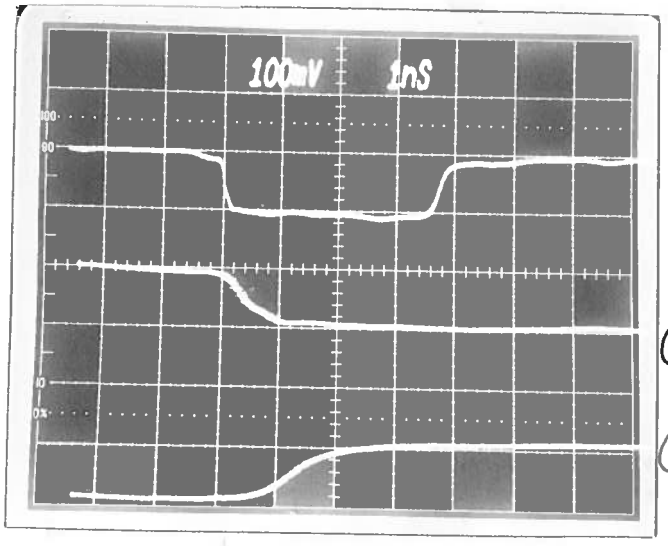
PULSE GENERATOR

PERFORMANCE CHECK

Model: AP-W-1-B-N

S.N.: 10869

Date: MAR 22 2004



a) Output signal amplitude:
0 TO -10V (TO 50-Ω)

b) Pulse width:
0.4 TO 4.0 NS)

(1) c) Rise time:
≤ 200 PS

(2) d) Fall time:
≤ 200PS

(3) e) PRF:
0 TO 1.0 MHz.

f) Jitter, stability:
OK

g) Prime power:
100 VOLTS TO 240 V
50 - 60 HZ.

40 dB ATTN : 10V/DIV

(1) 1 NS/DIV

(2) 200PS/DIV, RISE TIME

(3) 200PS/DIV, FALL TIME

PRF = 100 KHz FOR 1, 2 + 3.

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/

☒ BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

"-B" Functional Test & Calibration Certificate

Date of test:	March 19, 2004			Tester:	MJC
Programmed model name:	AVP-AV-1-B-N				
Programmed serial number:	10869				
Firmware revision:	2.57				
Internal trigger checked at:	1 Hz	1 kHz	10 kHz	100 kHz	1 MHz
Actual measured output[1]:	0.999 Hz	0.998 kHz	9.981 kHz	100.3 kHz	1.009 MHz
External trigger checked:	Yes			Gate checked:	Yes
Manual trigger checked:	Yes				
Pulse compression checked:	N/A		Low Amplitude PW Distortion Nulled:		N/A
Pulse width checked at:	0.4 ns	1 ns	2.5 ns	4 ns	100 kHz, -10V
Actual measured output[2]:	0.38 ns	1.05 ns	2.6 ns	4.0 ns	to 50Ω
PWin = PWout mode checked:	N/A			DC mode checked:	N/A
Duty Cycle Limit:	N/A				
Delay nulled:	Yes				
Delay checked at:	100 ns	1 us	10 us	100 us	100 Hz, -10V
Actual measured output[1]:	100.1 ns	1.001 us	10.02 us	100.1 us	to 50Ω
Double pulse checked:	N/A				
Invert mode checked:	N/A				
ECL/TTL modes checked:	N/A				
Zout switch checked:	N/A				
Amplitude checked at:	-2V	-5V	-8V	-10V	100 kHz, 4 ns
Actual measured output[2]:	-2.1V	-5.2V	-8.0V	-10.2V	PW to 50Ω
Amplitude polarity:	-				
Zout calibration:	N/A				
Electronic amplitude control:	N/A				
External amplify mode:	N/A				
Bleeder resistors adequate:	N/A				
Burst mode:	N/A				
Monitor V/I Ratio:	N/A			Monitor offset nulled:	
LCD Monitor calibrated:	N/A				
Offset checked at:	N/A				
Actual measured output[2]:	N/A				
Offset nulled (output on):	N/A		Amplitude-dependent offset nulled:		
Offset nulled (output off):	N/A				
RS-232 checked:	Yes				
LCD pull-ups installed:	N/A				
PCB 108G/H resistor updates:	Yes				
PN trigger pull-downs installed:	Yes				
Sync pulse width checked:	100 ns				
Circuit Boards:	PS:	158E	Main:	108H	
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A	
DC fuses:	Main:	0.8A	Overload:	0.8A (spare)	
AC Current:	Quiescent:	0.18A @ 115V 0.15A @ 230V	Max. Load:	0.21A @ 115V 0.16A @ 230V	
AC fuse:	0.5A				
1.5 kV RMS, 5 second Hypot Test:	OK				
25A RMS Ground Continuity Test:	OK				
Fan operational:	Yes				
Photographed:	Yes				

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

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