

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/

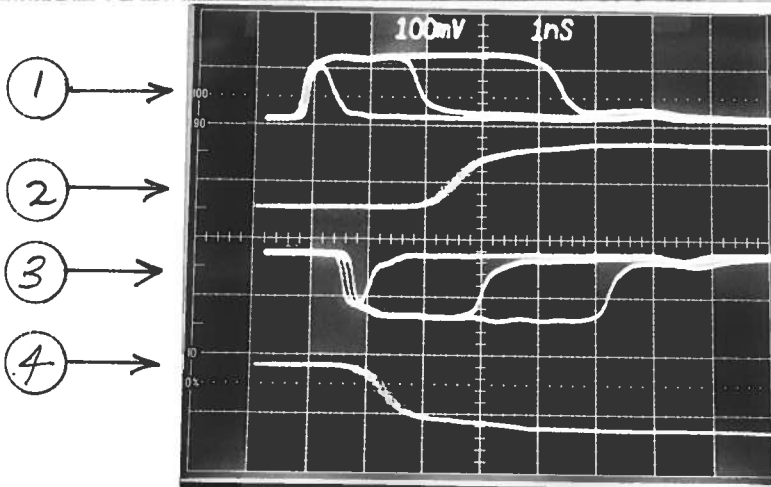
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: *AVPD-1A-B-PN-EA-TXT*

S.N.: *11343*

Date: *NOV 22 2005*



a) Output Signal Amplitude:
0 TO ± 10V (TO 50Ω)

b) Pulse Width(FWHM):
0.5 NS TO 1.0 US
5% MAX DUTY CYCLE

c) Rise Time (20%-80%):
≤ 200ps

d) Fall Time (80%-20%):
≤ 300ps

e) PRF:
0 TO 500 KHz
5% MAX DUTY CYCLE

f) Jitter, Stability:

OK

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

PW RANGE 0.5 TO 5.0 NS
40 dB ATTN, 10 VOLTS/DIV

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

② POS OUT, 200 ps/DIV
RISE TIME

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

④ NEG OUT, 200 ps/DIV
RISE TIME

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/

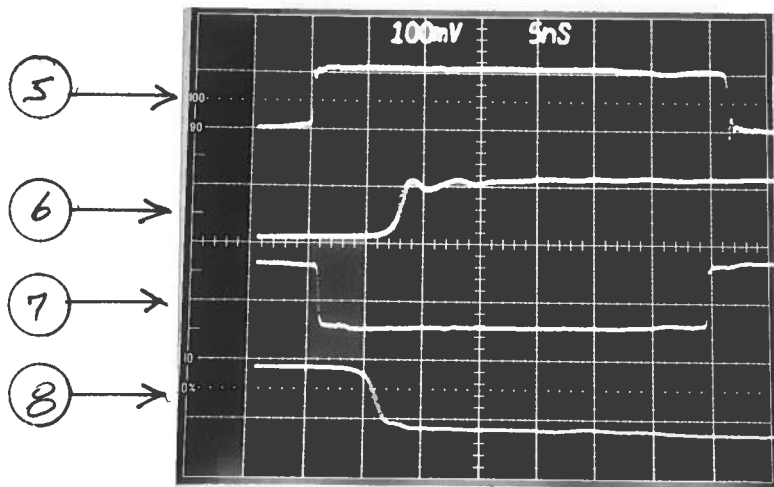
BOX 5120, LCD MERIVALE
 OTTAWA, ONTARIO
 CANADA K2C 3H4
 TEL: (613) 226-5772
 FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model:

S.N.: 11343 CONT.

Date:



a) Output Signal Amplitude:

b) Pulse Width(FWHM):

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

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

PW RANGE 5 NS TO 1 US
 40 dB ATTEN, 10V/DIV

e) PRF:

⑤ POS OUT, 5 NS/DIV

f) Jitter, Stability:

