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INSTRUCTIONS

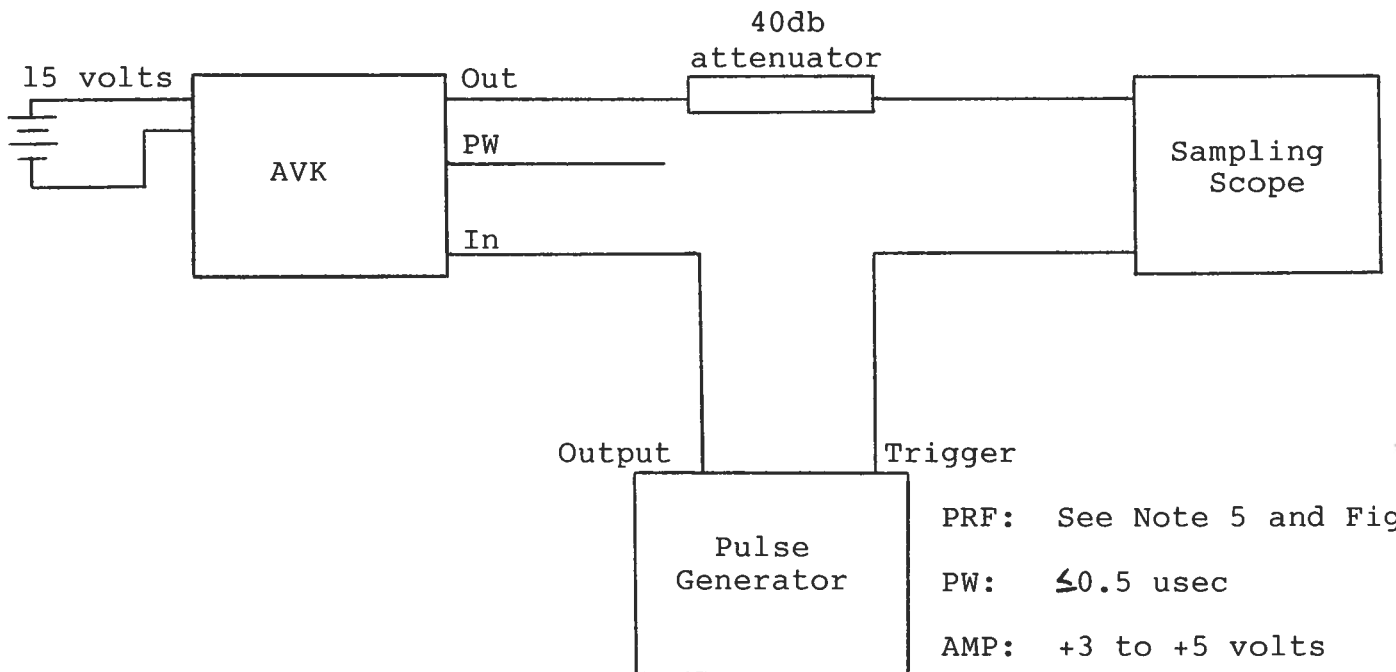
MODEL AVK PULSE GENERATOR

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.

MODEL AVK PULSE GENERATOR TEST ARRANGEMENT



Notes:

- 1) The bandwidth capability of components and instruments used to display the pulse generator output signal (attenuators, cables, connectors, etc.) should exceed ten gigahertz.
- 2) The use of a 40 db attenuator will insure a peak input signal to the sampling scope of less than one volt.
- 3) In general, the pulse generator trigger delay control should be set in the 100 nsec range. Other settings should be as shown in the above diagram. The Avtech pulse generator output is delayed with respect to the trigger input signal by about 50 nsec. (typically).
- 4) The Model AVK output pulse width is a linear function of the length of open circuited coaxial cable connected to the "PW" port (see Fig. 1). The open circuited delay line should be formed from high-quality semi-rigid 50 ohm coaxial cable (eg. 0.085 inch copper 50 ohm semi-rigid). Miniature flexible coaxial cable such as RG 174 may be used but will result in a degraded fall time. In the absence of an external cable connected to the tune port, Model AVK outputs a 4 nsec pulse.
- 5) The minimum pulse repetition frequency period is related to the delay line cable length (or pulse width) as shown in Fig. 2. If the PRF period for a given cable length is less than that specified in Fig. 2, the output pulse amplitude will be less than the specified value and prolonged operation in this mode could result in damage to the unit. Therefore, operation in or beyond the shaded region should be avoided.
- 6) The Model AVK pulse generator can withstand an infinite VSWR on the output port.

