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INSTRUCTIONS

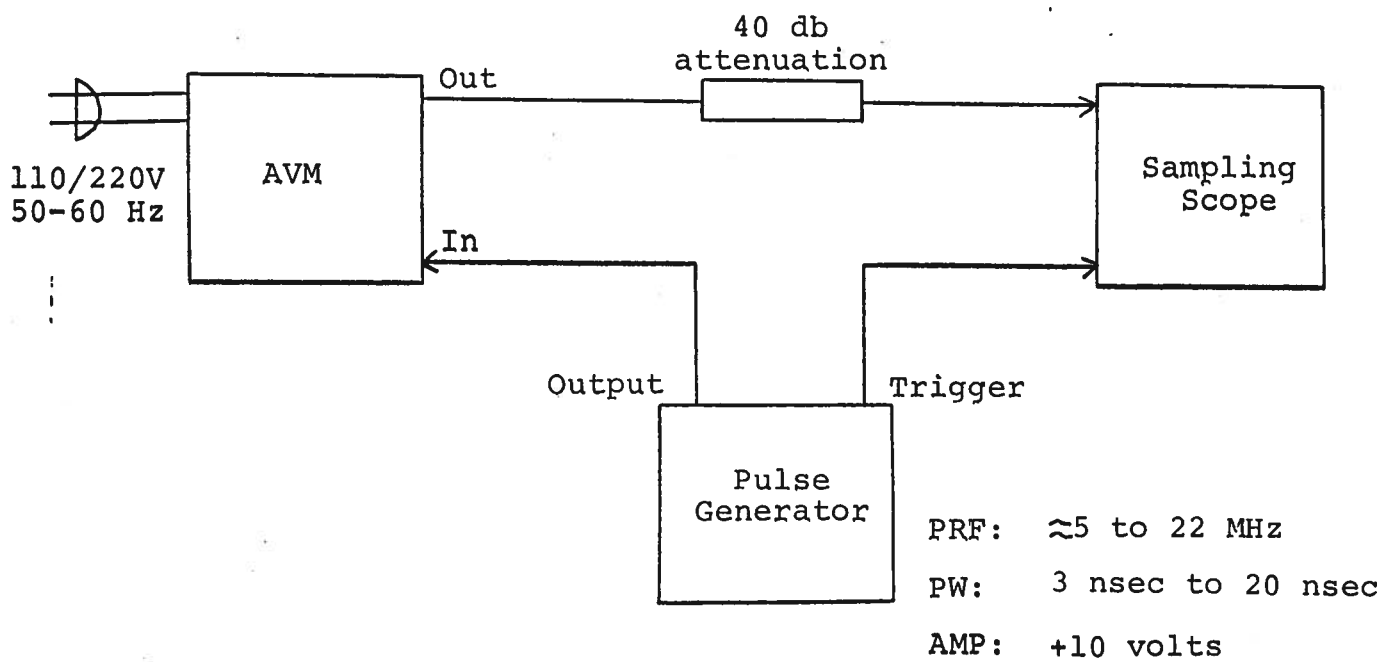
MODEL AVM-2-PS-HV-LA1 PULSE GENERATOR

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 AVM-PS PULSE GENERATOR TEST ARRANGEMENT



