

# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
ENGINEERING - MANUFACTURING

□ P.O. BOX 265  
OGDENSBURG  
NEW YORK  
13669  
(315) 472-5270

✘ BOX 5120, STN. "F"  
OTTAWA, ONTARIO  
CANADA K2C 3H4  
TEL: (613) 226-5772  
FAX: (613) 226-2802  
TELEX: 053-4591

## INSTRUCTIONS

MODEL AVX-S1-MI-EGG1-OP-3 BIAS TEE

S.N.:

## WARRANTY

Avtech Electrosystems Ltd. warrants products of its manufacture to be free from defects in material and workmanship under conditions of normal use. If, within one year after delivery to the original owner, and after prepaid return by the original owner, this Avtech product is found to be defective, Avtech shall at its option repair or replace said defective item. This warranty does not apply to units which have been disassembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation or liability assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

Fig. 1

BIAS INSERTION UNIT TEST ARRANGEMENT

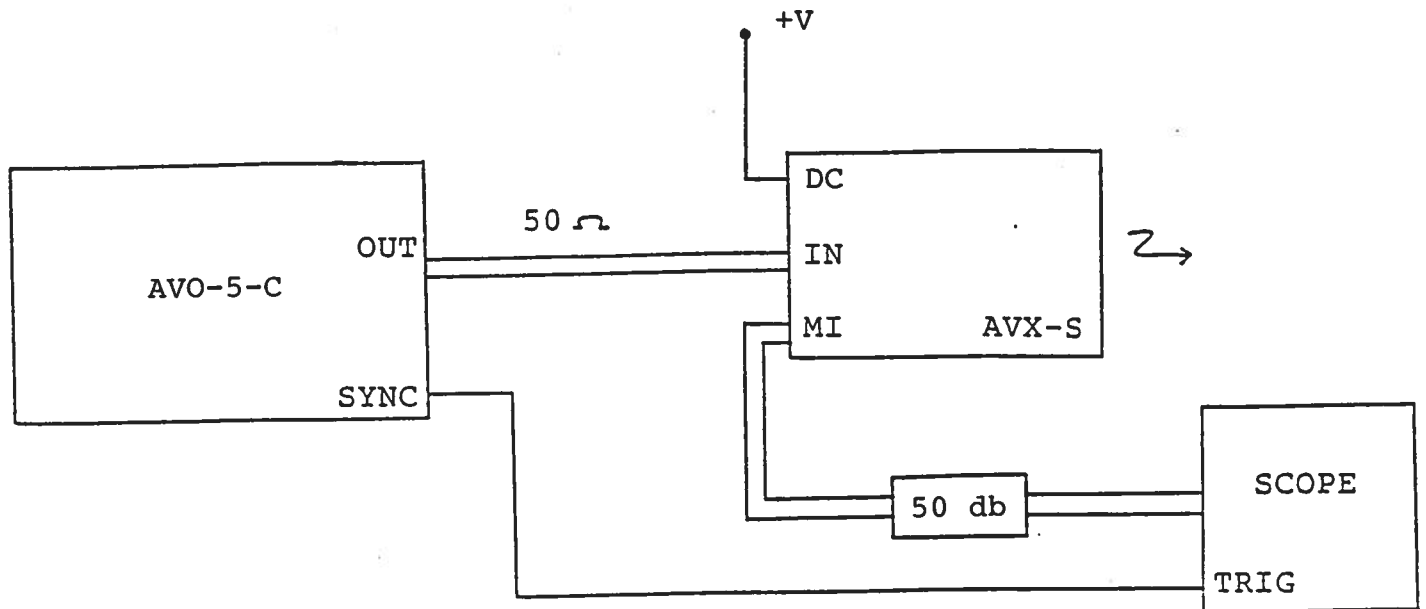
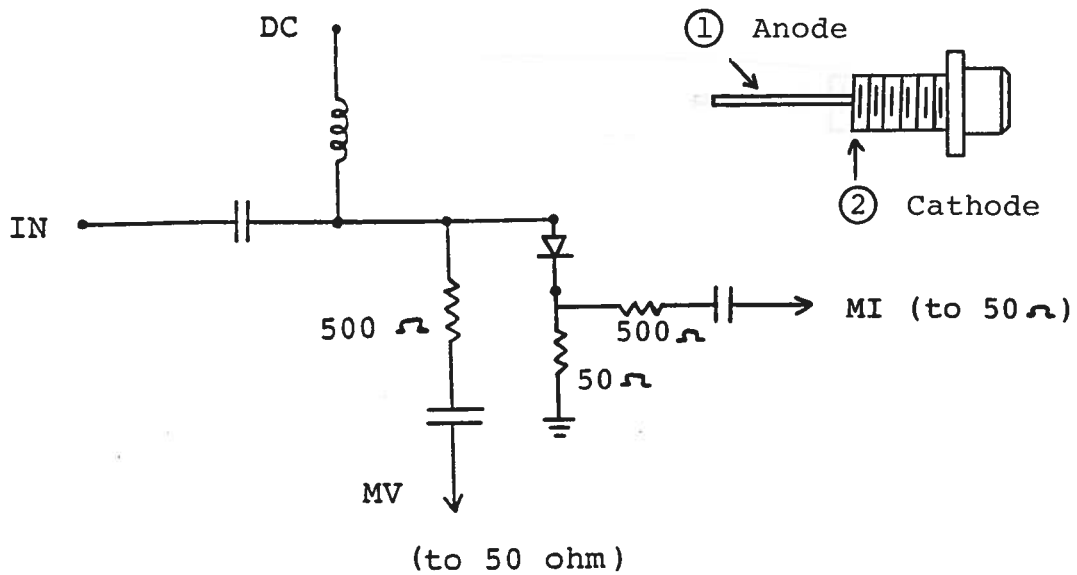


