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
U.S.A. & CANADA

e-mail: info@avtechpulse.com

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

INSTRUCTIONS

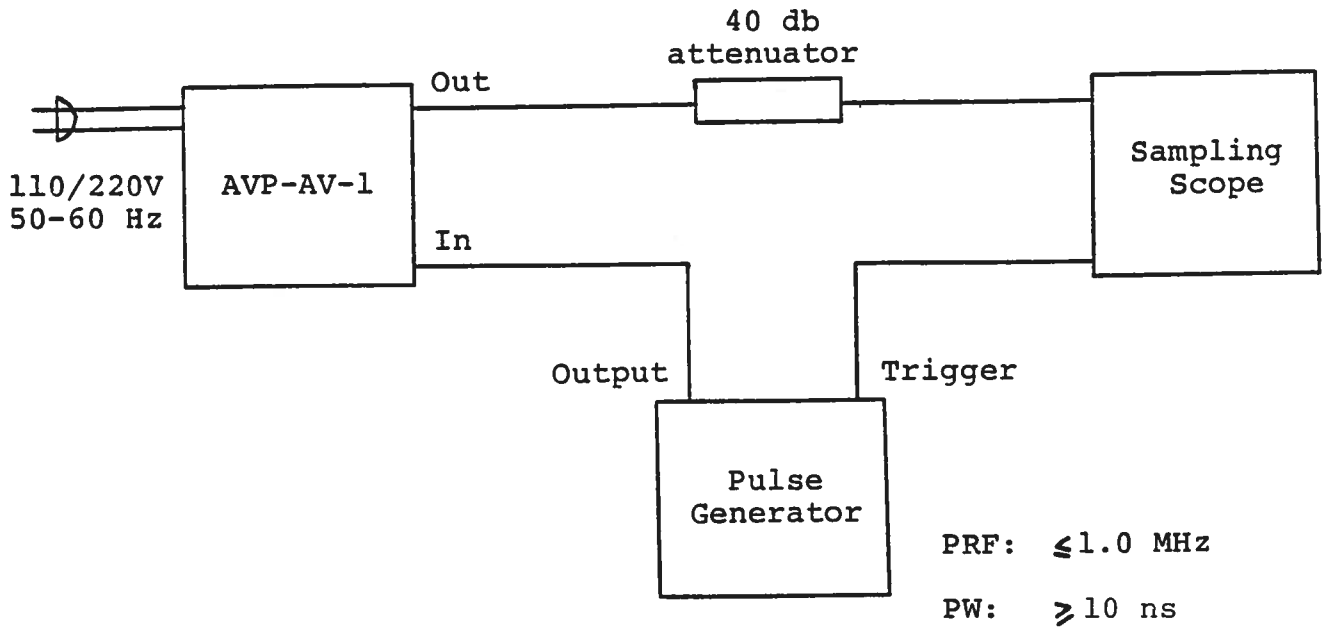
MODEL AVP-AV-1-EA-ECL-M PULSE GENERATOR

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 or liability assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

MODEL AVP-AV-1 PULSE GENERATOR TEST ARRANGEMENT



PRF: ≤1.0 MHz

PW: ≥10 ns

AMP: ECL levels,
-0.9 and
-1.8 Volts

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 40 dB attenuator will insure a peak input signal to the sampling scope of less than one Volt.

3) The AVP unit requires an ECL level trigger pulse (-0.9 and -1.8 Volts) to trigger the input circuit (MC10125). The input circuit does not include a -2.0V, 50 Ohm shunt termination.

4) WARNING: Model AVP-AV may fail if triggered at a PRF greater than 1.0 MHz.

5) 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.

6) 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 applying 0 to +10 VDC to the AMP solder terminal ($R_{IN} \geq 1K$).

8) The monitor output (-M) provides a 20 dB (i.e. x10) attenuated coincident replica of the main output.

9) 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.

10) For additional assistance:

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

Oct. 3/95

Disk: AVP-AV-1

Name: 1EAECLM.INS