

AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS SINCE 1975

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MODEL AV-146B-32

GENERAL INSTRUCTIONS

The Model AV-146B-32 clamping amplifier is designed to amplify bipolar nanosecond rise time baseband pulses in the pulse width range of about 12 ns and higher and CW signals in the frequency range of DC to 50 MHz. The basic specifications for the unit are as follows:

Gain:

> 30 dB (x32 Voltage)

Peak output

voltage:

± 5 Volt

Clamping levels:

±0.5 V to ±5.0 Volt

Rise time:

< 6.0 ns

Input impedance level:

50 Ohms nominal

Output impedance level:

≤2 Ohms

Bandwidth:

DC to 50 MHz

Max. noise figure:

2.5 nV/ √ Hz

Prime power:

+15 Volts, 150 mA max

-15 Volts, 150 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 exposed OS trim pot on the top of the chassis.
- 3) <u>CAUTION</u>: 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.