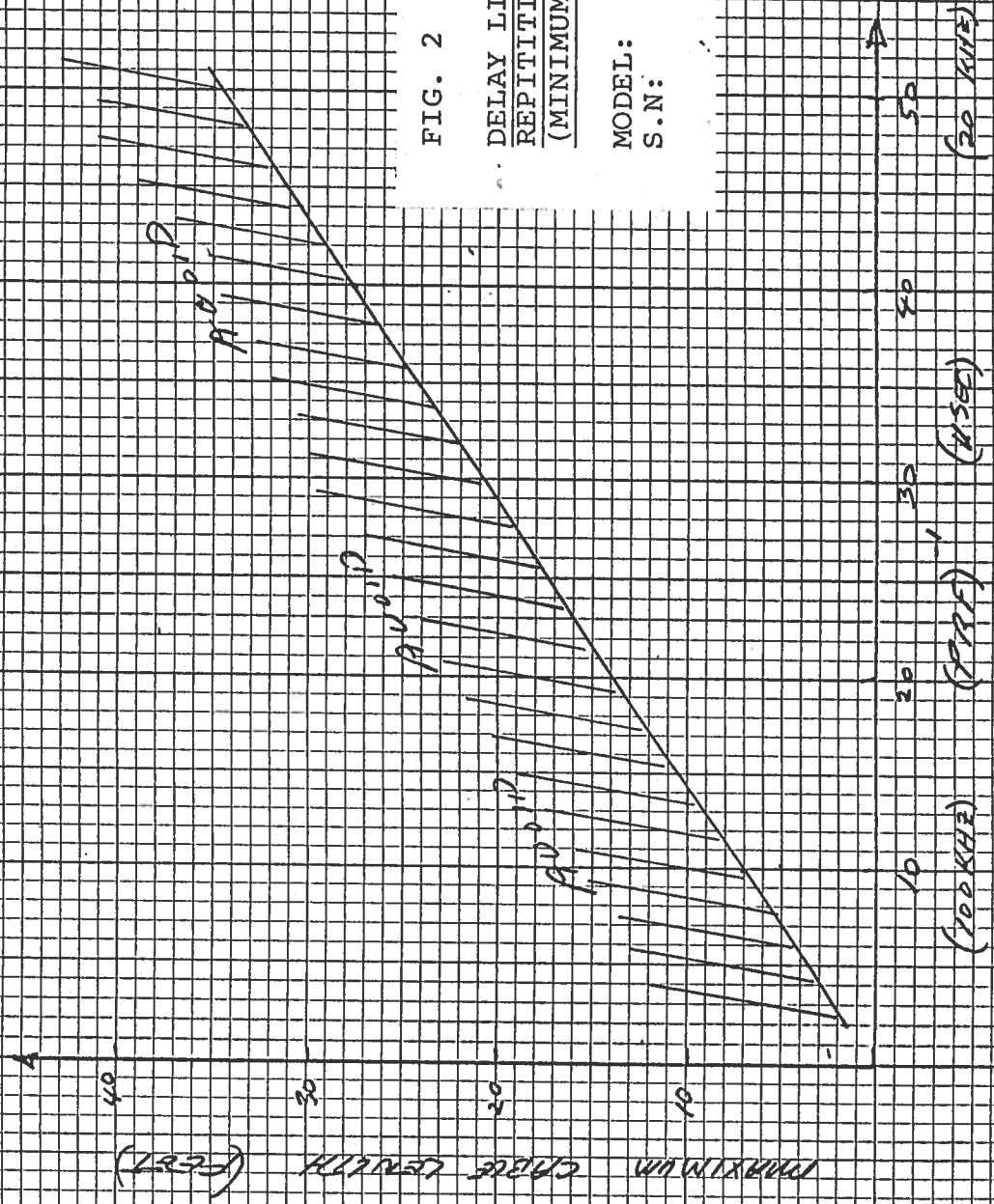


FIG. 2

DELAY LINE CABLE LENGTH VS PULSE REPETITION FREQUENCY PERIOD (MINIMUM ALLOWABLE PERIOD)

