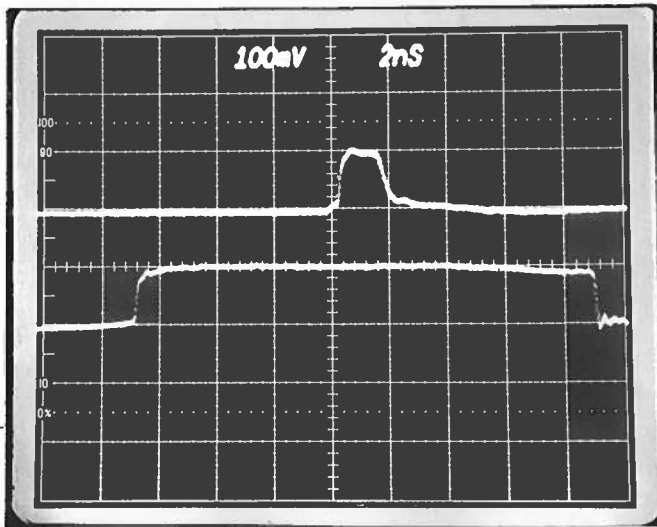


PULSE GENERATOR  
PERFORMANCE CHECK

Model: *MVPP-1-B-PN-0T*

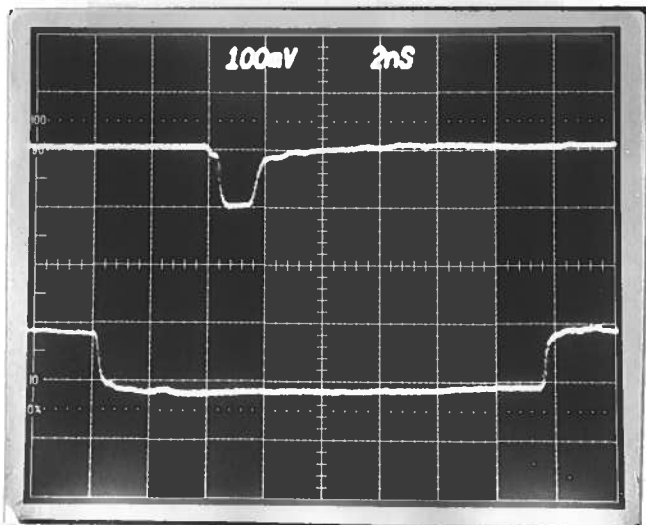
S.N.: *10120*

Date: *MAR 26 2002*



- a) Output signal amplitude:  
*0 TO ± 10 VOLTS*
- b) Pulse width: *(TO 50 N)*  
*0.4 TO 100 N*
- c) Rise time:  
*≤ 200 ps*
- d) Fall time:  
*≤ 200 ps*
- e) PRF: *0 TO 1.0 MHz*
- f) Jitter, stability: *OK*
- g) Prime power:  
*170/240 V*  
*50-60 Hz*

