



# AVTECH ELECTROSYSTEMS LTD.

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SINCE 1975

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## INSTRUCTIONS

MODEL AV-141C AMPLIFIER

S.N.:

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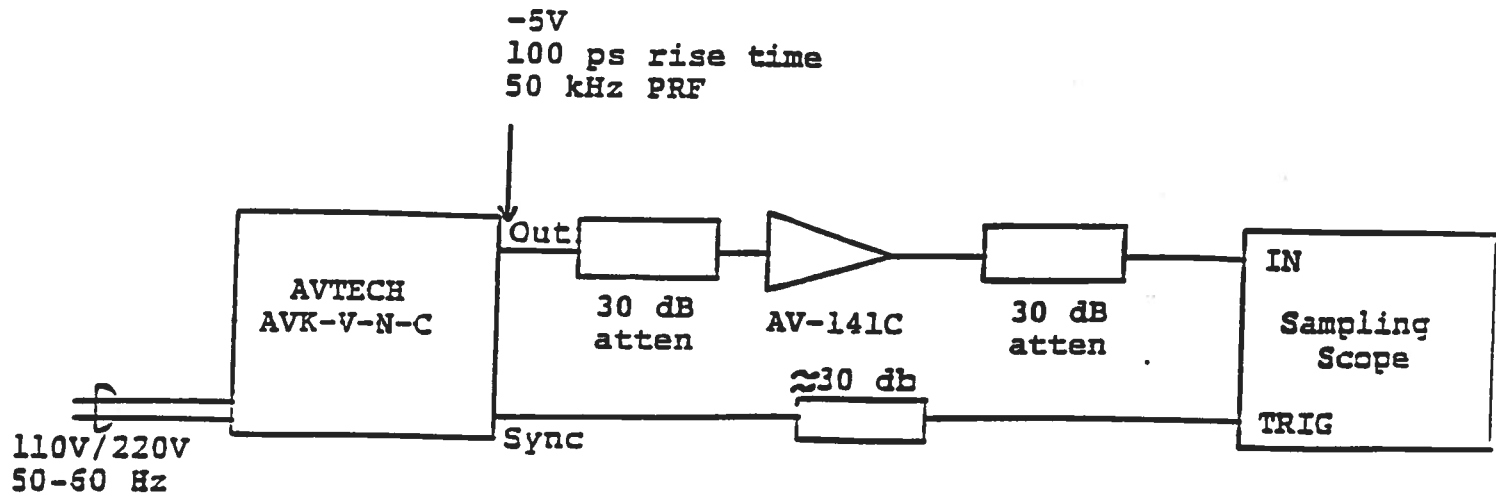
## MODEL AV-141C

### GENERAL INSTRUCTIONS

The Model AV-141C amplifier is designed to amplify bipolar nanosecond rise time baseband pulses in the pulse width range of about 2.0 ns and higher and CW signals in the frequency range of DC to 600 MHz. The basic specifications for the unit are as follows:

Gain:	> 20 dB
Peak output voltage:	$\pm 3$ Volt
Rise time:	< 1.0 ns
Impedance level:	50 Ohms nominal
Bandwidth:	DC to 600 MHz
Max. noise figure:	4 nV/ Hz
Prime power:	+15 Volts, 50 mA max -15 Volts, 50 mA max
Connectors:	SMA
Size:	1.4 x 1.1 x 2.3 inches

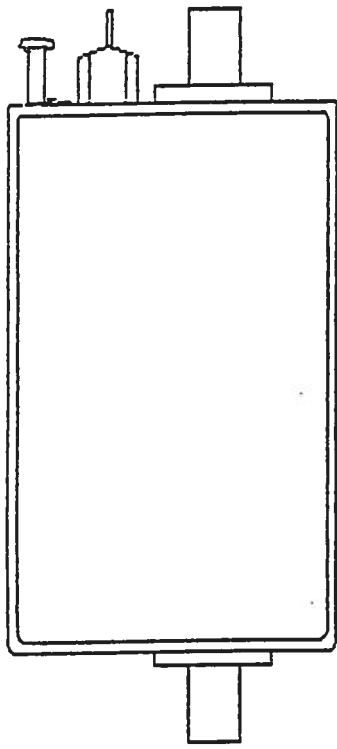
- 1) The DC offset on the output may be set to zero by making minor adjustments to the OS trim pot on the "OUT" end of the chassis.
- 2) The pulse mode operation of the unit was tested using the arrangement shown in Fig. 1.
- 3) **CAUTION:** The unit may be damaged if the DC voltage power supply voltage exceeds  $\pm 18.0$  Volts or if the power supply voltages are reversed. The 1N4746A zener diodes are installed across the  $\pm 15$  VDC input terminals to protect the unit against these factors. Note that the input power supply voltages may be as low as  $\pm 7$  Volts.
- 4) **CAUTION:** The unit may be damaged if the input voltage exceeds  $\pm 300$  mV, the input is not protected. Failures due to overvoltage application are not covered by the warranty.