⑥ POS OUT, 500ps/DIV
 RISE TIME

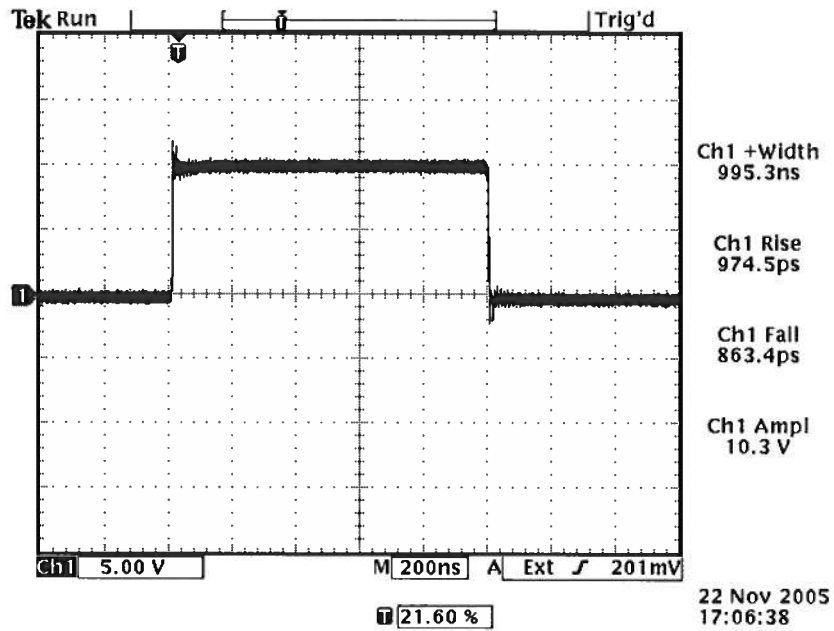
g) Prime Power:

⑦ NEG OUT, 5 NS/DIV

⑧ NEG OUT, 500ps/DIV
 RISE TIME

11343

POS OUT



PW MAX

$R_L = 50 \Omega$

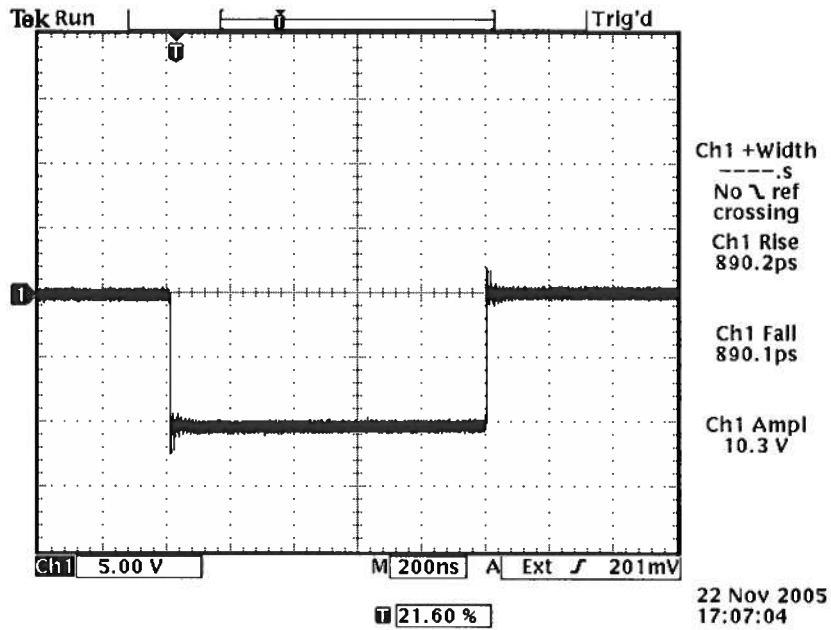
PBF = 10 KHz

TEK TDS 3032

300 MHz

SCOPE

11343
NEG OUT



PW MAX

$R_L = 50 \Omega$

PRF = 10 kHz

TEK TDS 3032 300 MHz SCOPE



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 22, 2005				Tester:	MJC
Programmed model name:	AVPP-1A-B-TNT-PN-EA					
Programmed serial number:	11343	MAC address:	00:90:c2:c6:a0:72			
Firmware revision:	3.34					
Internal trigger checked at:	50 Hz	500 Hz	5 kHz	50 kHz	500 kHz	
Actual measured output ¹ :	50.2 Hz	502 Hz	5.02 kHz	50.3 kHz	503 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	10 ns	100 ns	1 us	10 kHz, +10V to 50 Ohms	
Actual measured output ² :	0.95 ns	10.1 ns	100.0 ns	0.994 us	50 Ohms	
PW _{in} = PW _{out} mode checked:	N/A		DC mode checked:	N/A		
Duty Cycle Limit:	5%					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	100 us	100 Hz, 4 ns, +10V to 50Ω	
Actual measured output ¹ :	100 ns	1.005 us	10.05 us	100.5 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:	4 ns, -2V	4 ns, +10V	400 ns, +2V	400 ns, -10V	10 kHz, to 50 Ohms	
Actual measured output ² :	-2.0V	+10.3V	+2.1V	-10.2V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control (+ and -):	OK					
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					
Offset nulled (output off):	N/A					
RS-232 checked:	Yes			Telnet control checked:	Yes	
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:	Yes					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	Yes					
Circuit Boards:	PS:	158J	Main:	108N		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	20k		
DC fuses:	Main:	1.6A	Overload:	0.5A		
AC Current:	Quiescent:	0.38A @ 115V 0.23A @ 230V	Max. Load:	0.41A @ 115V 0.24A @ 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.