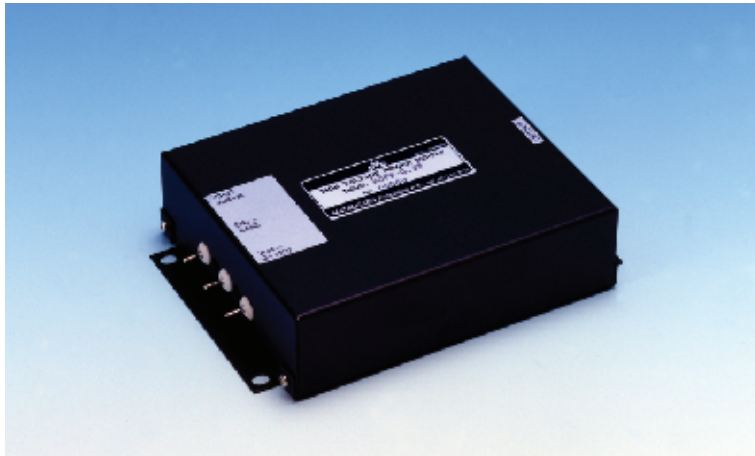


# High Voltage Bipolar Amplifier

AP Series, AS Series  $\pm 300\text{V}$  to  $\pm 3\text{kV}$ 

1009-03Pa



## FEATURES

- Output  $\pm 300\text{V}$  to  $\pm 3\text{kV}$
- High speed response
- All solid state
- Various types of output wave forms according to the input wave
- Small Design

## SUMMARY

AP/AS series is a fast response high voltage operational amplifier. Matsusada's long experience and expertise in HVPS field has made this high precision, high reliable product possible in the market. AP/AS series provides fast response to 250Hz - 12kHz and produces high voltage output in Sine Waves, Triangle Waves, Saw Tooth Waves, and Square Waves in proportion to the input wave type. 10 different models are available in this series as a standard unit. They are all solid state and provide  $\pm 300\text{V}$  to  $\pm 3\text{kV}$  output.

Output voltage (Vdc)	Current (mA)	MODEL	Frequency Response(-3dB) ※	Case No.	MODEL	Frequency Response(-3dB)		Slew Rate (full scale)	Case No.
						full scale	10% of full scale		
-300 to +300	10	AP-0.3B10	DC to 2kHz	C6A	AS-0.3B10	DC to 12kHz	DC to 30kHz	12V/ $\mu\text{s}$	C6A
-600 to +600	5	AP-0.6B5	DC to 2kHz		AS-0.6B5	DC to 6kHz	DC to 20kHz		
-1k to +1k	3	AP-1B3	DC to 1kHz	C6E	AS-1B3	DC to 3.5kHz	DC to 12kHz		C6E
-1.5k to +1.5k	2	AP-1.5B2	DC to 500Hz		AS-1.5B2	DC to 2.5kHz	DC to 10kHz		
-3k to +3k	1	AP-3B1	DC to 250Hz	C7	AS-3B1	DC to 1.5kHz	DC to 5kHz		C7

※ The frequency of AP is same in a low amplitude and full scale

## SPECIFICATIONS

<b>Input voltage</b>	24Vdc $\pm 5\%$ 0.6A TYP
<b>Output control</b>	External voltage control Vcon-in -10V to +10V (input impedance : $\geq 10\text{k}\Omega$ )
<b>Regulation</b>	Line $\pm 0.1\%$ ( $\pm 5\%$ line change) Load 0.1% (10 to 100% load change)
<b>Ripple</b>	$\leq 0.025\%$ rms
<b>Stability</b>	0.016%/Hr TYP.
<b>Protection</b>	Protection against Input reverse connection, and intermittent output short circuit
<b>Operating Temp.</b>	0°C to 45°C
<b>Storage Temp.</b>	-20°C to 60°C
<b>Input-Output Terminals</b>	Input/Pin Terminal Output/High Voltage lead wire 500mm(1.6feet)

\*Offset voltage : within 0.5% of rated output at Vcon-in = 0V

## OPTIONS

L2 OUTPUT VOLTAGE MONITOR

## DIMENSIONS mm(inch)

Case No.	W	L	H	Weight(g) approx
C6A	100(3.94)	180(7.09)	38(1.5)	1400
C6E	120(4.73)	205(8.07)	43(1.7)	2100
C7	152(5.99)	205(8.07)	43(1.7)	2600