



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/

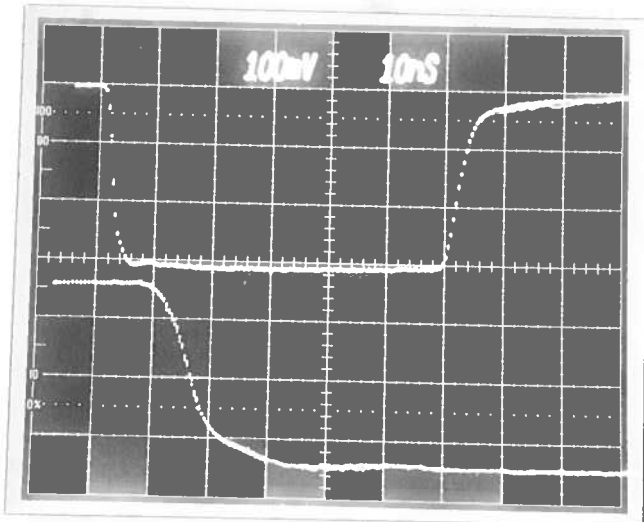
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: *AVL-2-B-N*

S.N.: *11057*

Date: *DEC 06 2004*



a) Output Signal Amplitude:

0 to 320 V (7050V)

b) Pulse Width(FWHM):

5 to 100 ns

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

≤ 2 ns

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

≤ 3 ns

e) PRF:

0 to 5 kHz

f) Jitter, Stability:

OK

g) Prime Power:

*100-240 V
50-60 Hz*

60 dB ATTN: -100 V/div

TOP 10 ns/div

BOT 2 ns/div (RISE TIME)

PRF = 2 kHz



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:	December 6, 2004				Tester:	MJC
Programmed model name:	AVL-2-B-N					
Programmed serial number:	11057	MAC address:		N/A		
Firmware revision:	2.60					
Internal trigger checked at:	5 Hz	50 Hz	500 Hz	5000 Hz		
Actual measured output ¹ :	5.03 Hz	50.2 Hz	503 Hz	5015 Hz		
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:	5 ns	20 ns	50 ns	100 ns	2 kHz, -320V to	
Actual measured output ² :	4.9 ns	20.2 ns	50.5 ns	99.5 ns	50 Ohms	
PW _{in} = PW _{out} mode checked:	N/A			DC mode checked:		
Duty Cycle Limit:	N/A					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	100 us	2 kHz, -320V to	
Actual measured output ¹ :	106 ns	1.006 us	10.03 us	100.0 us	50 Ohms	
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	-50V	-100V	-200V	-320V	2 kHz, 50 ns to	
Actual measured output ² :	-51V	-100V	-200V	-322V	50 Ohms	
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			Telnet control checked: N/A		
LCD pull-ups installed:	N/A					
PCB 108H oscillator buffer resistor:	Yes					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns nominal					
Circuit Boards:	PS:	158G	Main:	108H		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	15k		
DC fuses:	Main:	1A	Overload:	0.5A		
AC Current:	Quiescent:	0.21A @ 115V	Max. Load:	0.27A @ 115V		
		0.16A @ 230V		0.18A @ 230V		
AC fuse:	0.5A					
1.5 kV _{RMS} , 5s, switch on, 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 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.