

### AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS SINCE 1975

P.O. BOX 265 OGDENSBURG, NY U.S.A. 13669-0265 TEL: (315) 472-5270 FAX: (613) 226-2802 TEL: 1-800-265-6681 FAX: 1-800-561-1970

e-mail: info@avtechpulse.com http://www.avtechpulse.com P.O. BOX 5120 STN. F OTTAWA, ONTARIO CANADA K2C 3H4 TEL: (613) 226-5772 FAX: (613) 226-2802

### **INSTRUCTIONS**

**MODEL AVP-AV-1 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 dissembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

#### **TECHNICAL SUPPORT**

Phone: 613-226-5772 or 1-800-265-6681 Fax: 613-226-2802 or 1-800-561-1970

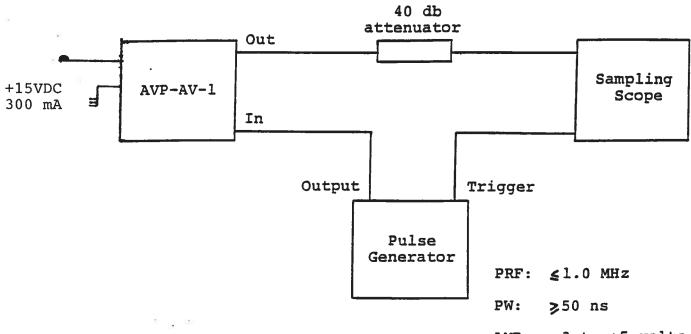
E-mail: info@avtechpulse.com World Wide Web: http://www.avtechpulse.com

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Manual Reference: Q:\office\instructword\Avp\AVP-AV-1.doc, created July 12, 1999

FIG. 1: PULSE GENERATOR TEST ARRANGEMENT



AMP: +3 to +5 volts

#### **GENERAL OPERATING INSTRUCTIONS**

- 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 40 dB attenuator will insure a peak input signal to the sampling scope of less than one Volt.
- 3) In general, the source pulse generator trigger delay control should be set in the 0.1 to 1.0 us range. Other settings should be as shown in the above diagram.
- 4) The Model AVP-AV pulse generator can withstand an infinite VSWR on the output port.
- 5) <u>WARNING</u>: Model AVP-AV may fail if triggered at a PRF greater than 1.0 MHz.
- The output pulse width is controlled by means of the one turn potentiometer (PW). The pot should initially be set maximum clockwise and the pulse width adjusted using an oscilloscope.
- 7) The output pulse amplitude is controlled by means of the one turn potentiometer (AMP). The pulse width may change by several nanoseconds as the output amplitude is reduced from maximum to minimum. Therefore it is convenient to first set the desired amplitude and then set the desired pulse width. Rotation of the PW pot causes the position of the falling edge of the pulse to change.
- 8) Some properties of the output pulse may change as a function of the amplitude pot setting. For some demanding applications, it may be desirable to use a combination of external attenuators and the amplitude pot to achieve the desired output amplitude.
- 9) For additional assistance:

Tel: 613-226-5772 Fax: 613-226-2802

# PERFORMANCE CHECK SHEET

July 99

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