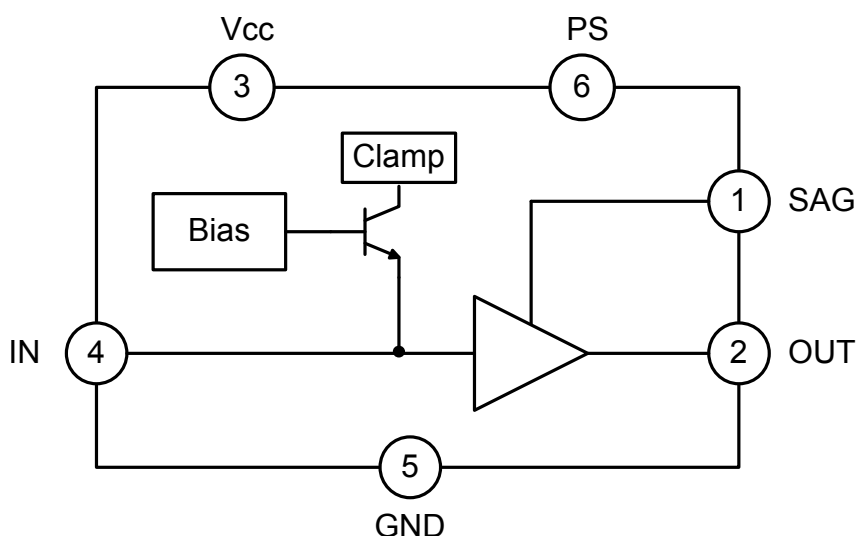
FEATURES

- Composite video driver with 6dB gain
- Support 3V and 5V operation voltage
- Power saving function
- Output short circuit protection function
- SAG correction function
- A load sufficient for driving two circuits
- Low power consumption, 75mw typical
- Internal voltage clamp circuit
- AC-Couple or DC-Couple output

APPLICATIONS

- VCR
- Video Camera
- TV
- Video Player

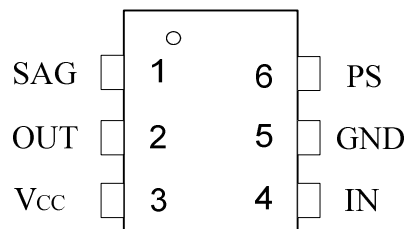
BLOCK DIAGRAM



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PIN DESCRIPTIONS



TOP VIEW

PIN NO.	PIN NAME	PIN FUNCTION
1	SAG	SAG correction to reduce the capacitance of output coupling capacitor
2	OUT	Composite output. As it is less than 0.6V, the protect circuit is triggered to enable the power saving function
3	Vcc	3V ~ 5V power supply
4	IN	Composite Y input signal is clamped input
5	GND	Ground
6	PS	Output is muted as this pin is set to low

ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATING	UNIT
Supply Voltage	Vcc	7	V
Operating Ambient Temperature	Ta	-25~+75	°C
Storage Temperature	Ts	-55~+125	°C

NOTE: Stress above those listed under "Absolute Maximum Rating" may cause device permanent damage. This stress-rating only factor and functional operation of the device at these or any other conditions above those indicated in the operational section of this specification is not implied. Exposure to absolute maximum rating conditions for an extending period of time may affect the reliability of the device.

ELECTRICAL CHARACTERISTICS

TA = 25 °C, VCC = 3V

SYMBOL	PARAMETER	CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
Icc1	Supply Current	No input Signal		15	20	mA



