



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

P.O. BOX 265
OGDENSBURG, NY
U.S.A. 13669-0265
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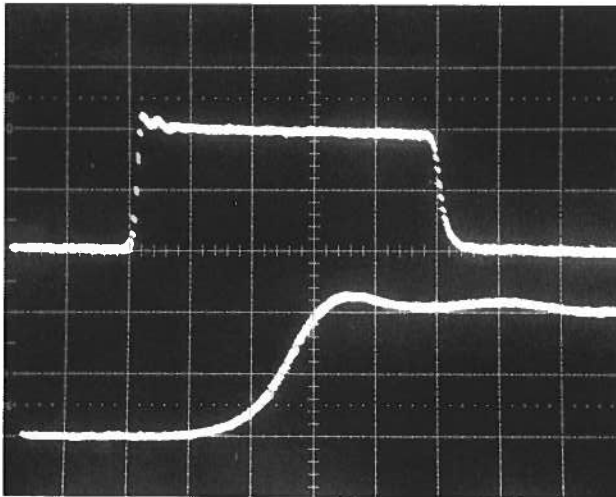
TEL: 1-800-265-6681
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BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: AVL-AV-1-B-EA-OS-M-P
S.N.: 11043
Date: October 12, 2004



Top waveform: 50 ns, 2 kHz, +100V into 50 Ohms.
10 ns/div, 50 V/div.

Bottom: same waveform, but scaled at
1 ns/div, to show the rise time.

- a) Output Signal Amplitude: 0 to +100V
- b) Pulse Width (FWHM) : 3 - 100 ns,
- c) Rise Time (20%-80%): < 1 ns
- d) Fall Time (80%-20%): < 2 ns
- e) PRF: 1 Hz - 5 kHz
- f) Jitter, Stability: OK
- g) Prime Power: 100-240V AC, 50-60 Hz.



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"-B" Functional Test & Calibration Certificate

Date of test:	October 12, 2004				Tester:	MJC
Programmed model name:	AVL-AV-1-B-EA-OS-M-P					
Programmed serial number:	11043	MAC address:	N/A			
Firmware revision:	2.59					
Internal trigger checked at:	5 Hz	50 Hz	500 Hz	5 kHz		
Actual measured output ¹ :	5.000 Hz	49.90 Hz	499.5 Hz	4.99 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:	3 ns	10 ns	30 ns	100 ns	2 kHz, +100V to 50 Ohms	
Actual measured output ² :	3.0 ns	10.4 ns	31 ns	100 ns		
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	2 kHz, +100V to 50 Ohms	
Actual measured output ¹ :	101 ns	1.009 us	10.09 us	100.8 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:	+20V	+50V	+110V		2 kHz, 100 ns to 50 Ohms	
Actual measured output ² :	+21V	+50V	+110V			
Amplitude polarity:	+					
Zout calibration:	N/A					
Electronic amplitude control:	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					
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:	158F	Main:	108H		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	33k		
DC fuses:	Main:	0.8A	Overload:	0.25A		
AC Current:	Quiescent:	0.21A @ 115V	Max. Load:	0.22A @ 115V		
		0.16A @ 230V		0.17A @ 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 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.