FIG. 1: AMPLIFIER TEST ARRANGEMENT

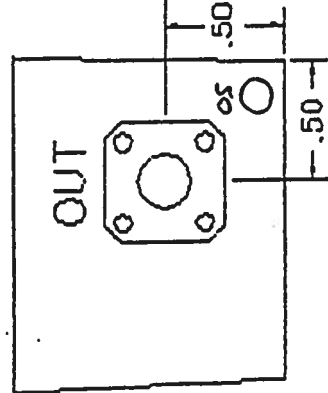
# Avtech Model AV-141C

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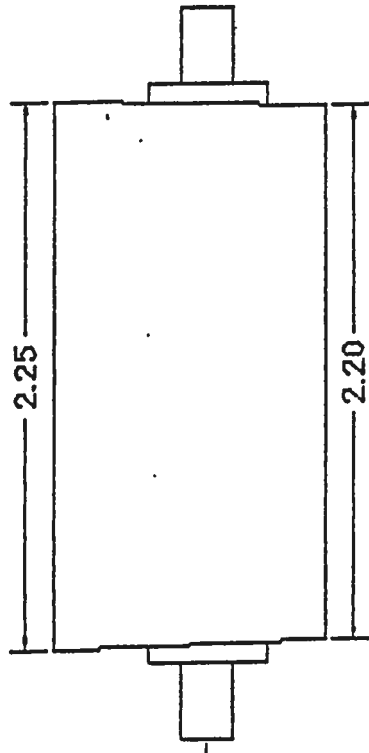
TOP VIEW



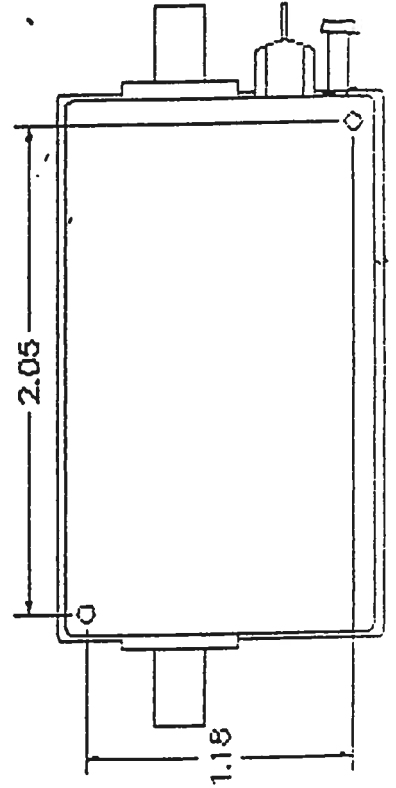
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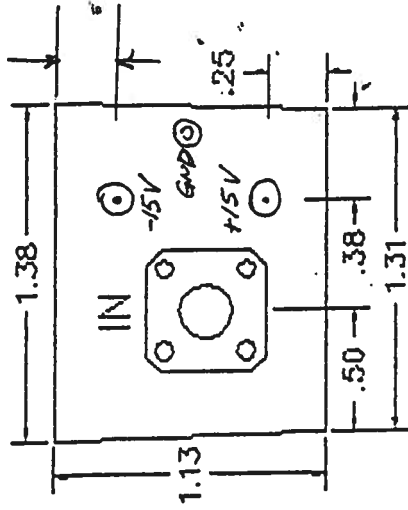
SIDE VIEW



BOTTOM VIEW



END {IN}



Notes: 1. Dimensions are in inches.

2. Holes on bottom face are 2-56 tapped. (.05")

3. SMA connectors 05M model: 215

4. Chassis: Pomona model 2417.

PERFORMANCE CHECK SHEET

Nov. 10/98

Edition D

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