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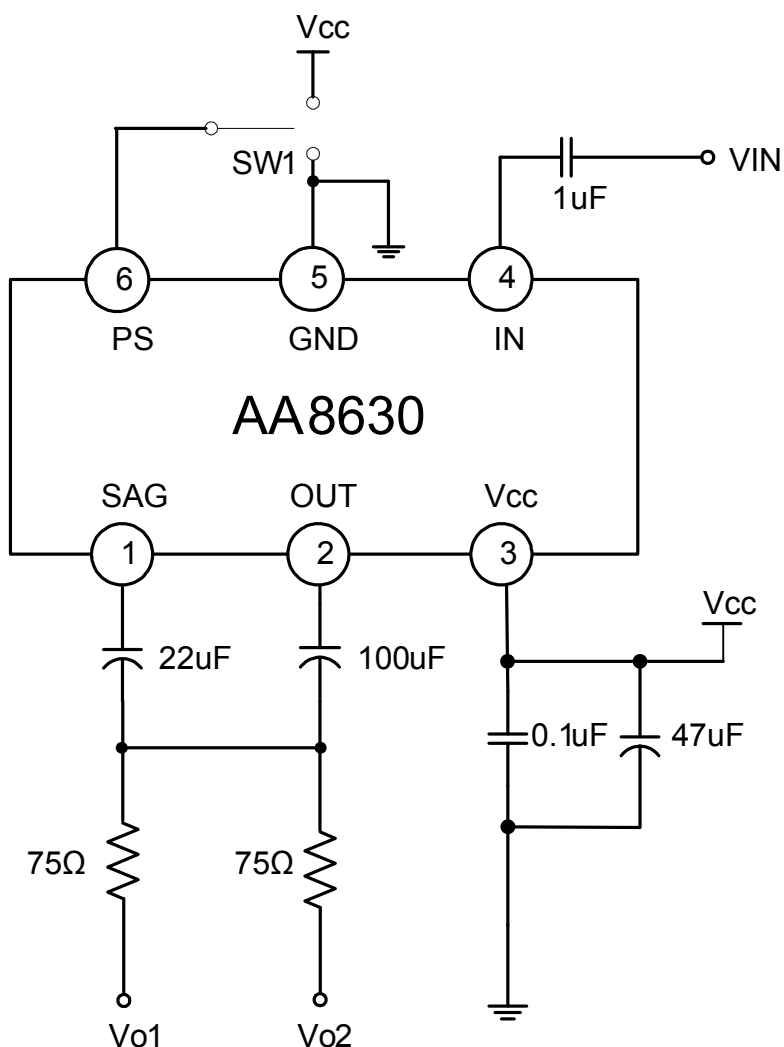
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SYMBOL	PARAMETER	CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
Icc2	Supply Current (at power save mode)	No input Signal, PS : ON			1	uA
Gv	Voltage Gain	Input Signal Freq = 4.43MHz, 1VP-P, measure VO1		-0.3		dB
GF	Frequency Characteristic	Input Signal Freq = 7MHz/1MHz, 1VP-P, measure VO1	-0.5	-0.5	0.5	dB
	Clamp Voltage			1.3		V
VMH	PS High Level		2.2		Vcc	V
VML	PS Low Level		GND		0.8	V
	Output DC level			1.2		V
IM	Muted Current	MUTE = 'L'			1	uA
GSAG	SAG-Terminal Gain			48		dB
DG	Differential Gain	VIN = 1VP-P, refer staircase signal		1	2	%
DP	Differential Phase	VIN = 1VP-P, refer staircase signal		1	2.5	deg

