



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/

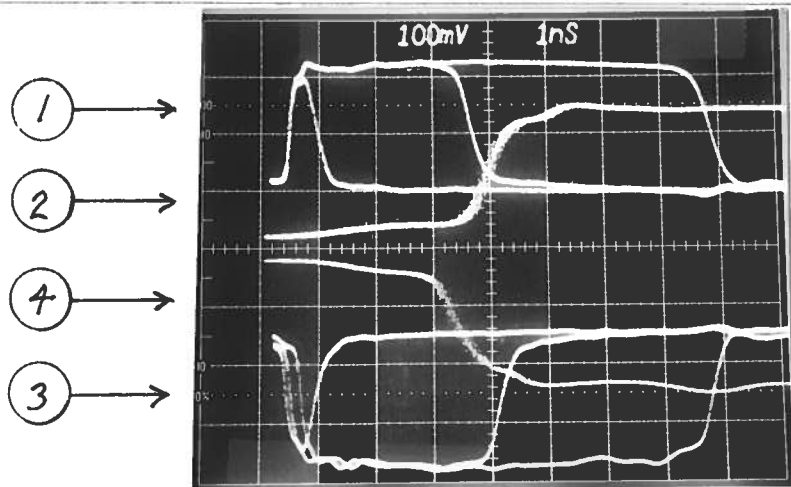
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: *AVPP-2-B-PN-M-AK1*

S.N.: *11344*

Date: *NOV 18 2005*



*PW RANGE 0.4 TO 8.0 NS
40 DB ATTN, 10 V/DIV*

① *POS OUT, 1 NS/DIV
PW_{MIN}, PW_{MID}, PW_{MAX}*

② *POS OUT, 200ps/DIV
RISE TIME*

③ *NEG OUT, 1 NS/DIV
PW_{MIN}, PW_{MID}, PW_{MAX}*

④ *NEG OUT, 200ps/DIV
RISE TIME
PRF = 100 KHz*

a) Output Signal Amplitude:
0 TO ±20V (TO 50Ω)

b) Pulse Width(FWHM):
0.4 NS TO 100 ns

c) Rise Time (20%-80%):
≤ 200 ps

d) Fall Time (80%-20%):
≤ 300 ps

e) PRF:
0 TO 100 KHz

f) Jitter, Stability:
OK

g) Prime Power: *100-240 V
50-60 Hz*



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/

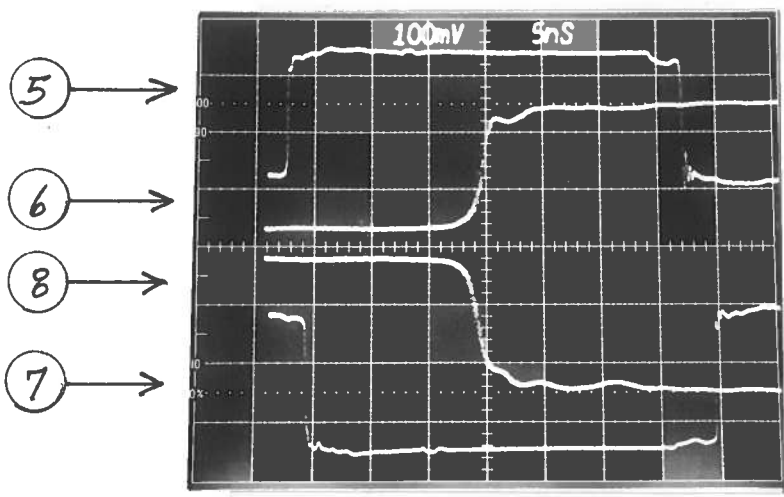
BOX 5120, LCD MERIVALE
 OTTAWA, ONTARIO
 CANADA K2C 3H4
 TEL: (613) 226-5772
 FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model:

S.N.: 11344 CONT.

Date:



a) Output Signal Amplitude:

b) Pulse Width(FWHM):

c) Rise Time (20%-80%):

d) Fall Time (80%-20%):

e) PRF:

f) Jitter, Stability:

g) Prime Power:

PW RANGE 8 TO 160ns
 40dB ATTN, 10V/DIV

⑤ POS OUT, 5 ns/DIV

⑥ POS OUT, 50ps/DIV
 RISE TIME

⑦ NEG OUT, 5 ns/DIV

⑧ NEG OUT, 50ps/DIV
 RISE TIME

PRF = 100kHz



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

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

e-mail: info@avtechpulse.com
http://www.avtechpulse.com/

"-B" Functional Test & Calibration Certificate

Date of test:	November 17, 2005				Tester:	MJC
Programmed model name:	AVPP-2-B-AK1-PN-M					
Programmed serial number:	11344		MAC address:	00:90:c2:c6:a1:2b		
Firmware revision:	3.34					
Internal trigger checked at:	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output ¹ :	10.02 Hz	100.0 Hz	1.001 kHz	10.00 kHz	99.8 kHz	
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:	1 ns	5 ns	20 ns	100 ns	10 kHz, +20V to 50Ω	
Actual measured output ² :	1.0 ns	4.8 ns	20.3 ns	99 ns		
PW _{in} = PW _{out} 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	1 kHz, 7 ns, +20V to 50Ω	
Actual measured output ¹ :	101 ns	0.998 us	9.97 us	99.7 us		
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	5 ns, +5V	5 ns, -20V	50 ns, -5V	50 ns, +20V	10 kHz, to 50Ω	
Actual measured output ² :	+5.2V	-20.1V	-5.0V	+20.0V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control (+ and -):	N/A					
External amplify mode:	N/A					
Bleeder resistors adequate:	Yes					
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			Telnet control checked:	N/A	
LCD pull-ups installed:	N/A					
PCB 108H oscillator buffer resistor:	N/A		PW, delay bias (1k/820/108H or 1k/604/108M):	N/A		
PCB 108N TP14/C26 resistor:	OK					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns nominal					
Circuit Boards:	PS:	158J	Main:	108N		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	10k		
DC fuses:	Main:	2A	Overload:	0.5A		
AC Current:	Quiescent:	0.40A @ 115V 0.24A @ 230V	Max. Load:	0.45A @ 115V 0.26A @ 230V		
AC fuse:	0.5A					
1.5 kV _{RMS} , 5s, switch on, Hypot Test:	OK					
25A RMS Ground Continuity Test:	OK					
Fan operational:	Yes					
Top cover vent required:	No					
Photographed:	Yes					

¹ Checked with: Fluke PM6681 Counter (S/N 9446 066 81016), referenced to Datum ExactTime 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.