MODEL: AVK-A
S.N:

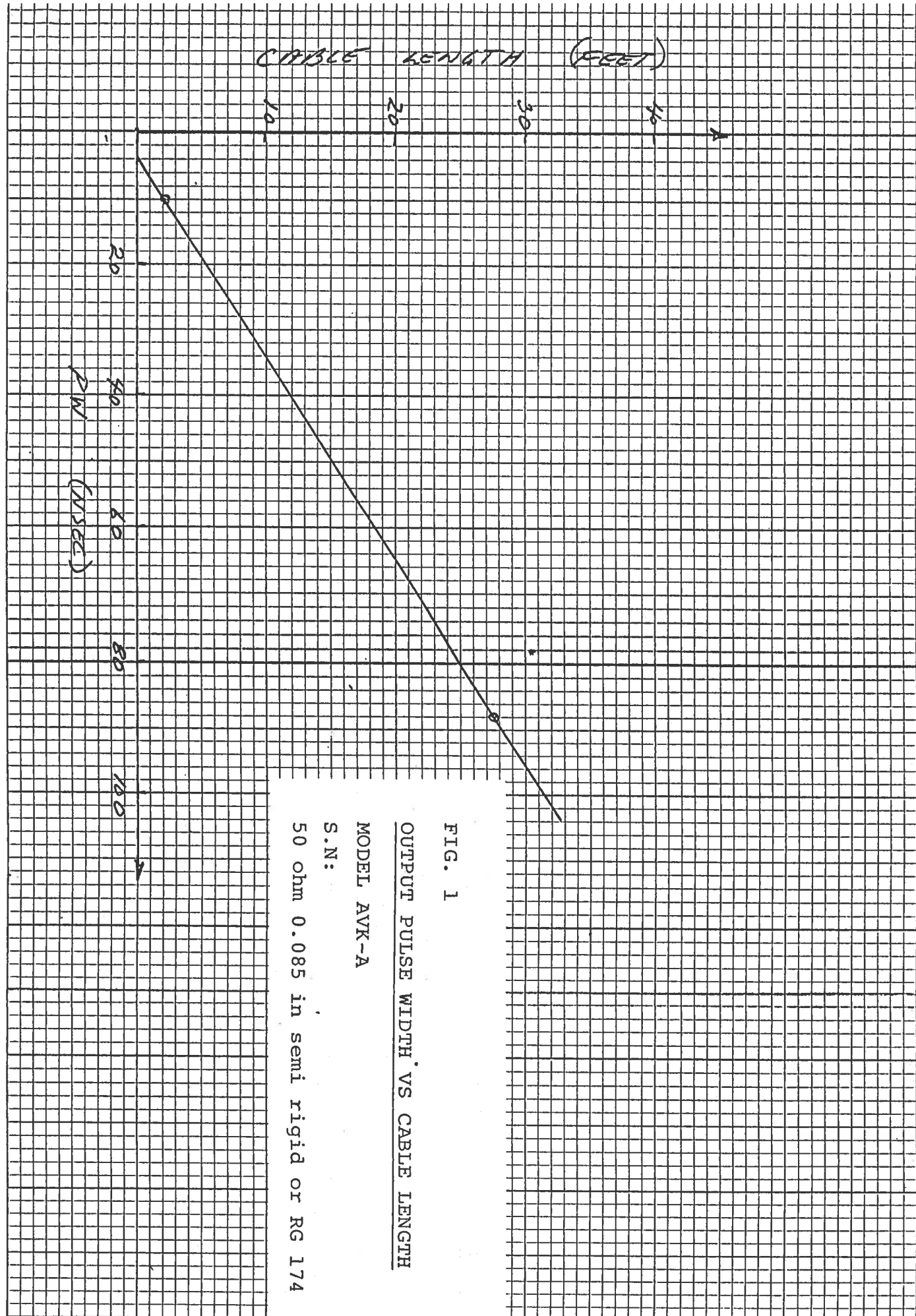


FIG. 1

OUTPUT PULSE WIDTH VS CABLE LENGTH

MODEL AVK-A

S.N:

50 ohm 0.085 in semi rigid or RG 174