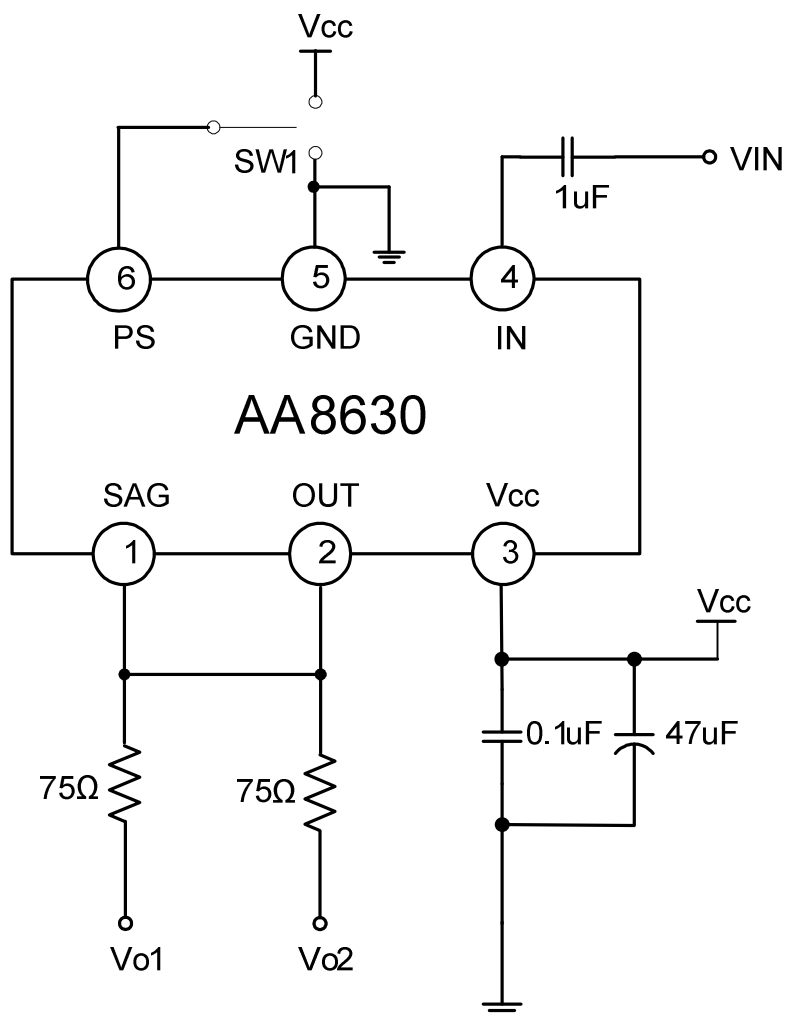
Power Saving MODE

Function	PS
Power Saving	L
Operation	H
Power Saving	Open

■ APPLICATION CIRCUIT 1 – AC-COUPLE OUTPUT



APPLICATION CIRCUIT 2 – DC-COUPLE OUTPUT



ORDERING INFORMATION

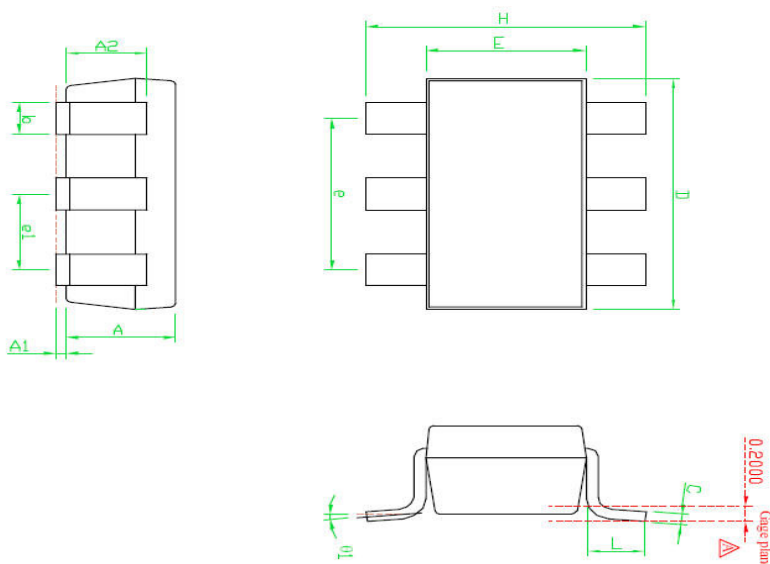
ORDER NO.	PACKAGE	PACKING	ONE REEL Q'TY	MARK CHART
AA8630A	SOT26L	Tape & Reel	3,000ea	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 8630 XXXX </div>

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■ PACKAGE DIMENSIONS

SOT 26L



SYMBOLS	DIMENSIONS IN MILLIMETERS		
	MIN	NOM	MAX
A	1.00	1.10	1.30
A1	0.00	---	0.10
A2	0.70	0.80	0.90
B	0.35	0.40	0.50
C	0.10	0.15	0.25
D	2.70	2.90	3.10
E	1.40	1.60	1.80
e	---	1.90(TYP)	---
H	2.60	2.80	3.00
L	0.37	---	---
θ1	1°	5°	9°
e1	---	0.95(TYP)	---

NOTES

1. PACKAGE BODY SIZES EXCLUDE MOLD FLAH PROTRUSIONS OR GATE BURRS
2. TOLERANCE $\pm 0.1000\text{mm}$ (4mil) UNLESS OTHERWISE SPECIFIED
3. COPLANARITY : 0.1000mm
4. DIMENSION L IS MEASURED IN GAGE PLANE