

### AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS SINCE 1975

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### **INSTRUCTIONS**

MODEL AVL-VSA-P UNIPOLAR 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

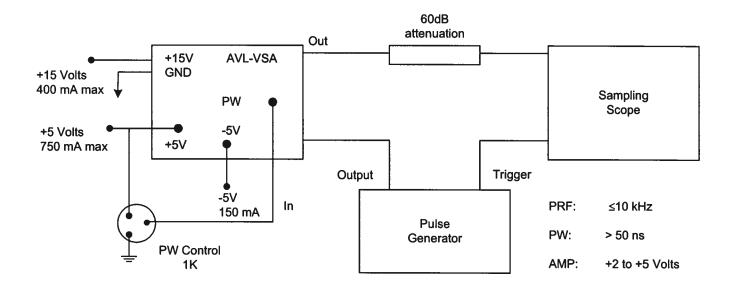
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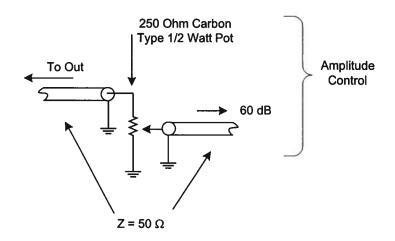
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Manual Reference: T:\instructword\AvI\AVL-VSA-P, edition1.doc, created November 25, 2002

# FIG. 1: PULSE GENERATOR TEST ARRANGEMENT





### **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 one gigahertz.
- 2) The use of 60 dB attenuator will insure a peak input signal to the sampling scope of less than one volt.
- 3) The chassis should be securely bolted to a heat sink capable of dissipating about 10 Watts.
- 4) In general, the pulse generator trigger delay control should be set in the < 100 ns range. Other setting s should be as shown in the above diagram. The monocycle generator output is delayed with respect to the trigger input signal by about 50 ns (typically).
- 5) The output pulse width is controlled by varying the DC potential on pin PW from 0 to +5 Volts using either a 1K pot or an equivalent switched resistor arrangement.
- 6) A 4-cable group of RG174 50-Ohm cables protrudes for about 5 feet from the side of the chassis. These open circuited cables may be coiled as required but note that potentials as high as 330 VDC are present on the center conductor.
- 7) A 250 Ohm pot may be used as shown in Fig. 1 to provide amplitude control
- 8) For additional information:

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Quote No: 11249 Sender's Fax: 613-226-2802 File: Q:\office\QUOTES\q11249.doc Receiver's Fax: 416-482-3865 To: Receiver's Phone: VisualSonics 416-482-3838 Toronto, ON Date: October 24, 2002 Attn: Brian Starkoski Number of pages: 2, including cover Subject: Price and delivery quotation

Following our telephone conversation of Oct. 24, 2002, I am pleased to provide a price and delivery quotation for a special purpose unipolar pulse generator meeting the following specifications:

**Quote Number:** 

11249

Model designation:

**AVL-VSA-P** 

Pulse width:

8 to 16 ns (Controlled by a one turn pot which connects to

three front panel solder terminals).

Amplitude:

0 to +200 volts zero to peak. AMP control is via a user-

supplied 250 Ohm pot in the output line. Instructions included.

PRF:

1 to 10 kHz

Input Trigger Required:

TTL, PW ≥ 50 ns

Prime Power:

a) +15 VDC, 350 mA (max)

b) +5 VDC, 400 mA (max)

Chassis Size:

1.7" x 3.0" x 6.0"

Input and Output Connectors:

SMA (on 1.7" x 3.0" face)

Other:

This is a low spurious unipolar version of model AVB2-TC-

**SB2-B2** 

Price:

\$1,698.00 US each, FOB Destination. (For a quantity of 1)

Delivery:

30 days

GST:

7% extra

PST:

8% extra, if applicable

Terms:

Prepayment, 2 weeks before required delivery date.

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Thank you for your continuing interest in our products. Please call me again (1-800-265-6681) if you require any further information.

Regards,

Mary Budarick Sales Manager Nov 25/02