



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/

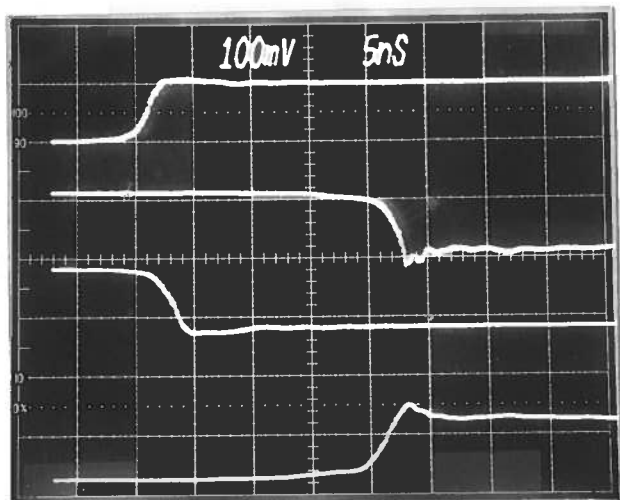
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: *AV-1011B1-B*

S.N.: *11523*

Date: *MAY 16 2006*



60 DB ATTN.: 100 V/DIV

a) Output Signal Amplitude:

0 TO ±100V (TO 50Ω)

b) Pulse Width(FWHM):

*100 NS TO 1 MS
(5% MAX DUTY CYCLE)*

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

≤ 2 NS

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

≤ 2 NS

e) PRF: *0 TO 100 K/HZ*

5% MAX DUTY CYCLE

f) Jitter, Stability:

OK

g) Prime Power: *100 - 2400*

50 - 60 MHz

① *P_{out}: 5 ns/div, RISE TIME*

② *P_{out}: 5 ns/div, FALL TIME*

③ *N_{out}: 5 ns/div, RISE TIME*

④ *N_{out}: 5 ns/div, FALL TIME*

PRF = 100 K/HZ

PW = 100 NS.



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FAX: (315) 883-1328

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"-B" Functional Test & Calibration Certificate

Date of test:	May 16, 2006				Tester:	MJC
Programmed model name:	AV-1011B1-B					
Programmed serial number:	11253	MAC address:	N/A			
Firmware revision:	2.61					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output ¹ :	1.000 Hz	99.98 Hz	1.000 kHz	9.993 kHz	99.9 kHz	
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:	100 ns	1 us	10 us	1 ms	10 Hz, +100V to	
Actual measured output ² :	100.2 ns	1.003 us	10.05 us	1.053 ms	50 Ohms	
PWin = PWout mode checked:	Yes			DC mode checked:	N/A	
Duty Cycle Limit:	5%					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	1 ms	10 Hz, +100V to	
Actual measured output ¹ :	99.8 ns	1.000 us	10.03 us	1.006 ms	50 Ohms	
Double pulse checked:	Yes					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	Yes					
Amplitude checked at:	-10V	+20V	-50V	+100V	1 kHz, 10 us,	
Actual measured output ² :	-9.8V	+19.9V	-50.0V	+100.4V	Z _{out} =2, to 50Ω	
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			Amplitude-dependent offset nulled:		
Offset nulled (output off):	N/A					
RS-232 checked:	Yes			Telnet control checked:	N/A	
LCD pull-ups installed:	Yes					
PCB 108H oscillator buffer resistor:	N/A			PW, delay bias (1k/820/108H or 1k/604/108M):	N/A	
PCB 108N TP14/C26 resistor:	N/A					
PCB 108Q PRF stabilized:	N/A					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	200 ns nominal					
Circuit Boards:	PS:	158E	Main:	108E		
Overload Trigger Resistance:	Trips at:	5k	Installed:	4.3k		
DC fuses:	Main:	2A	Overload:	1.6A		
AC Current:	Quiescent:	0.27A @ 115V 0.18A @ 230V	Max. Load:	0.51A @ 115V 0.28A @ 230V		
AC fuse:	0.8A (for 115V operation)					
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 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.