Fig. 2

FUNCTIONAL EQUIVALENT CIRCUIT

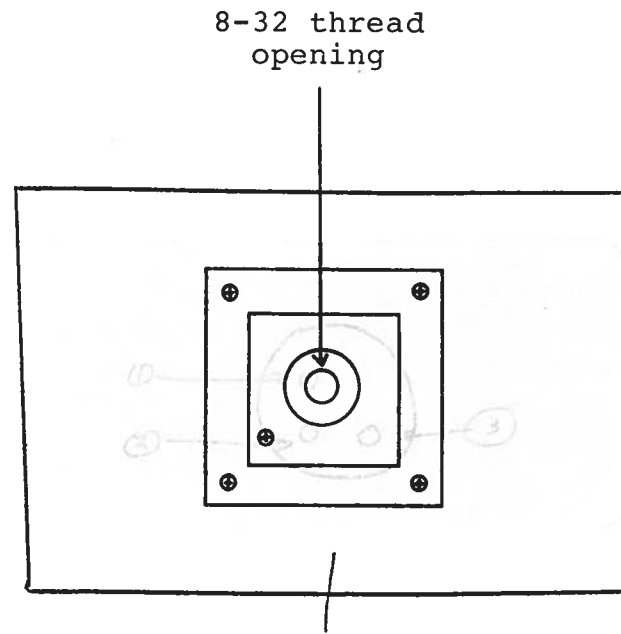
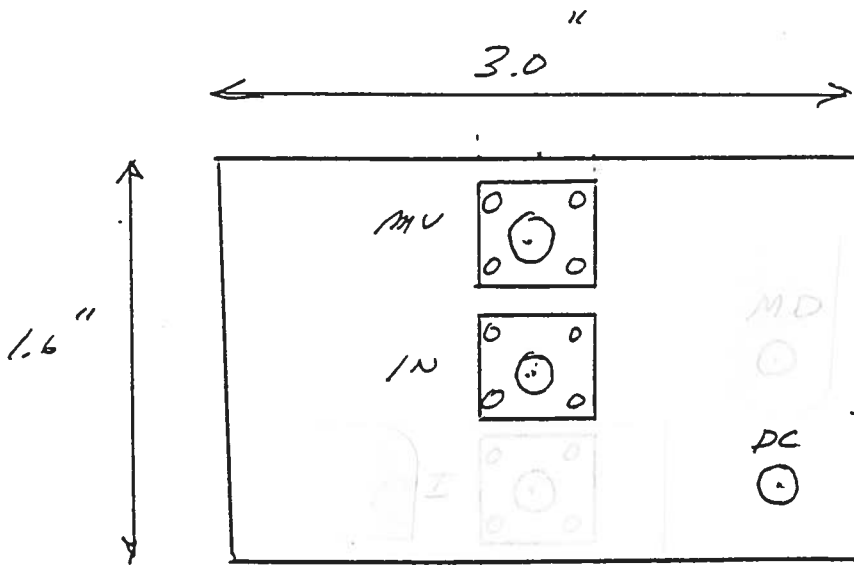


Set AVO-5-C  
output on P  
for this  
package

Notes:

- 1) Gently insert the anode lead of the OP-3 package into the 8-32 threaded opening of the AVX-S1 unit and contact the pin socket which is located about 1 centimeter into the 8-32 opening. Push the anode lead into the socket until the 8-32 threads on the package contact the body of the AVX-S1 unit. Then screw the package into the threads using finger force only. Note that the above operation is much easier if the anode lead is very straight.
- 2) The DC terminal of the bias insertion must either be shorted to ground (if a DC offset is not required) or a DC power supply must be applied. The laser diode will not function if the DC terminal is open circuited. Note that the DC current must not exceed ±100 mA.
- 3) The MI port must be terminated into 50 ohms. Note that a 50 db (or larger) attenuator should be placed between the AVX-S MI output and the scope input since the MI output is very nearly equal to 0.1 the amplitude of the input drive pulse (therefore MI provides outputs as high as 35 volts).
- 4) The diode current  $I_D$  (Amps) and the MI output voltage are related as follows:

$$I_D = 0.2 MI$$



FLUSH-MOUNTED  
SOCIET  
ASSEMBLY

PACKAGE

11.28.90



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①



Figure 1