



# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

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## MODEL AV-146A-10

### GENERAL INSTRUCTIONS

The Model AV-146A-10 clamping amplifier is designed to amplify bipolar nanosecond rise time baseband pulses in the pulse width range of about 10 ns and higher and CW signals in the frequency range of DC to 100 MHz. The basic specifications for the unit are as follows:

Gain:	> 20 dB (x10 Voltage)
Peak output voltage:	± 3 Volt
Clamping levels:	±0.5 V to ±3.0 Volt
Rise time:	< 4.0 ns
Input impedance level:	50 Ohms nominal
Out impedance level:	≤2 Ohms
Bandwidth:	DC to 100 MHz
Max. noise figure:	3.5 nV/√Hz
Prime power:	+15 Volts, 120 mA max -15 Volts, 120 mA max
Connectors:	SMA
Size:	1.7 x 2.6 x 4.3 inches

- 1) The positive clamp Voltage is controlled by the front panel one turn clamp "POS" pot while the negative clamp Voltage is controlled by the clamp "NEG" pot.
- 2) The DC offset on the output may be set to zero by making minor adjustments to the OS trim pot on the side of the chassis.
- 3) **CAUTION:** The unit may be damaged if the DC voltage power supply voltage exceeds ±18.0 Volts or if the power supply voltages are reversed. The 1N4746A zener diodes are installed across the ±15 VDC input terminals to protect the unit against these factors. Note that the input power supply voltages may be as low as ±7 Volts.