



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 AVB2-TC-SB2 MONOCYCLE GENERATOR

(-B2 MOD)

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

TECHNICAL SUPPORT

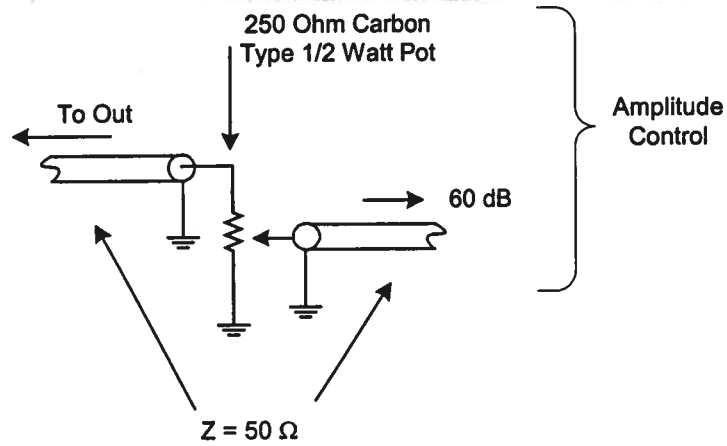
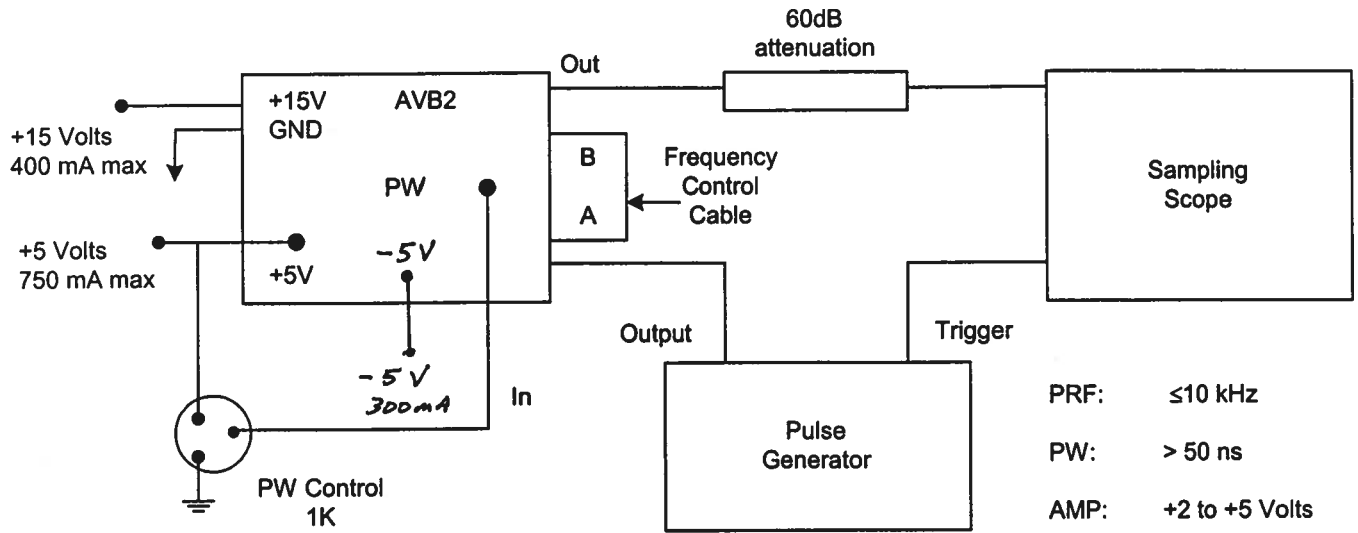
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World Wide Web: <http://www.avtechpulse.com>

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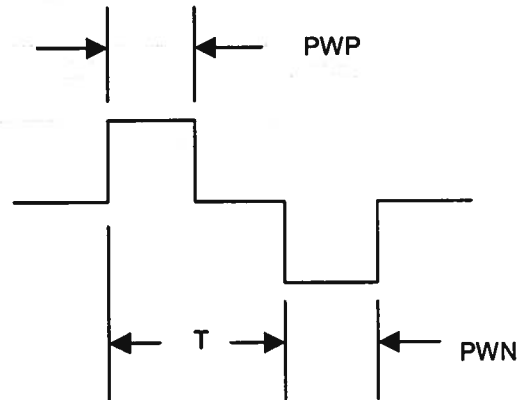
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FIG. 1: MONOCYCLE GENERATOR TEST ARRANGEMENT



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 settings should be as shown in the above diagram. The monocyte generator output is delayed with respect to the trigger input signal by about 50 ns (typically).
- 5) The frequency control cable (see attached graph) may be fabricated from RG174 miniature coax or from 85 mil semi-rigid cable. Increasing the cable length increases the "T" of the output waveform:



- 6) PWP and PWN are 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.
- 7) Two 4-cable groups of RG174 50-Ohm cables protrude 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.

- 8) **CAUTION:** The +15 Volts supply should be disconnected when changing or removing the frequency control cable. (DC potential as high as 380V are applied to the center conductor).
- 9) A 250 Ohm pot may be used as shown in Fig. 1 to provide amplitude control
- 10) For additional information:

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Quote No:	<u>10826</u>	Sender's Fax:	<u>613-226-2802</u>
File:	<u>R:\QUOTES\Q10826.doc</u>	Receiver's Fax:	<u>416-644-5393</u>
To:	<u>VisualSonics</u>	Receiver's Phone:	<u>416-644-5390</u>
	<u>Toronto, ON</u>	Date:	<u>January 3, 2002</u>
Attn:	<u>Jim Wright</u>	Number of pages:	<u>2, including cover</u>
Subject:	<u>Price and delivery quotation</u>		

Following our telephone conversation of January 3, 2002, I am pleased to provide a price and delivery quotation for a special purpose monocycle generator meeting the following specifications:

Quote Number:	10826
Model designation:	AVB2-TC-SB2 * This module unit employs the same technology as Model AVB2-C, S.N. 4200 and incorporates the same modifications employed in the last three units shipped in 2001.
Frequency:	30 to 60 MHz (Controlled by a delay line which connects to two SMA connectors on the 1.7" x 3.0" face) and by a one turn pot which connects to three front panel solder terminals.
Amplitude:	0 to 300 volts peak 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 \geq 50 ns
Prime Power:	a) +15 VDC, 500 mA (max) b) +5 VDC, 750 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:	See standard AVB2-TC-C, page 85, Cat. No. 11
Price:	\$3,260.00 US each, FOB Destination. (For a quantity of 14)
Note:	This price includes a quantity discount.

GST: 7% extra
PST: 8% extra, if applicable
Delivery: 4 units, February, Week 1
4 units, February, Week 4
4 units, March, Week 2
2 units, March, Week 4

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

Mary Budarick
Sales Manager

MB:mf

- * Note
- 1) Units with a -B2 suffix include a design modification which reduces the spurious out for high frequencies ($\geq 45\text{MHz}$).
 - 2) Units with a -B4 suffix include a design modification which reduces the spurious out for high frequencies ($\geq 45\text{ MHz}$) and which should also reduce the 3 us delayed glitch for low frequencies ($\leq 30\text{ Mhz}$).