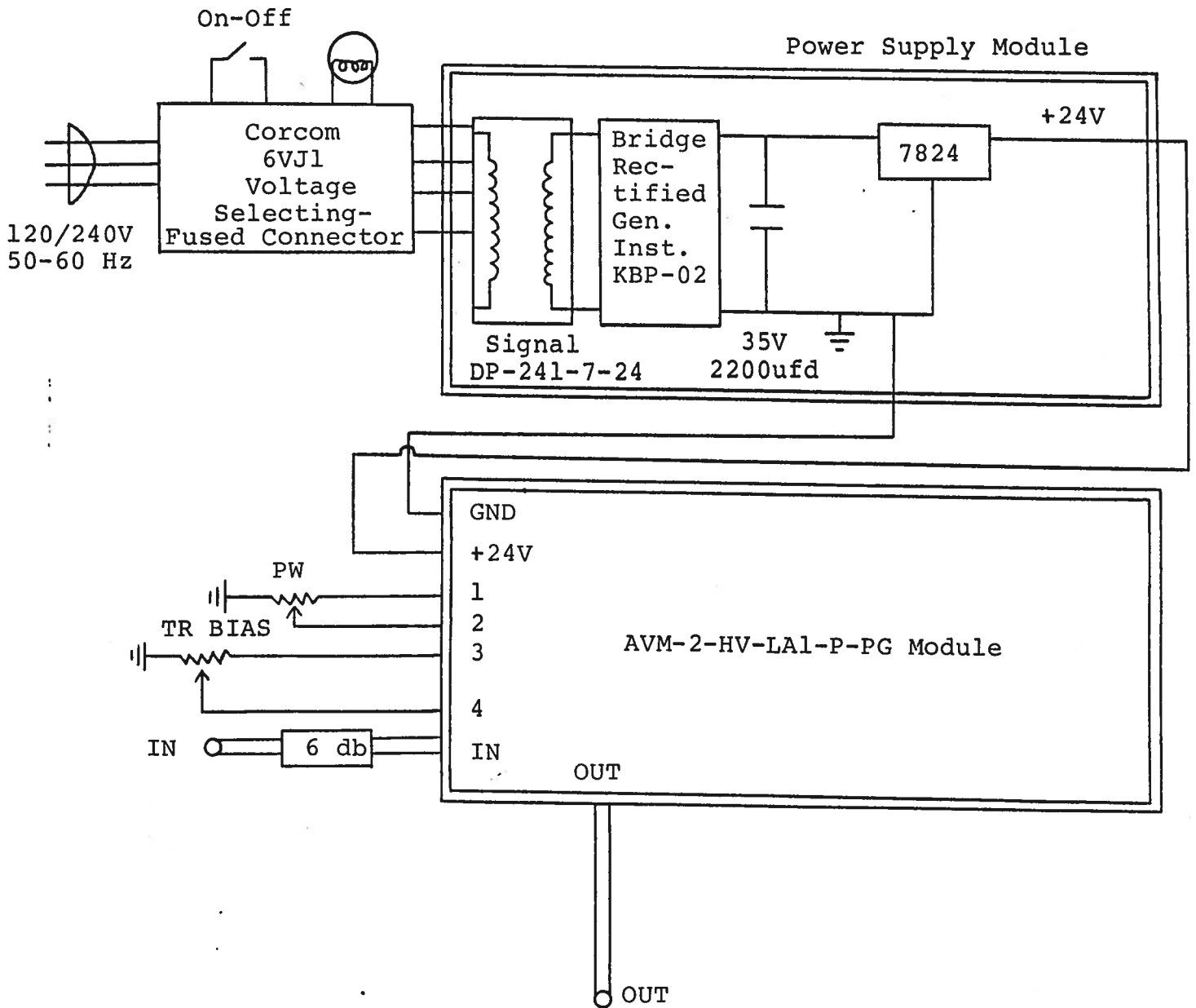
Notes:

- 1) The bandwidth capability of components and instruments used to display the pulse generator output signal (attenuators, cables, connectors, etc.) should exceed two 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 usec range.
- 4) The output pulse width is controlled primarily by the front panel one turn PW control. The pot should initially be set maximum clockwise and the pulse width adjusted using an oscilloscope.
- 5) The rear panel one turn TR BIAS control has a minor effect on the output pulse width, overshoot and amplitude. Clockwise rotation of the pot increases the amplitude and overshoot and decreases the pulse width. For operation at 22 MHz, the control should be set near maximum clockwise.
- 6) WARNING: Model AVM-PS may fail if triggered at a PRF greater than 25.0 MHz.
- 7) The Model AVM-PS pulse generator can withstand an infinite VSWR on the output port.
- 8) The unit can be converted from 110 to 220V 50-60 Hz operation by adjusting the voltage selector card in the rear panel fused voltage selector cable connector assembly.

SYSTEM DESCRIPTION AND REPAIR PROCEDURE

The AVM-2-PS consists of a pulse generator module (AVM-2-HV-LA1-P-PG) and a power supply board which supplies +24 volts (800 mA max) to the pulse generator module. In the event that the AVM-PS unit malfunctions, remove the instrument cover by removing the four Phillips screws on the back of the unit. The top lid may then be slid off. Measure the voltage at the +24V pin of the PG module. If this voltage is substantially less than +24 volts, unsolder the line connecting the power supply and PG modules and connect 50 ohm 10 W load to the PS output. The voltage across this load should be about +24 V DC. If this voltage is substantially less than 24 volts the PS module is defective and should be repaired or replaced. If the voltage across the resistor is near 24 volts, then the PG module should be replaced or repaired. The sealed PG module must be returned to Avtech for repair (or replacement). The unit also includes a 6 db attenuator module on the input to the AVM-2-HV-LA1-P-PG module. This attenuator reduces the input pulse amplitude from 10 to 5 volts, as required by the AVM-2-HV-LA1-P-PG module.

SYSTEM BLOCK DIAGRAM AND REPAIR PROCEDURE



Schroff

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