⊙ Pos out, 2ns/div, 10V/div



⊙ Neg out, 2ns/div, 10V/div

*40 dB ATTN*  
*PRF = 100 KHz*



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

## "-B" Functional Test & Calibration Certificate

|                                       |                           |             |                                     |                        |                     |     |
|---------------------------------------|---------------------------|-------------|-------------------------------------|------------------------|---------------------|-----|
| Date of test:                         | March 26, 2002            |             |                                     |                        | Tester:             | MJC |
| Programmed model name:                | AVPP-1-B-P-PN-OT          |             |                                     |                        |                     |     |
| Programmed serial number:             | 10120                     |             |                                     |                        |                     |     |
| Firmware revision:                    | 2.38                      |             |                                     |                        |                     |     |
| Temp, RH:                             | 24.6°C, 18.4%             |             |                                     |                        |                     |     |
| Internal trigger checked at:          | 1 Hz                      | 100 Hz      | 1 kHz                               | 10 kHz                 | 1 MHz               |     |
| Actual measured output <sup>1</sup> : | 0.999 Hz                  | 99.9 Hz     | 0.998 kHz                           | 9.99 kHz               | 1.01 MHz            |     |
| External trigger checked:             | yes                       |             |                                     | Gate checked:          | yes                 |     |
| Manual trigger checked:               | yes                       |             |                                     |                        |                     |     |
| Pulse compression checked:            | yes                       |             | Low Amplitude PW Distortion Nulled: |                        |                     | N/A |
| Pulse width checked at:               | 1 ns                      | 10 ns       | 100 ns                              | 100 kHz, +10V          |                     |     |
| Actual measured output <sup>2</sup> : | 1.1 ns                    | 10.2 ns     | 100.2 ns                            | to 50 Ohms             |                     |     |
| PWin = PWout mode checked:            | N/A                       |             |                                     | DC mode checked:       | N/A                 |     |
| Duty Cycle Limit:                     | N/A                       |             |                                     |                        |                     |     |
| Delay nulled:                         | yes, at TTL trigger point |             |                                     |                        |                     |     |
| Delay checked at:                     | 100 ns                    | 200 ns      | 500 ns                              | TTL trig to SYNC       |                     |     |
| Actual measured output <sup>1</sup> : | 99.9 ns                   | 201.2 ns    | 506 ns                              |                        |                     |     |
| Double pulse checked:                 | N/A                       |             |                                     |                        |                     |     |
| Invert mode checked:                  | N/A                       |             |                                     |                        |                     |     |
| ECL/TTL modes checked:                | N/A                       |             |                                     |                        |                     |     |
| Zout switch checked:                  | N/A                       |             |                                     |                        |                     |     |
| Amplitude checked at:                 | +10V, 2 ns                | +10V, 50 ns | -10V, 2 ns                          | -10V, 50 ns            | 100 kHz, to 50 Ohms |     |
| Actual measured output <sup>2</sup> : | +10.0V                    | +10.0V      | -10.0V                              | -10.2V                 |                     |     |
| Amplitude polarity:                   | +/-                       |             |                                     |                        |                     |     |
| Zout calibration:                     | N/A                       |             |                                     |                        |                     |     |
| Electronic amplitude control:         | N/A                       |             |                                     |                        |                     |     |
| External amplify mode:                | N/A                       |             |                                     |                        |                     |     |
| Ultravolt flux removed:               | N/A                       |             |                                     |                        |                     |     |
| Monitor V/I Ratio:                    | N/A                       |             |                                     | Monitor offset nulled: |                     |     |
| LCD Monitor calibrated:               | N/A                       |             |                                     |                        |                     |     |
| Offset checked at:                    | -5V                       | 0V          | +5V                                 | into 50 Ohms           |                     |     |
| Actual measured output <sup>2</sup> : | -4.99V                    | 0.00V       | +5.01V                              |                        |                     |     |
| Offset nulled (output on):            | yes                       |             | Amplitude-dependent offset nulled:  |                        |                     | N/A |
| Offset nulled (output off):           | N/A                       |             |                                     |                        |                     |     |
| RS-232 checked:                       | yes                       |             |                                     |                        |                     |     |
| Sync pulse width checked:             | 200 ns nom                |             |                                     |                        |                     |     |
| Circuit Boards:                       | PS:                       | 93          | Main:                               | 108E                   |                     |     |
| Overload Trigger Resistance:          | Trips at:                 | N/A         | Installed:                          | N/A                    |                     |     |
| DC fuses:                             | Positive:                 | N/A         | Negative:                           | N/A                    |                     |     |
| AC Current at 115 VAC:                | Quiescent:                | 0.47A       | Max. Load:                          | 0.50A                  |                     |     |
| AC fuse:                              | 1A                        |             |                                     |                        |                     |     |
| 120/240V operation:                   | OK                        |             |                                     | Fan operational:       | yes                 |     |
| Photographed:                         | yes                       |             |                                     |                        |                     |     |

<sup>1</sup> Checked with: Fluke PM6681 Counter (S/N 9446 066 81016), referenced to Datum ExacTime 9390-6000 (S/N 4461) GPS Frequency Reference

<sup>2</sup> Checked with: Tektronix TDS3052 digital oscilloscope (S/N B014783) for PW ≥ 5 ns, Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system (Cal. Label 112506) for PW < 5 ns.